COLLABORATING TO IMPROVE TEACHING PRACTICE: DEVELOPING AN APPROACH TO PROMOTE SELF-DETERMINATION IN A SCHOOL FOR STUDENTS WITH AUTISM

by

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ABSTRACT

This research inquiry aimed to: a. collaboratively develop an approach to teaching practice to enhance the self-determination of students with autism; b. demonstrate how a school's stakeholders can collaborate to empirical research and be co-creators of knowledge; c. investigate the potential of video and the Video Interaction Guidance framework as methodological tools in developing an approach to teaching practice; and d. analyse an emergent, practice-based approach in light of Self-Determination Theory. To achieve this, a mixed methods study was conducted, which followed an emergent and participatory action research methodology and was structured in three phases: *Exploration, Investigation and Collaboration.* The study was conducted in collaboration with a special school for students with autism in England, UK. A narrative literature review on the topics researched was conducted, followed by a systematic review of self-determination literature. Phase 1 *(Exploration)* involved semi-structured interviews with staff and parents/carers, and semi-structured observations in the Post-16 setting of the school. The findings shaped the questionnaires used in the whole-school survey conducted in Phase 2 *(Investigation)* with three stakeholder groups: staff, students, and parents/carers. The data collected in Phase 1 and Phase 2 confirmed the need for the study, highlighted participants' priorities for development, and ensured its outcomes align with their needs. Phase 3 *(Collaboration)* involved the collaborative development of the ten principles of the Enhancing Self-Determination Approach (ESDA) with a group of staff and students in the Post-16 setting. This process was framed by the principles and structure of Video Interaction Guidance, and used video as a methodological and reflection tool. The ESDA principles were developed from the strengths of the teaching practice, based on participants' lived experiences, and informed by their desired outcomes. Collaborating to empirical research contributed to staff's professional learning and development, led to an increase in confidence and improved communication skills for the students, and fostered positive relationships within the school. The analysis of the ESDA principles through the lens of Self-Determination Theory demonstrates that they create an environment supportive of the basic psychological needs that fosters the development of self-determination. The research inquiry brings significant contributions to demonstrating the value of participatory research in the areas of autism and self-determination, which fosters the bridging of gaps between research and practice.

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GLOSSARY

AHT	Assistant Head Teacher
ASDAN	Award Scheme Development and Accreditation Network
BPNT	Basic Psychological Needs Theory
CL	Communication Lead
CT	Class Teacher
DHT	Deputy head teacher
EHC Plan	Educational Health and Care Plan
ESDA	Enhancing Self-Determination Approach
EYFS	Early Years and Foundation Stage
HT	Head Teacher
ICT	Information and Communications Technology
P	Parent
SDT	Self-Determination Theory (Deci and Ryan, 1985)
SEN	Special Educational Needs
SEND	Special Educational Needs and Disability
TA	Teaching Assistant
VIG	Video Interaction Guidance
YP	Young Person

1. CHAPTER ONE

INTRODUCTION - IDENTIFICATION

1.1. Origins of the study

The summer of 2014 marked the beginning of my journey into looking at how the quality of life for people with autism can be improved. After an initial experience of working with young people and adults with additional needs at a summer camp in the US, I returned to the UK for the final year of my Bachelor's Degree in Drama, and shifted my focus to the portrayal of disability in literature and the therapeutic uses of drama. This led me to begin my professional career by working with children and young people with additional needs in out of school provisions, and to take on a job as a teaching assistant in a specialist school for students with autism. It was here where I discovered my true passion for autism education and research, where initial research interests and questions arose, and where this empirical study came to life. For all the chapters that follow, this specialist school will be referred as *the school,* and any other schools from literature referenced will be clearly distinguished to avoid confusion.

The practitioner experience of working with young people with autism and a desire to contribute to educational research led me to pursue a Master's in Special Education in Autism (Children) at the University of Birmingham in 2016. The assignments for the various modules provided me with opportunities to reflect on the different aspects of the teaching practice, the curriculum, and relationships between staff and students. It was through this work that I understood the importance of reflection in teaching practice, and the value and need for research in practice. Whilst consulting the literature on various interventions and approaches, mostly developed in clinical settings, and writing about my experience of using them in the real world, I became aware of the gap that exists between the two. Furthermore, the voices of people with autism were rarely sought and taken into consideration when developing interventions, which highlighted another significant gap. It is a personal passion to listen to voices that often go unheard, thus consulting those directly impacted by these gaps was something I wanted to pursue in my research.

It was through the work of Dr Despina Papoudi that I became aware of the value of reflection in practice, especially through the use of video. She introduced me to the Video Interaction Guidance (VIG; Kennedy, Landor, and Todd, 2011) intervention and its applications with families or in school settings. My interest was sparked by the potential I saw in the intervention, which I began exploring in one of my assignments for my master's degree, that looked at its trans-cultural potential. Having moved from Romania for my higher education studies, the influence of cultural aspects on interventions and diagnosis tools has always been of great interest, and also represented the focus of my master's dissertation. Furthermore, the ethos of VIG is to focus on the client's reflection on own strengths and is collaborative and encouraging in nature, which highlighted a potential for exploration in the context of research in practice.

My professional position as a teaching assistant at the school, along with my studies have developed my critical abilities regarding teaching practice, and have made me more aware of the educational gaps that needed addressing. The school, with a long and well-established reputation, was going through a time of growth and change by expanding into two additional buildings, one for the secondary students and one for those in Post-16 education. During the running of the latter in particular, new challenges arose, as staff were realising that the established successful communication and behaviour management systems, as well as the curriculum, were not targeting students' need to prepare for life after school. Informal conversations with the staff highlighted a need to explore a new way of working with the students in the Post-16 setting. Staff were recognising that admirable attempts were made to encourage students to express themselves authentically and age-appropriately in the new Post-16 setting, but they lacked consistency and structure. Despite the staff team's vast experience, knowledge and range of skills, a need arose for a shift in teaching practice that would reflect and define their guiding principles, ethos, and establish a common ground. This was addressed through a collaboration between the staff, students, parents/carers, and the researcher, which led to the development of the principles of the Enhancing Self-Determination Approach (ESDA), the focus of this thesis.

1.2. Thesis overview

The present thesis provides a description of a collaboration between a researcher and the stakeholders of a school to address an existing need for development regarding teaching practice, which concludes with the development of the ESDA principles.

The researcher acknowledges the existence of the present debate between the use of person-first vs. identity-first language in autism research. The use of person-first language (person with autism) was first proposed in the 1970s as a shift from stigmatising terms such as 'handicapped', to show that disability is a component of one's personality, rather than a defining one (Vivanti, 2020). In recent years, this view has been challenged by individuals with autism, as well as scholars, on the grounds that autism is a feature that cannot be separated from the individual, and the use of identity-first language (autistic person) can be empowering and non-stigmatising (Gernbacher, 2017). Autistic adults show a preference for identity-first language, as do parents, unlike professionals who prefer person-first language (Kenny et al., 2016; Bury et al., 2020). Furthermore, 'on the autism spectrum' has shown to be a preferred term for autistic adults (Bury et al., 2020). All preferences have been acknowledged and taken into consideration, however given the collaborative nature of the study with the school's stakeholders, the writing of the present thesis reflects participants' preferences for person-first language.

The research inquiry began with an initial exploration of the literature on preparation for life for young people with autism, existing UK educational guidelines, self-determination research and theory. As the term *self-determination* appeared most appropriate in meeting the needs expressed by the staff, a more in-depth exploration of self-determination interventions took place, to understand how the current need in the school could be addressed. This literature was used to shape and frame the empirical study, which consisted of three phases, and concluded with the development of the ESDA principles.

To ensure that the initial need identified in the school was appropriate and targeted the needs of staff, students, and parents/carers, an emergent phased research design was chosen. Phase 1 was conducted to pilot the questions used in Phase 2, and explore participants' views on

self-determination, the current statutory guidance, and existing curriculum. The data gathered in Phase 1 was used to shape the questions used in the whole-school survey conducted in Phase 2, aiming to gather the opinions of all stakeholders impacted by the research: teaching staff, students, and parents/carers.

Phase 1, Phase 2, and the literature reviews were used to inform the approach to the collaborative development of the ESDA principles in Phase 3. The framework of VIG with a group along with the six *Principles of attuned interaction and guidance* were used (Kennedy, Landor and Todd, 2011). One small group of staff and one small group of students were involved in the filming of eight videos, and the reviewing of 16 short clips of interaction, across six meetings, with the aim of identifying the strengths in teaching practice that were enhancing students' self-determination. The observations and reflections made by both staff and students were transcribed and grouped into themes by the researcher. The themes were further grouped together to generate the ESDA principles. Three drafts of the ESDA principles were reviewed by both groups, with the final one being presented to the whole Post-16 staff team. A further three meetings with staff were held to reflect on the experience and the future use of the ESDA principles.

1.3. Research Design

The empirical study reported in this thesis followed a mixed-methods research design and an emergent, participatory, and emancipatory action research methodology, structured in three phases. Phase 1 *(Exploration)* served *exploratory, methodological*, and *relational* purposes, aiming to confirm the need for the empirical study. This need was further confirmed through the school-wide survey conducted in Phase 2 *(Investigation)* aimed to gather the opinions of all stakeholders and inform the subsequent phase, having thus *exploratory, descriptive,* and *methodological* purposes. The development of the ESDA principles took place in Phase 3 *(Collaboration)* of the study, in collaboration with a group of staff and students from the Post-16 setting of the school.

According to Wright (2009), an emergent methodology involves a 'sophisticated recognition that data analysis is a core element in the research design' (p. 64). Furthermore, this involves a flexible design, an extensive familiarization with the data and the research context, active involvement with the participants, and continual reflection upon ontological and epistemological validity. For Martin (2008), an emergent design allowed for an exploration of both the qualitative and quantitative paradigms by using a range of methods, and showing how they can be complimentary to one another in a naturalistic context. An emergent methodology was most suitable for the empirical study as it aimed to address the specific needs of the school and its stakeholders. Although the initial need for the study came from the staff, a wider and more structured exploration was needed to ensure the needs and desired outcomes of all stakeholders were reflected in the research.

Phase 1 served an *exploratory* purpose of both the school context and its stakeholders. The initial need for the study was discussed more than a year prior to the beginning of the data collection, thus the researcher needed to ensure that it still met stakeholders' priorities for development. In order for the researcher to become familiar with the running of the Post-16 setting, and for the staff and students to become re-accustomed to the presence of the researcher, two weeks of semi-structured observations took place. The researcher was participant-as-observer during this phase which, as described by Saunders et. al (2019), can involve participating in a group without assuming all the attributes of being a full member. The researcher's purposes for exploration were known to both the staff and students, and described by the assistant head teacher as the position of a 'critical friend'. The students were familiar with the researcher from her prior position at the school, thus often offered opportunities for her to participate in different activities during the two weeks of observation. Phase 1 thus also had a *relational* purpose in that it laid the foundations for the development of the collaborative relationships. Seven semi-structured interviews with staff and five with parents/carers (all mothers) were carried out to pilot the questions used in the questionnaires in Phase 2. The data collected served a *methodological* purpose in ensuring the terminology used and the structure of the questionnaires reached a wide range of stakeholders.

Phase 2 involved a school-wide survey aimed at gathering the opinions of staff, students, and parents/carers to confirm the need for the research and ensure this aligns with their priorities. The questions used were developed from existing self-determination literature and shaped by the data collected in Phase 1. For the student questionnaire, consultations were carried out with the school's communication lead, one experienced teacher, one parent, and one student with autism from a different school, to ensure this was inclusive and able to reach a wide range of participants.

The choice for an action research methodology was made based on the needs of the school and its stakeholders. Action research is participatory in nature and involves a process aimed at finding solutions to existing problems and improving practice (Saunders et al., 2019). Furthermore, action research is guided by a belief that research questions should arise from the community of interest and the best way of addressing them is by directly involving participants (Walter, 2019). This is in accordance with the researcher's ethos and a willingness to contribute to the need for participatory research in autism education.

The analysis of the data collected in Phase 2, highlighted that *independent living skills* were viewed as the most important area of the curriculum by all stakeholder groups, as well as in need of most attention and development. Thus, the videos taken in Phase 3 were of lessons targeting these skills. This finding is in accordance with that of Pellicano et al. (2014), whose large-scale survey on areas of focus for autism research in the UK, showed that improving life skills for people with autism was considered most important by families, practitioners, and researchers, and second most important by adults with autism.

Action research is cyclical in nature and involves evaluating, reflecting, and adjusting the solutions to the problem targeted until this meets the needs of the participants. This is most clearly demonstrated in Phase 3 of the study, during which the ESDA principles were developed, evaluated and adapted collaboratively, across the six meetings with participants. This phase of the study was guided by the VIG *Principles of Attuned Interaction and Guidance* and the framework of *VIG with a group* (Kennedy, Landor and Todd, 2011). Four staff and five students volunteered to be filmed during daily school activities related to the development of *independent living skills*. From these, short clips were selected by the researcher, which were

viewed and discussed during separate meetings with the staff and student groups. All participant observations were coded into themes, which were grouped together to generate the ESDA principles. Further details regarding this process are provided in Chapter Six of this thesis.

1.4. Aims and research questions of the empirical study

The aims and research questions outlined below are those of the empirical study presented in this thesis. Further aims and research questions for the two literature review chapters (Chapter Two and Chapter Three), as well as for each phase of the empirical study are outlined in their respective chapters.

1.4.1. **Research aims:**

a. To collaboratively develop an approach to teaching practice to enhance the self-determination of students with autism
b. To demonstrate how a school's stakeholders can collaborate to empirical research and be co-creators of knowledge
c. To investigate the potential of video and the Video Interaction Guidance framework as methodological tools in developing an approach to teaching practice (Kennedy, Landor, and Todd, 2011)
d. To analyse an emergent, practice-based approach (ESDA) in light of Self-Determination Theory (Deci and Ryan, 1985)

1.4.2. **Research questions:**

1. How can teaching practice enhance the self-determination of students with autism in a specialist school in England?
2. How can an equal partnership with a school's stakeholders be established through a participatory and emancipatory methodology?
3. Are video and the Video Interaction Guidance framework useful methodological tools in developing an approach to teaching practice (Kennedy, Landor, and Todd, 2011)?
4. How does the approach relate to the satisfaction and frustration of basic psychological needs in Self-Determination Theory (Deci and Ryan, 1985)?

1.5. Significance of the thesis

The present thesis brings important contributions to the development of the school and its stakeholders, as well as several areas of research.

The empirical study addresses a current need for the school and its stakeholders, regarding the development of the teaching practice for the Post-16 setting. Through the collaborative development of the ESDA principles, staff were provided with consistent guidelines to interact with their students in a way that enhances their self-determination. The data collected in Phase 1 and Phase 2 contributed not only to the development of the ESDA principles, but also provided the school with valuable information regarding the current curriculum and statutory guidance, as viewed by its stakeholders. Furthermore, staff concluded that the ESDA principles would be most effective if used throughout the school and highlighted a willingness to explore this in future. This supports teaching staff's initial aspiration to establish a common ground in working with the students and to contribute to the development of whole-school teaching practice.

The thesis brings several contributions to the area of self-determination research. The narrative literature review (Chapter Two) provides a historical overview of the development of the term in education, its relevance for the England, UK context, and for students with autism. The systematic review (Chapter Three) brings together studies evaluating self-determination interventions in school settings for students between the ages of 15-25 with autism and/or learning disability. The gaps identified helped shape the empirical study. All but one study identified in the systematic review evaluated interventions developed by researchers only, Oswald et al.'s (2018) intervention having been partially informed by stakeholders. The empirical study contributes to self-determination research through its emergent participatory design, by having the staff and students directly involved in the development of the ESDA principles. Furthermore, conducting the study in the English educational context, brings new perspectives to self-determination research, as almost all studies identified through the review were conducted in the US (Chapter Three).

The empirical study also contributes to current areas in need of development in autism educational research. Guldberg (2017) explained that autism educational research is dominated by experimental designs that cannot capture the complexity of their implementation in school settings. Moreover, there is a need for methodologies that place the knowledge of those directly impacted by research at the centre, and can capture their professional and lived experiences, in particular those of individuals with autism (Pellicano et al., 2014). The design of the present empirical study develops according to the data collected from participants, aiming to capture their voices and needs. Furthermore, by looking at videos of interaction during lessons regarding *independent living skills* (Phase 3), the empirical study addresses not only the needs of the school's stakeholders (as outlined in Phase 1 and Phase 2), but also those outlined more broadly by parents/carers, practitioners, and researchers (Pellicano et al., 2014).

The methodology of the empirical study brings contributions to both video-based research and Video Interaction Guidance (VIG). In autism educational research, video is often used as an intervention tool (Bellini and Akullian, 2007). Phase 3 offers a different perspective by using video as a double methodological tool: to encourage participants' reflection, and to support the data analysis in developing the ESDA principles. When used with children or young people, VIG is used for self-reflection (Walker, 2018), or to reflect on peer interaction (Landor and Gilfillan, 2017). In the empirical study, students are encouraged to reflect on their interaction with the staff, particularly focusing on the strengths of the teaching practice and their thoughts and feelings in relation to them.

1.6. Chapter structure

The present research inquiry was structured in six steps as seen in Figure 1. Each step informed the next, and all contributed to the development of the ESDA principles. Table 1 provides a summary of the research inquiry, the means and tools used to address the research questions/problems, and the respective chapters in which they are discussed.

Figure 1. The steps taken in the research inquiry

Table 1. Summary of the research inquiry

Step	Means	Research question/problem	Tools	Chapter
Identification	Informal conversations	Preparing students with autism for life after school	Informal conversations between the researcher as practitioner and teaching staff	Chapter One
Inquiry	Narrative literature review	What can teaching staff do to prepare young people with autism for life after school?	Overview of broad areas of literature	Chapter Two
Information	Systematic review	What can teaching staff do to enhance students' self-determination within the school context?	Systematic review of empirical studies evaluating self-determination interventions	Chapter Three
Exploration	Empirical study – Phase 1	What are the initial thoughts of teaching staff and parents/carers on the term *self-determination*, the current statutory guidance, and current curriculum? Are the terms used suitable for the teaching staff and parents/carers groups? Which means are most suitable to gather the views of as many students as possible?	Semi-structured interviews with teaching staff and parents/carers Semi-structured observations of the Post-16 setting Consultations regarding student questionnaire	Chapter Five
Investigation	Empirical study – Phase 2	Are stakeholders aware of the term *self-determination* and its implications? Is self-determination an important educational outcome for stakeholders? Does it	Whole-school survey with stakeholders: teaching staff, parents/carers, students	Chapter Five

		need further development within the school? How do stakeholders see the statutory guidance as providing a framework for the development of self-determination? What are stakeholders' views on the current curriculum and how it prepares students for life after school?		
Collaboration	Empirical study – Phase 3	What aspects of existing teaching practice promote students' self-determination? How can they be used to further enhance it? Is video a useful methodological tool in highlighting the positive aspects of teaching practice that enhance students' self-determination? What are the views of teaching staff and students regarding the approach developed and the overall process?	Six meetings (three for teaching staff and three for students) to develop the ESDA principles Three meetings to discuss the suitability of the ESDA principles Group interview with teaching staff to evaluate their experience of the collaboration and the ESDA principles Standardised measures of self-determination Participant feedback forms	Chapters Five and Six

This thesis is structured in eight chapters, including this Introduction (Chapter One - *Identification*). Chapters Two *(Inquiry)* and Chapter Three *(Information)* discuss the literature relevant to the empirical study. Chapter Two is a narrative literature review which introduces the term *self-determination* and its implications, the context of Post-16 special education in England, UK, and the theoretical framework. Chapter Three provides a systematic review of peer-reviewed articles that evaluate the effectiveness of educational interventions targeting the self-determination of young people with autism and/or learning disability aged 15-25.

Chapters Four and Five outline the research design, methodology, and methods used for the empirical study. Chapter Four provides an overview of the research design, structured in three phases, the case and context of the school, and researcher's positionality. Chapter Five presents the methods used in the empirical study, including their rationale, development, and the participant groups involved. Relevant findings from the previous phase that contributed to the development of the tools are also presented.

Chapters Six presents the findings of the *Collaboration* (Phase 3), during which the ESDA principles were developed. This includes the themes highlighted at each stage of the development, how they evolved as a result of participants' feedback, along with staff's views on the principles, the overall study design, and initiatives to carry the work forward.

Chapters Seven *(Discussion)* discusses the outcomes of the empirical study in light of the theoretical framework and within the context of existing literature. The first part looks at the process of the research inquiry, significant research decisions and their impact on the participants and outcomes. This is followed by an analysis of the ESDA principles through the lens of Self-Determination Theory (Deci and Ryan, 1985), looking at their scope in meeting the basic psychological needs.

Chapter Eight outlines the thesis conclusions, re-visiting the research questions and summarising the contributions brought to literature, methodology, theory, and practice.

2. CHAPTER TWO

NARRATIVE LITERATURE REVIEW - INQUIRY

2.1. Chapter overview

After an initial broad area of need was identified in the school: preparation for life for students with autism, the researcher consulted the relevant literature, which is presented in this chapter. The narrative style of literature review was chosen as most suitable in meeting the purposes outlined by Thomas (2017): 'discusses and summarises the literature on a particular topic' (p. 59). This also helped shape initial research ideas and provide a more focused approach. As several vast areas of literature were explored, the narrative review style was considered most appropriate.

The research is concerned with preparing students with autism for life after school, which stemmed from the researcher's professional experience and interests, as well as informal conversations with school staff. Therefore, existing research and literature in this broad area were explored. According to Thomas (2017, p. 18), initial research questions are '*prima facie questions',* which 'change and become refined as your study progresses'. Furthermore, it is to be expected that these questions change as the researcher becomes more knowledgeable of the topic. The process of refining the *prima facie* questions is often iterative, in that it goes back on itself and starts again, involving reviewing and replanning (Thomas, 2017). The *prima facie* question of this study is: *what can teaching staff do to prepare young people with autism for life after school?*

The chapter aims to refine this broad *prima facie* question and break it into focused aims and questions. For this purpose, seminal theoretical papers and empirical studies, as well as systematic reviews and meta-analyses were consulted. The chapter begins with an exploration of terms surrounding *preparation for life* for young people with disabilities, and its particular relevance for young people with autism. The ideas generated led onto the identification of the term *self-determination*, which is used widely in this thesis. Its historical development within education is presented, as well as its implications and existing misconceptions. The

English educational context is then explored, including existing provision and statutory guidance. The chapter concludes with a summary of the most influential theories in self-determination research.

2.2. Chapter aims and questions

The chapter aims to refine the following *prima facie* question: *what can teaching staff do to prepare young people with autism for life after school?* This is achieved by exploring relevant literature, guided by the following questions:

a. What is the most suitable term related to *preparation for life* that describes the needs outlined by the school?
b. What is the importance of *preparation for life* for the needs of young people with autism?
c. What is the role of the school context in the *preparation for life* of young people with autism?
d. What does the current educational provision in England, UK have in place regarding the *preparation for life* of young people with autism?
e. What are the main theories and frameworks in self-determination research?

2.3. A plethora of terms

The focus of the present thesis came to life from initial discussions with staff regarding their willingness to better prepare their students with autism for life after school, particularly by encouraging them to express their authentic thoughts, feelings, and opinions. So, why do students with autism need support in preparing for life after school, and what does this mean?

According to the most recent *Diagnostic and statistical manual of mental disorders (DSM-5)* (American Psychiatric Association, 2013): autism is a life-long neurodevelopmental disorder characterised by difficulties in social communication and interaction, and restricted and repetitive patterns of behaviour and interests. Almost 1% of the worldwide population lives with autism (World Health Organisation, 2019). Research progress, particularly in the recent decades, has brought significant increases in autism awareness, understanding, and recognition, as well as a clearer picture of prevalence rates (Elsabbagh et al., 2012). Thus,

more and more young people with autism are entering adult life, and a better understanding of what can improve its quality is needed more than ever before.

Before discussing the most common terms related to *preparation for life*, it is important to understand how these can be constructed in the context of existing models of disability. Nathan and Brown (2018) explain that definitions of disability involve two features: a biological or psychological characteristic called *impairment*, and a social or personal *limitation* this is connected to.

In the context of the *medical model*, disability is viewed as having pathological causes, often as a *deficit*, where the aim is to *rehabilitate* (Straus, 2010). Therefore, the source of disability is located in the individual, and the *impairment* is the main cause of *limitation* (Nathan and Brown, 2018). As a reaction to addressing the flaws of the *medical model*, the *social model* arose, with a view of disability as socially constructed (Straus, 2010). This implies that disability is conceptualised as a *social limitation*, caused by social forces such as attitudes, neglect, architectural barriers, which are unfairly imposed (Nathan and Brown, 2018). Although very popular in the context of disability literature, the *social model* has faced criticism on its metaphysical presuppositions, particularly regarding the underplay of the role of *impairment* as a cause of *limitation* (Nathan and Brown, 2018). This is due to the fact that even in a *fully accessible* and *adapted* environment, some individuals may still face a disadvantage.

In an attempt to address the shortcomings of the medical and the social models, the *interactionist*, *human rights*, or *transactional* models appeared (Guldberg, 2017). They conceptualise disability as part of diversity, and regard both personal impairments and social factors as causes of *limitations* (Nathan and Brown, 2018). The difficulties arise at the interaction of an individual with an impairment and the individual's contextual factors, both environmental and personal.

Nathan and Brown (2018) argue that although *interactionist models* solve the main problems of medical and social models, they fail to distinguish between genuine disabilities and what they call *non-talents* and *lack of superabilities*. Although they do not believe this is a good enough reason to disregard *interactionist models*, they propose an *ecological approach* to modelling disability, meant to set some guidelines to distinguish between these conditions. This *ecological approach* agrees with the social and interactionist models in that disabilities are at least in part context-dependent. However, instead of focusing on what causes a disability, Nathan and Brown's (2018) *ecological approach* focuses on asking what constitutes a disability. Furthermore, they argue that disabilities cannot be described as characteristics of individuals, but rather as 'individual properties contextualised to specific environments' (Nathan and Brown, 2018, p. 598). Although similar to *interactionist models*, this *ecological approach* argues that the environment does not merely play a role in causing disability, but rather that it characterises its very nature. That is because disabilities cannot be identified as the experience of an individual, caused by biology, society, or both, but rather they are 'relational features of organisms embedded in sets of environments' (Nathan and Brown, 2018, p. 598).

The current vision of the school states that it aims to enable their young people with autism 'to lead meaningful and enjoyable lives and to optimise lifelong opportunities' (quotation taken from school's website). In initial discussions with the researcher, staff refer to this as *preparing the students for life*, or helping them to become *independent*, or *agents* that can freely express their thoughts and opinions. This is achieved through a curriculum that offers opportunities for the learning and practice of *daily* or *independent living skills.* The paragraphs below provide a brief exploration of these terms, as they are outlined in relevant literature.

2.3.1. **Independence**

Independence is a term commonly used in the school when discussing students' *preparation for life*, and also one widely used in the field of autism research. In the broader field of disability studies, the term arose during the independent living social movement which began after the 1973 Rehabilitation Act and prohibited any form of discrimination against people with disabilities in state institutions and activities (Dejong, 1979). This social movement did not only seek a better quality of life for people with disabilities, but also reshaped the views

of researchers and professionals, providing new directions in disability policy, practice, and research.

Loomis (2014) defines *independence* as a multi-faceted construct, incorporating several ideas including the ability to make decisions regarding own well-being, self-perceived control, possessing a set of physical and cognitive skills regarding self-care, and involvement in the community. It can also be seen as a culturally constructed concept, and regarded as observable behaviour, which can lead to the misconception that some are independent, and others are not (Rossetti et al., 2008). However, Brown et al. (1998) claim the opposite, arguing that few people are entirely independent, and meeting daily living demands often involves interdependence, through the assistance and support of others.

Interventions focusing on increasing independence for individuals with learning disabilities often involve mastering daily living skills, promoting choice, and personal control (Loomis, 2014). For individuals with autism, on the other hand, the focus is often on autonomous functioning and targeting specific behaviours, some of which could be seen as not socially acceptable (Loomis, 2014). An interesting dilemma that can arise in this latter situation is the expression of independence through choice. One way to view independence in this context is to allow the individual to engage in their preferred behaviour or activity, which is a manifestation of their choice, however that would not lead to the development of functional independence.

2.3.2. **Daily living skills**

Daily living skills (DLS) (or *independent living skills* in the school) are skills needed for everyday life, which entail 'practical and rather mundane activities that enable people to care for themselves and meet daily challenges and ultimately enable them to live independently' (Bagatell, 2019, p. 249). DLS include self-care skills such as dressing and toileting, domestic skills such as cooking and cleaning, community skills such as shopping and travelling, recreational and leisure skills, and prevocational/vocational skills such as completing tasks as instructed and requesting help. When choosing which DLS should be taught to a student at a particular time some factors should be taken into consideration, such as: existing skills,

environments in which the student participates and will perform the skill in, chronological age, and manner in which peers perform the task (Carothers and Taylor, 2004).

Children with autism are more likely to have better adult outcomes if they master a variety of DLS (Carothers and Taylor, 2004). For these to be maintained and generalised, they should be taught by different individuals in different settings, with particular focus on the collaboration between the school and the family. It is important that students are motivated to learn DLS, and that they have the desire to learn and put them in practice (Baker, 2005). This relates to the concept of agency, or being an agent in one's life, that is the one that initiates the action (Synofzik et al., 2008). As both *agent* and *agency* were terms that the researcher heard being used during her time at the school, a closer look at their meaning is provided in the paragraphs below.

2.3.3. **Agency**

Rossetti et al. (2008) define *agency* as the opportunity to initiate a conversation, move it in a certain direction, participate in a dialogue, be seen as a person with ideas, personality, who is able to make contributions to conversations. This view is similar to Fogel's (1993) *co-regulated communication*, in which both parties are active and engaged in the communication process. Therefore, agency is not a skill someone can acquire, but rather an opportunity that arises out of social interaction and communication, and it involves the partner believing that the other has something to say (Rossetti et al., 2008).

An important manifestation of agency is choice. To maximise the opportunities for choice, a skilled listener is required, as well as access to communication facilitators, and an attitude that the partner has something to say. Rosetti et al. (2008) offer a valuable example of promoting agency by offering opportunities for choice through the relationship between a teacher and his student. During an interaction observed, the teacher noticed the student struggled with a task that did not previously present difficulties and, instead of attributing this to her autism, the professional guessed correctly that this was a result of anxiety caused by the presence of cameras. Although the study required the videotaping of the session, the teacher recognised the inconvenience this caused the student, and decided to remove them, thus promoting participant's choice (Rosetti et al., 2008). Expressions of agency are also context and

participant dependent. A study which investigated the agency of young children found that their abilities changed across settings and these in turn, were enabling according to the interactions that took place (Nind et al., 2010). Thus, the agency was shaped in a transactional process. A similar term to agency, also widely used in special education literature, but with different implications is *self-determination,* which arose as relevant during the reviewing of literature. Its meanings are explored in the following paragraphs.

2.3.4. **Self-determination**

Early uses of the term *self-determination* refer to 'the determination of one's own fate or course of action', whereas in the modern era it is most commonly understood as 'the rights of nations or groups of people to autonomy and self-governance' (Shrogen et al. 2015, p. 252). The first however is most relevant in the context of education, as it implies a characteristic within a person to determine his or her own fate.

The 1989 National Conference on Self-Determination marked the beginning of a movement of promoting self-determination in special education, the Office of Special Education Programs funding six projects on the subject in 1990 alone. The attention given to self-determination came as an extension of the increased visibility of people with disabilities through the independent living, normalization, and self-advocacy movements in previous decades (Field, Sarver, and Shaw, 2003). This visibility brought a growth in civil rights and legal protections regarding the discrimination against individuals with disabilities.

Self-determination is an important concept in the *transition-from-school-to-adulthood movement* and has been widely defined in special education and disabilities literature (Field, 1996). Wehmeyer and Berkobien (1991) define self-determination as:

> *'the abilities and attitudes required for one to act as the primary causal agent in one's life and to make choices regarding one's actions free from undue external influence or interference' (p. 305).*

A *causal agent* is someone who makes or causes things to happen (Wehmeyer, 1996). According to Mithaug, Campeau and Wolman (1992, cited in Field, 1996) self-determination is 'choosing and enacting choice in persistent pursuit of self-interest' (p. 19), whilst Ward (1988, p. 2) defines it as 'the attitudes, abilities and skills that lead people to define goals for

themselves and to take the initiative to reach these goals'. Although such definitions approach self-determination from different perspectives, they all include the common elements of *freedom*, *choice*, and *control* (Field, 1996). In 1993, efforts were made by researchers working on the projects funded by OSERS to have a common working definition of self-determination, which was developed as:

> *'choosing and enacting choices to control one's life – to the maximum extent possible – based on knowing and valuing oneself, and in pursuit of one's own needs, interests and values' (Campeau and Wolman, 1993, p. 2).*

This conceptualization of the inherent need to exert control over one's environment has existed since the time of Aristotle (Abery, 1994). Self-determination plays an important role in the development of individual identity, independence, and autonomy, as well as in increasing self-esteem and self-efficacy, which lead to a better quality of life (Abery, 1994). As one self-advocate states:

> *'the chance to direct our lives the way we want to, not the way others expect us to; the ability to use the power we have as citizens to vote, to choose where and with whom we want to live, to decide when and where we want to work; and to make decisions that are right for us as people. Most importantly, self-determination means respecting our right to pursue our own goals and dreams' (I.M., 1992 cited in Abery, 1994).*

Regarding the self-determination of students with autism, Wehmeyer et al. (2010) highlighted a lack in empirical research, but recognised the increasing attention given to self-determination in their education. Chou et al. (2017a) claim that no studies have been carried out to measure the global self-determination of students with autism. A contributing factor to this gap has been identified as the lack in research regarding instruments to measure self-determination for individuals with autism. Measuring the effectiveness of interventions and programmes aimed at improving self-determination is difficult without the appropriate instruments. Thus, a need arises in determining the validity and reliability of these measures for individuals with autism. An initial attempt in this area was undertaken by Chou et al. (2017b), who looked at the validity and reliability of two measures of global self-determination: the Arc's Self-Determination Scale (SDS; Wehmeyer, 1995) and the American Institutes for Research Self-Determination Scale (AIR; Wolman et al., 1994). Both instruments showed potential to contribute to measuring the global self-determination of students with

autism, however further applications need to be evaluated with larger and more representative populations.

After having explored the meaning of some of the terms frequently used when discussing *preparation for life*, the term *self-determination* appears most appropriate in encompassing the needs initially expressed by the school staff, during informal discussions in *Identification*. It encompasses their desires for students to be able to expresses themselves authentically, freely and age-appropriately, without prioritising staff's views and being prompt-dependent. This is the first step in refining the *prima facie* question as outlined above, by answering question a. of this chapter: *What is the most suitable term related to preparation for life that describes the needs outlined by the school*? The term *self-determination* is used in the present thesis with the understanding provided by the OSERS definition of:

> *'choosing and enacting choices to control one's life – to the maximum extent possible – based on knowing and valuing oneself, and in pursuit of one's own needs, interests and values' (Campeau and Wolman, 1993, p. 2).*

Although the researcher made the initial decision to use this term, agreement from the school's stakeholders was sought to ensure it is most suitable.

2.4. Autism and self-determination

In order to understand the value of focusing on self-determination within a special school setting, the following paragraphs explore the characteristics of students with autism that demonstrate the need for this targeted attention. This is a further step in refining the *prima facie* question and addressing question b. of this chapter: *What is the importance of preparation for life (now self-determination) for the needs of young people with autism?* Although the thesis does not aim to provide an approach that would 'fix' or 'treat' the students involved, an awareness of autism is valuable for a deeper understanding of the need for self-determination research for this population. The view taken on autism is similar to that of Prizant and Fields-Meyer (2016), eloquently expressed below:

> *'Autism isn't an illness. It's a different way of being human. Children with autism aren't sick; they are progressing through developmental stages as we all do. To help them, we don't need to change them or fix them. We need to work to understand them, and then change what we do.' (p. 11)*

The following paragraphs look at the main characteristics of students with autism in relation to the need for providing support to enhance their self-determination.

2.4.1. **Social communication and interaction**

As previously discussed in Section 2.3., at the time of writing of the present thesis, the essential features of *autism spectrum disorder*, as named and diagnosed under the DSM-5 are: 'persistent impairment in reciprocal social communication and social interaction' and 'restricted, repetitive patterns of behavior, interests, or activities' (American Psychiatric Association, 2013, p. 53). In order to receive a diagnosis, the social communication and social interaction difficulties should be pervasive and sustained with varying manifestations depending on the individual's characteristics, history, and support (American Psychiatric Association, 2013). This variation across the spectrum was identified from initial autism research through the contrast of observations of pioneers Kanner and Asperger regarding children's language abilities. In his 1943 seminal paper, Kanner reports that out of the 11 children presenting with the characteristics of a ''unique' syndrome, not heretofore reported', three 'have so far remained 'mute'' and none of the others had language that 'served to convey meaning to others' (pp. 242-243). Asperger on the other hand, reported that the children he studied spoke fluently, even 'like little adults', with freedom and originality in their language (Happé and Fletcher-Watson, 2019, p. 17). This early contrast is representative of autism as a spectrum, with each individual's social communication and social interaction developing and manifesting differently.

A unique characteristic of autism is that speech can develop without communicative ability (Jordan, 2019). As autism affects communication, which is the key to understand and develop language, delays or difficulties in this area are also common. Furthermore, difficulties can also appear in viewing language as a tool for communication, thus it may be used successfully to express own needs, but present with challenges when explaining thoughts and feelings, or understanding those of others (Bogdashina, 2005). Other difficulties can include: the interpretation of language as fixed and literal, leading to misinterpretations of idioms, non-verbal cues from body language and facial expressions, and the presence of echolalic speech (Jordan, 2019). A systematic review conducted in 2012 found that language abilities and level of useful speech play a role in outcomes in adulthood for students with autism (Holwerda et

al., 2012). Young adults with autism with difficulties in social communication and social interaction are also at an increased risk of social isolation (Orsmond et al., 2013).

Difficulties with social communication and social interaction mean that students with autism should receive targeted support in the area of self-determination. Delayed or limited communication and/or social interest can hinder spontaneity of skill demonstration, which leads to increased adult prompting and support (Hume et al., 2009). Furthermore, they can inhibit the individuals' confidence to ask questions, seek clarifications, and express preferences (Hume et al., 2014). Carter et al. (2006) suggest that teachers' views on students' self-determination can be impacted by their social and communication difficulties. Moreover, self-determination outcomes could be more linked to these specific difficulties, rather than to a diagnosis label. Individuals with autism might also struggle to understand the implications of life planning and self-determination, and without targeted instructional methods they might engage in relevant activities without authentic understanding and personal relevance (Fullerton and Coyne, 1999). According to Mithaug (1998, p. 41), 'self-determination always occurs in a social context', as 'opportunities for choice and action (…) are guaranteed by other people'. Therefore, in order to ensure enhanced self-determination for students with autism, particular focus should be given to the areas of social communication and social interaction. A qualitative review of the experiences of adults with autism of self-determined behaviour suggests that the challenges encountered 'may be a symptom of inadequate support or services' (Kim, 2019, p. 11). Thus, individuals with specific communication difficulties may be able to achieve their full potential in gaining and expressing their self-determination when given adequate support and tools.

2.4.2. **Restrictive repetitive behaviours and interests**

The second area of autism diagnostic criteria is the presence of 'restricted, repetitive patterns of behavior, interests, or activities' (American Psychiatric Association, 2013, p. 53). Kanner (1943, p. 45) described the behaviour of the children he observed as being 'governed by an anxiously obsessive desire for the preservation of sameness', changes in routine or surroundings causing distress. Similar observations were also made by Asperger, including the restrictive special interests in isolated idiosyncratic objects or topics (Happé and Fletcher-Watson, 2019). *Restrictive repetitive behaviours* are a heterogeneous group ranging from

repetitive movements of the body, to repetitive use of objects and non-functional rituals and cognitive ones such as intense interests, including sensory or pre-occupations (Richler et al., 2010). The area of restrictive repetitive behaviours and interests receives much less attention than the domains of social communication and social interaction (Richler et al., 2010).

A common misconception is that the *restrictive* interests of individuals with autism implies that they are less in number. However, a study conducted in 2013 (Anthony et al.) found that the interests of individuals characterised as having high functioning autism were not more limited in number or scope than those of neurotypical individuals. Nonetheless, they were greater in intensity, less likely to be socially oriented, and more likely to be object or sensory oriented (Anthony et al., 2013).

Restrictive repetitive behaviours can impact the expression of self-determined skills and behaviours, particularly when these have been taught with adult support and prompting. The removal of adult prompting can lead to the target skills or spontaneous responses not being displayed or generalised (Hume et al., 2009). Furthermore, this might lead to off-task behaviours or a decline in engagement and productivity (Dunlap and Johnson 1985, cited in Hume et al., 2009). A systematic review on autism and predictors of work participation, found that challenging or ritualistic behaviour interferes with daily functioning (Holwerda et al., 2012, p. 340). The impact of restrictive repetitive behaviours and interests can be separated from that of difficulties with social communication and social interaction. It has been shown that individuals with mild social impairments and fluent language can still have significant difficulties caused by restrictive repetitive behaviours and interests (Richler et al., 2010).

Having a restrictive area of interest can also impact the willingness of individuals with autism to explore and be motivated by new skills, activities, and interests expressed by others. In this instance, a dilemma occurs when looking at the manifestation of self-determination through choice, as both the willingness and refusal of engaging with a specific area of interest represent ways of expression. Nonetheless, although it might be necessary to try to find ways in which an individual's intense interests do not have a detrimental effect on learning, they should still be seen as manifestations of choice and preference (Zager and Wehmeyer, 2019).

2.4.3. **Sensory processing, motivation, and engagement**

The DSM-5 states that (American Psychiatric Association, 2013, p. 52) 'hyper- or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment' represents a manifestation of restricted, repetitive patterns of behaviour, interests, or activities. Sensory processing differences are common in over 90% of individuals with autism, but also in other conditions, such as ADHD, learning disabilities, and Down Syndrome (Leekam et. al., 2007).

Sensory processing differences can impact an individual's ability to acquire skills related to self-determination and to generalise skills or behaviours that have already been mastered (Hume et al., 2009). Under-reactivity and sensory seeking have been found to impact scores related to daily-living skills (Bagatell, 2019). Fine motor difficulties might also impact the acquisition of skills involving utensils or clothes fasteners, and poor somatosensory processing might lead to difficulties in performing tasks such as sweeping or vacuuming.

Differences in sensory processing can also impact engagement and motivation. Social stimuli are common motivators and sources for engagement, but that is not often the case for individuals with autism. As with all characteristics of autism, sociability or desire for social interaction can vary, however difficulties in understanding how to manage social situations or how to please other are common (Jordan, 2019). Furthermore, a lack of motivation in engaging in certain skills related to self-determination can be linked to a difficulty in understanding their social implications, such as personal care (Bagatell, 2019). However, incorporating an individual's specific interests and providing opportunities for choice when teaching skills related to self-determination can lead to increased motivation and engagement (Koegel, Singh and Koegel, 2010).

2.4.4. **Executive function**

The previously discussed characteristics of autism, including restrictive repetitive behaviours and interests, reluctance to change, and sensory processing differences, are all signs of differences in executive function (Ozonoff and Schetter, 2007). Executive function includes cognitive processes such as goal initiation, planning, working memory, and flexibility. Individuals with autism are often described as having an uneven profile of executive

functioning skills, such as being successful academically, but experiencing difficulties in planning and organisation (Carr, Moore, and Anderson, 2014).

Of particular interest in relation to the expression of self-determination are the ability to plan multi-step sequences of events and dealing with new situations and information (Hume et al., 2014). Difficulties in executive function have been found to impact adaptive everyday functioning in children with autism (Gilotty et al., 2002). Furthermore, differences in working memory and initiation can impact organisation of materials and steps in performing certain tasks (Bagatell, 2019).

Problem solving, which is often linked to self-determined behaviour, involves social interaction and communication, thus might bring difficulties to individuals with autism. Furthermore, goal setting and attainment, also related to promoting self-determined behaviour, can present challenges due to the sequential characteristic of goal-directed behaviour (Chou et al., 2017a). Interventions focusing on goal setting and attainment have been proven effective for individuals with autism, however research in the area remains scarce (Carr, Moore and Anderson, 2014).

2.4.5. **Prompt dependence and generalisation**

Lastly, another important area is prompt dependence, which needs particular attention in the field of autism research and for the present research inquiry, as discussed in *Identification*. Prompt dependence is a particular concern for students who take part in significant amounts of one-to-one instruction, as it can lead to an overreliance on adult support, thus inhibiting self-determined behaviour (Hume et al., 2009). Prompting is widely used in autism evidence-based interventions, such as time delay, reinforcement, and video-modeling, in the acquisition of social and communication skills, academic, and life skills (Sam and Hume, 2019). Teaching strategies that involve adult prompting is often effective for the initial acquisition of skills, but if prompt dependence occurs, performance can be hindered during maintenance and generalisation activities. Strict stimulus control when teaching specific skills can enhance student reliance on adult cues and increase the likelihood of prompt dependence (Hume et al., 2009). Furthermore, prompt dependence can lead to increased passivity and learned

helplessness. The latter can also negatively impact initiation of responses and difficulties learning the response-reinforcement contingency (Koegel and Mentis, 1985).

The previously discussed areas of social communication and interaction, restrictive repetitive behaviour and interests, prompt dependence, generalisation, sensory processing, motivation, engagement, and executive functioning, in which students with autism might encounter difficulties demonstrate the need for specific and targeted attention to enhancing their self-determination. Furthermore, these characteristics should be taken into consideration by the researcher in defining the *prima facie* question.

2.4.6. **A gap in autism research**

Autism educational research is dominated by empirical studies conducted using experimental designs, stemming from the medical model. Unfortunately, this research culture diminishes the potential of contributions from teachers and students, stemming from their professional and lived experiences, and knowledge of the nature of the school context (Guldberg, 2017). Connor et al. (2011, p. 108) highlight a need to expand research methodologies in learning disability research, to offer 'a needed exploration of what kind of crucial knowledge has been missed, unacknowledged, blocked, or lost'. These methodologies should position, according to Guldberg (2017), teachers, individuals with autism and their families at the centre of research inquiries. This is in accordance with viewing teachers as reflective practitioners and valuing the knowledge they generate, as Guldberg (2017) states:

> *'it is difficult to see how a practice can be effective at generating improvement if we do not also gain an understanding of the way that the world is viewed and experienced by the individuals whose outcomes we are aiming to improve' (p. 154)*

Recent years have seen a movement towards including individuals with autism as collaborators to research, and as active participants in knowledge production. Autism self-advocates also call for 'nothing about us without us', for representation in the developments that directly impact their lives (Crane et al., 2021). However, most studies involve 'no power, or only tokenistic forms of power' (Fletcher-Watson et al., 2019, p. 944). Milton and Bracher (2013, p. 61) explain that the exclusion of participants with autism from 'meaningful involvement in social scientific research is both ethically and epistemologically problematic,

and constitutes a significant barrier to impact'. This *meaningful involvement* refers to an inclusion of different voices, an accurate depiction of the lived experiences, and the production of knowledge that is in agreement with them. The authors suggest that this can be achieved through 'community based participatory research' or 'participatory action research', 'where autistic people engage as equal partners throughout the research process' (Milton and Bracher, 2013, p. 66). Such research should build on the strengths and knowledge of participants involved, as well as facilitate co-learning and co-production of knowledge that is purposefully disseminated to those involved. Input from the community can also lead to improving research processes and methods, demonstrate the value of research in context, and facilitate the translation of findings into practice (Fletcher-Watson et al., 2019).

2.5. Self-determination – meanings and implications

After a clearer understanding of the characteristics of students with autism and the decision to look at enhancing their *self-determination,* a better understanding of the term is needed. The following paragraphs look at its development, meanings, and implications as an educational concept in the school context and in relation to transition outcomes. This is to further define the *prima facie* question of: what can teaching staff do to prepare young people with autism for life after school?

2.5.1. **An educational outcome**

Developing a sense of self-determination is important for individuals with or without disabilities, as it influences not only how an individual perceives themselves, but also how he is perceived by others in society. As an educational outcome, self-determination began gaining attention also in the mid-1990s, with leaders of the U.S. Department of Education considering it a 'critical outcome for youth with disabilities' (Wehmeyer, 1996, p. 18). Moreover, Halloran (1993) even went as far as naming self-determination as 'the ultimate goal of education', when discussing requirements for transition services (cited in Wehmeyer, 1996, p. 18).

When discussing the education of students with disabilities, Cobb et al. (2009) saw self-determination as 'a key component of high-quality transition services' (p. 108). Transition interventions should be guided by the student and aimed at empowering and facilitating

independence. However, self-determination can be a difficult educational goal to achieve for students with disabilities (Ward, 1988). This is due to the fact that many become reliant on dependency-creating systems to meet their needs, which reduces their chances and opportunities for independence (Wehmeyer, 1996, p. 18). This is of particular importance for students with autism, as addressed in Section 2.4.5. Moreover, self-determination is linked to adulthood outcomes after leaving school. Higher levels of self-determination have been found to lead to more positive post-school outcomes including employment, financial independence, and accommodation (Wehmeyer and Garner, 2003).

2.5.2. **Misperceptions**

Due to the complexity and the numerous attempts at defining the concept of *self-determination*, several misperceptions appear regarding its meaning and implications. A common misperception is that self-determination is limited to the independent performance of behaviours (Wehmeyer, 2003). This is problematic in the context of designing interventions targeting self-determination, as their success is quantifiable in the increase of autonomous behaviour. Furthermore, this implies deficits in individuals with cognitive or physical disabilities, who might have limited activities they can perform independently or might need more time to develop relevant skills. Wehmeyer (2003) explains that, in the expression of self-determination, it is more important that the individuals have exerted control over the outcomes of certain functions, rather than whether they have the capacity to perform them autonomously. Moreover, adequate support should be provided to ensure that the individual has control over and participates to the maximum extent in the decision-making process.

Another misperception is limiting self-determination to *choice-making*, which is only one aspect of its expression. This can also be problematic as it does not only limit the understanding of the concept, but it can also lead to interventions and programmes that focus only on quantifiable results related to choice-making. Furthermore, Ferleger (cited in Wehmeyer, 2003) explains that understanding self-determination as only choice-making can lead to deprivation of services or violation of rights, such as work or housing.

Lastly, self-determination can be misperceived as something an individual does, often being used in the field of learning disabilities as a programme or offering support. Within

educational environments, this can be encountered when involving students in their education or transition planning meetings, which are often included in self-determination interventions. Although all of these are important aspects, Wehmeyer (2003, p. 20) explains that they fall short of understanding that 'self-determination is not about a way to do planning or provide services, but instead about enabling people to make things happen in their lives'.

2.5.3. **The functional model of self-determination**

In the 1990s when self-determination began gaining attention in disability research, Wehmeyer (1992) proposed a functional model of self-determined behaviour focusing on the self-determination of young people with disabilities. The model was called *functional* because self-determination was not viewed in a *response-class manner*, but rather by considering the function an action served for a person (Shogren et al., 2017).

Wehmeyer (1996) explains that in order for an act or event to be characterised as self-determined, the individual's actions should reflect four essential characteristics:

> *'1) the individual acted autonomously, 2) the behaviours were self-regulated, 3) the person initiated and responded to events in a psychologically empowered manner, and 4) the person acted in a self-realising manner'*
>
> *(p. 24).*

The attitudes (psychological empowerment and self-realization) and abilities (behavioural autonomy and self-regulation) should be displayed consistently, not unfailingly, by an individual in order to be characterised as self-determined (Wehmeyer, 1996). These characteristics became the domains measured by *The Arc Self-Determination Scale (SDS)* which operationalised the model's structure to measure an individual's self-determination (Shogren et al., 2017).

Autonomy can be described as the capacity to act on one's interests and preferences, free from external influence or interference (Hume et al., 2014). *Self-regulation* is the individual's ability to examine their environments and their responses for coping with them, in order to make decisions about how to act (Whiteman, 1990). Individuals who are characterised as self-

regulated are able to evaluate a task, make decisions about what skills are needed in a certain situation, and design, evaluate, and adapt a plan of action (Wehmeyer et al., 1996).

Acting in a *psychologically empowered* manner, involves the different dimensions of perceived control, including the cognitive (personal efficacy), personality (locus of control), and motivational aspects (Wehmeyer et al., 1996). Individuals who behave in a psychologically empowered manner do so on the basis of a belief that they can control circumstances that matter to them, and that they have the required skills to achieve desired outcomes (Wehmeyer, 1996).

The term *self-realization* was initially used by Gestalt psychologists to refer to the intrinsic purpose of the person, but it can be widely understood as the ability to shape one's life course in a meaningful manner (Angyal, 1941). Wehmeyer (1999) summarises its essence as people knowing what they do well and acting accordingly. Therefore, self-realization involves self-knowledge and self-understanding of one's strengths, limitations, and acting in such a manner that maximises their potential. This is developed through experiences of environments and relationships, and through feedback and reinforcement from others (Wehmeyer, 1999).

The following component elements are seen as integral to the development of the four essential characteristics of self-determination:

> *'Choice-making skills*
> *Decision-making skills*
> *Problem-solving skills*
> *Goal-setting and attainment skills*
> *Self-observation, self-evaluation and self-reinforcement skills*
> *Self-instruction skills*
> *Self-advocacy and leadership skills*
> *Internal locus of control*
> *Positive attributions of efficacy and outcome expectancy*
> *Self-awareness*
> *Self-knowledge' (Wehmeyer, 1999, p. 59).*

The list is not to be considered exhaustive or to define the concept of self-determination, but rather that the acquisition of such skills is considered essential in the expression of self-determination and should be used to guide instructional frameworks.

Therefore, viewing self-determination through an *ecological approach* seems most appropriate when targeting it in an educational context. This is not to say that individual skills and qualities of an individual are ignored, as explained in Section 2.3, but rather that they are viewed as part of and through the interaction with the environment in which they occur. The theoretical implications of this perspective are further detailed in Section 2.7, but firstly the details of the immediate English educational context are presented in the following paragraphs.

2.6. The educational context in England, UK

2.6.1. **Educational provision**

The present section provides an overview of the educational system for children and young people with disabilities in England. This is achieved by presenting the educational provision, as well as looking at relevant sections of legislation. This is to further refine the *prima facie* question, by exploring the guidance given to teaching staff. According to National Statistics (January 2020), over 15% of pupils in England were recorded as having special educational needs (SEN). These are classified between those receiving *SEN support* (12.1%), and those with an *Educational, Health and Care (EHC) Plan* (3.3%) (National Statistics, 2020). *SEN support* refers to extra or different help provided as part of the school's existing curriculum, from the class teacher, who might receive advice from outside specialists. The EHC Plan is a legal document written following a formal assessment, that outlines a child or young person's (up to the age of 25) needs and the help they should receive.

According to Jones (2002), the educational provision funded by authorities in the UK for pupils with autism includes:

- mainstream schools – with or without additional help
- resourced provision – in a mainstream school, where pupils with a specific type of SEN are taught in mainstream classes, but have a base or specialist facilities within the school
- generic special school or units – with a unit being a special provision within a mainstream school, where pupils with SEN are taught mainly in separate classes
- schools, units, or classes specific for pupils with autism

- schools or units for pupils with other types of SEN
- home-based programmes
- advisory/outreach teams

At the beginning of 2020, almost all pupils (97.9%) in state-funded special schools had an EHC Plan (National Statistics, 2020). However, out of the total of pupils with SEN, only 9.3% attended state-funded special schools, and a further 0.3% non-maintained special schools (National Statistics, 2020). In the same year, autism was recorded as the most common need identified amongst pupils with an EHC Plan, 30% having it as their primary need, as well as the most prevalent need for which special schools were approved to make provision for (National Statistics, 2020).

According to the *2015 Special Educational Needs and Disability (SEND) Code of Practice: 0 to 25 years,* young people aged 16-19, and up to 25 when they have an EHC Plan, 'should follow a coherent study programme which (…) enables them to achieve the best possible outcomes in adult life' (p. 113). The post-16 education and training are very diverse and include mainstream and special school sixth forms, sixth form colleges, general further education colleges, 16-19 academies, special post-16 institutions, vocational learning and training providers in the private or voluntary sectors. Unfortunately, support for young people aged 19-25 with SEND is 'not an automatic entitlement', and provision might be ended if deemed no longer necessary or if they have achieved their EHC Plan aims (Parliament. House of Commons, 2019, p. 6). However, local authorities must not cease to maintain an EHC Plan because the young person has turned 19, and only if the young person chooses to leave education to take up paid employment, enters higher education, or no longer wishes to engage in further learning. In January 2018, there were 46,850 young people in further education with EHC Plans or the previous version of statements, out of which almost a third were in state-funded special school (Parliament. House of Commons, 2019).

2.6.2. **Current statutory guidance**

According to the Department for Education (2014), the *2015 SEND Code of Practice: 0 to 25 years,* provides guidance and details of legal requirements that must be followed by local authorities, health bodies, school and colleges to provide for children with SEND. This

guidance should be taken into consideration and followed unless there is a good reason not to do so.

The *2015 SEND Code of Practice: 0 to 25 years*, appears promising for young people with special educational needs transitioning to adulthood. There is a strong emphasis on post-16 settings striving to meet the needs of students in order to achieve progress and 'reach positive destinations in adult life' (Department for Education, p. 113). The four target areas in preparing for adulthood: higher education and/or employment, independent living, participating in society, and being as healthy as possible. An interesting definition of what *independent living* consists of is 'having choice, control, and freedom over their lives and the support they have' (Department for Education, p. 122). Settings have a duty to provide young people with high aspirations in the four target areas through the curriculum and extra-curricular provision (Department for Education, p. 124).

This support should be discussed with the young person during EHC Plan reviews from Year 9 onwards, with particular focus given to their preferences regarding employment, housing, and the means to access support. Moreover, as young people develop and form their own views, significant focus should be given to the required support to prepare the young person 'to make more decisions for themselves' (Department for Education, p. 126). Under the Children and Families Act 2014, after the compulsory school age, the right to make requests and decisions applies to the young people directly rather than their parents/carers. However, settings should continue to involve parents/carers in discussions regarding the young person's future, but with the final decision resting with the young person (Department for Education, p. 127).

Significant focus throughout the document is given to young people being 'supported to participate in discussions about their aspirations, their needs, and the support that they think will help them best', with the aim of 'promoting student independence' (Department for Education, p. 114). The support provided should be evidence-based, individualised and under regular review, during which the young people and their parents/carers should be involved. Moreover, this support should be aimed at meeting the young person's aspirations and

ambitions, which should be addressed early as 'high aspirations are crucial to success' (Department for Education, p. 120).

The planning and support do not only bring enormous benefits of independence and self-esteem to the young people themselves, but also lead to a reduction in costs to the public purse. According to the 2011 National Audit Office report *Oversight of special education for young people aged 16-25*, giving a young person the necessary skills to live in a semi-independent rather than a fully supported living environment reduces the costs by around £1 million.

The current *2015 SEND Code of Practice: 0 to 25 years* places a strong emphasis on taking into consideration the young person's needs, preferences and aspirations, with the aim of providing positive adulthood outcomes. Therefore, it can be inferred that one of the goals of education is to provide students with an environment that offers opportunities to practice and develop skills related to the ability to exercise control over their lives. The aim of this approach is to provide young people with 'positive destinations in adult life' (Department for Education, p. 113). A similar perspective regarding student involvement in decisions about their future began arising in U.S. legislation in the 1990s, through the development of the concept of self-determination in order to provide individuals with disabilities with an enhanced quality of life, as discussed in Sections 2.3.4 and 2.5. Therefore, the current statutory guidance in England sets out clear aims regarding the self-determination of young people in preparing them for life after school. However, further exploration is needed to determine the opinions of stakeholders when translating and implementing this into practice.

2.7. Theories and frameworks in self-determination

As previously discussed, from an overview of relevant areas of literature, investigating self-determination from an ecological perspective seems most suitable in meeting the needs of the school. However, this should be explored and confirmed by the school's stakeholders, to maximise their benefits and outcomes from the research. Before this is carried out, a more in-depth understanding of existing interventions in self-determination research is needed, which will be carried out in Chapter Three. The following sections outline the main theories that are

at the foundation of self-determination research and have been the basis of the development of interventions.

The first theory to be overviewed is *Self-Determination Theory (SDT)* the main and most influential theory in self-determination research, founded by Deci and Ryan (1985). This is a broad and complex framework for the study of human motivation and personality, thus for the purposes of this thesis only a brief overview is provided, followed by looking at concepts the *basic psychological needs*, and *supportive environments*.

The next theory presented is *Causal Agency Theory,* recently developed by Shogren et al. (2015), as a reconceptualization of the functional model of self-determination (described in Section 2.5.3). This is an influential theory in the specific area of self-determination for young people with disabilities, thus valuable to consider in the context of the present thesis. Furthermore, it also looks at the role of the basic psychological needs, taken from SDT, but with a different perspective.

Following Causal Agency Theory, an ecological framework of self-determination is presented. This is not a theory in itself, but nevertheless a valuable framework to consider particularly because of the ecological approach on self-determination taken in this thesis.

2.7.1. **Self-determination theory (SDT)**

Overview

In the Aristotelian view of human development, individuals are seen to possess a tendency towards psychological growth and integration. *Self-determination theory (SDT)* is an organismic theory of human behaviour, personality development, motivation and wellness, based on empirical research (Ryan and Deci, 2017). It began with an initial focus on intrinsic motivation, but expanded to include both intrinsic and extrinsic motivations, models of well-being, relationship quality, goal contents, vitality and depletion, and many others (Ryan and Deci, 2019). SDT was founded on the assumption that 'all individuals have natural, innate, and constructive tendencies to develop an ever more elaborated and unified sense of self' (Ryan and Deci, 2002, p. 5). Furthermore, theorists assume that individuals have a natural tendency

to create relations between aspects of their innermost selves and also with other individuals in their social worlds. This tendency involves both *autonomy*, tending towards inner organisation and self-regulation, and *homonomy*, tending toward integrating oneself with others (Ryan and Deci, 2002). In order to ensure a healthy development, both aspects will function complimentarily, but although innate, they cannot be taken for granted. On the contrary, SDT assumes that specific social-contextual factors can support or thwart the development of this innate tendency (Ryan and Deci, 2002).

The foundations of SDT reside in the interaction between an active, integrated individual and social contexts that can either facilitate and support the innate integration propensities, or hinder and fragment their development, which can have detrimental consequences to development. Thus, according to Ryan and Deci (2002):

> *'psychological growth and integration in personality should neither be taken as a given, as something that will happen automatically, nor should it be assumed not to exist. Instead, it must be viewed as a dynamic potential that requires proximal and distal conditions of nurturance' (p. 6).*

SDT also has a functional approach that is both practical and critical. It is practical in that it identifies how features of contexts facilitate or undermine the motivations and satisfactions of effective self-regulation and wellness, which can be systematically applied in various social contexts (classrooms, workplaces, families) (Ryan and Deci, 2017). The critical aspect is manifested through the examining of social contexts as supporting or impairing human thriving.

The basic psychological needs

According to Shogren et al. (2015), SDT:

> *'integrates conceptualizations of innate human tendencies, social contexts, and motivators for human action to illustrate how congruence between one's basic needs and social contexts spur personal agency that, ultimately, results in improved overall well-being' (p. 257).*

In SDT, environments that support or hinder effective functioning are described in relation to the concepts of *basic* or *fundamental psychological needs*. This is based on a belief that these *basic psychological needs* are necessary conditions for growth and well-being, just as fundamental physical needs (Ryan and Deci, 2002). Human beings are seen to be motivated

to engage in experiences and contexts that fulfil these innate needs, which are essential for psychological growth, resilience, vitality, and well-being (Causgrove Dunn and Zimmer, 2020). The three main needs identified are: *competence, relatedness, and autonomy* (Ryan and Deci, 2002). They are universal and innate, thus present across cultures and developmental stages, although they might be expressed or satisfied differently (Ryan and Deci, 2002).

Competence refers to a feeling, rather than a skill or capacity, of a sense of confidence, effectance, and mastery in interacting with the environment. It involves a need to feel capable to operate effectively in important life contexts (Ryan and Deci, 2017). Furthermore, *competence* refers to 'experiencing opportunities to exercise and express one's capacities' (Ryan and Deci, 2002, p. 7). The need for *competence* is expressed through inherent striving, manifested through curiosity and manipulation, but also readily thwarted. This occurs in contexts where challenges are too difficult, there is negative feedback, criticism, and social comparisons (Ryan and Deci, 2017).

Relatedness refers to a feeling of belongingness, of caring, and being cared for by others. It reflects the *homonomy* of the integrative tendency of life, to connect and be accepted by others. The *relatedness* in SDT does not involve the seeking of outcomes, but rather the psychological sense of being with others. It involves a need for belonging and feeling significant among others, as well as experiencing oneself as giving or contributing to others (Ryan and Deci, 2017).

Autonomy refers to the need of being the source of one's own behaviour and acting on the basis of own interests and values. Autonomous individuals experience their behaviour as an expression of their sense of self, even when their actions are influenced by external sources (Ryan and Deci, 2002). In SDT, *autonomy* is not to be confused with *independence*, which is understood as not relying on external influences, and also not to be antagonised with *dependence*. Thus, individuals can act autonomously through independent, interdependent, or dependent action (Causgrove Dunn and Zimmer, 2020). This is due to the belief that individuals can act autonomously when relying on advice and support from others, as long as one is in agreement with them. Therefore, *autonomy* in SDT involves that an individual's behaviours are in agreement with one's authentic interests and values (Ryan and Deci, 2017).

SDT theorists characterise social environments in terms of the extent to which they are:

> *'(1) autonomy supportive (versus demanding and controlling)*
>
> *(2) effectance supporting (versus overly challenging, inconsistent, or otherwise discouraging)*
>
> *(3) relationally supportive (versus impersonal or rejecting)' (Ryan and Deci, 2019, p. 12)*

Supportive environments

A common concern for teaching staff is how to increase students' motivation to learn. Through the lens of SDT, this can be achieved through environments that are supportive of the needs for autonomy, competence, and relatedness (Zager and Wehmeyer, 2019).

An autonomy-supportive classroom environment includes opportunities for students to choose, self-direct, and self-regulate their learning, which is structured around their strengths, interests, and curiosity, in order to create meaningful and purposeful learning (Zager and Wehmeyer, 2019). The framework of Universal Design for Learning (UDL) outlines valuable strategies and principles that can provide support when creating autonomy-supportive classrooms (Zager and Wehmeyer, 2019). It involves a focus on the curriculum design, by having flexible materials that provide opportunities for students across a range of abilities and interests, to maximise access to content and opportunities for learning. The materials used provide options for recruiting interest, that is they are designed to engage students by being relevant, meaningful, presented in an interesting and appropriate format, as well as being optimally challenging.

Teaching staff play an essential role in providing autonomy-supportive environments. When looking at the behavioural differences between controlling and autonomy-supportive teachers, Reeve (2002) noted that the latter spent more time listening, less time holding instructional materials, allowed more time for independent work, and offered fewer answers to problems students faced. Moreover, regarding conversational statements, autonomy-supportive teachers came across as less pressuring/demanding, gave less directives/commands, less criticism, and placed emphasis on praising mastery, responding to student-generated questions, and communicating statements rich in empathy and

perspective taking (Reeve, 2002). Thus, autonomy-supportive teachers can be described as responsive, supportive, flexible, and motivating.

A follow-up study conducted in 2006 by Reeve and Jang, looked at the behaviours of autonomy-supportive teachers, and identified the following eight behaviours as positively correlated to students' autonomous motivation:

> *'(1) listening*
>
> *(2) creating time for independent work*
>
> *(3) giving the student opportunities to talk*
>
> *(4) praising signs of improvement and mastery*
>
> *(5) encouraging the student's effort*
>
> *(6) offering progress-enabling hints when the student seemed stuck*
>
> *(7) being responsive to the student's questions and comments*
>
> *(8) acknowledging the student's perspective and experience' (pp. 215-16)*

Autonomy-supportive behaviours shown by teachers have been found to affect students' self-reports of self-determination and competence (Hamm and Reeve, 2002, cited in Reeve, 2002). Furthermore, what teachers did had a more significant impact than what teachers said. Students reported higher perceptions of self-determination when teachers listened more, encouraged conversation, and allowed time for independent work. An even more significant impact was that of 'teachers providing hints but resisted giving answers' (Reeve, 2002, p. 188).

There is limited research on the impact of an autonomy-supportive environment and self-determination for individuals with autism. A study conducted in 2013 by Shea, Millea and Diehl, found that autonomy supports in a school setting might have similar benefits for students described as having high-functioning autism as for their typically developing peers. Thus, students who rated their teachers higher in autonomy support also reported higher self-determination at school (Shea, Millea and Diehl, 2013).

Competence supports involve educational practices that encourage students to believe that they are capable and competent (Zager and Wehmeyer, 2019). This does not imply the acquisition of certain skills, but rather a perception of oneself as competent, which can be encouraged through a focus on mastery goals and collaboration, instead of competition and performance goals. It can involve provisions of structure and positive feedback, optimally challenging learning activities that are based on students' interests, encourage self-directing and self-regulating. Teachers should also provide students with appropriate tools and feedback to promote success and feeling of efficacy (Niemiec and Ryan, 2009).

An environment that is supportive of *relatedness,* is one that enables individuals to experience a sense of belonging and connection with others. When students' strengths are recognised, interests are emphasised, volitional action is supported (autonomy supports), and when students believe they are capable and competent (competence supports), they are more likely to feel a sense of belongingness and that others care about them (Zager and Wehmeyer, 2019). Thus, an environment in which both autonomy and competence supports are present, should also provide support for relatedness. Niemiec and Ryan (2009) explain that relatedness in the classroom is 'deeply associated with a student feeling that the teacher genuinely likes, respects, and values him or her' (p. 139). Thus, students who experience this are more likely to feel more motivated and engaged in their learning. Relatedness-supportive teaching has been identified as being related to teachers showing enthusiasm towards students' work, offering a rational and meaningful purpose for work, and providing supportive feedback (Zager and Wehmeyer, 2019).

2.7.2. **Causal Agency Theory**

Causal Agency Theory (Shogren et al., 2015) represents a reconceptualization of the *functional model of self-determination* (Wehmeyer, 1992). As self-determination is a complex construct, a reconceptualization was needed to reflect research on the construct and changes in understanding human behaviour (Shogren et al., 2015). The change in understanding disability itself also contributed to the need to revisit the theory, with the focus shifting towards strengths-based approaches and 'improving the fit between the person's capacities and the demands of the environment' (Shogren, 2013, p. 20).

In Causal Agency Theory, self-determination is defined as a:

> *'dispositional characteristic manifested as acting as the causal agent in one's life. Self-determined people (i.e., causal agents) act in service to freely chosen goals. Self-determined actions function to enable a person to be the causal agent is his or her life' (Shogren et al., 2015, p. 258).*

A *dispositional characteristic* refers to a tendency to act or think in a certain way, but can change depending on context, thus implying that self-determination can be measured, and variance will be observed across individuals and within individuals over time (Shogren et al., 2015).

Causal agency implies that it is the individual that makes and causes things to happen, acting in a way aimed to accomplish a specific goal or create change (Shogren et al., 2019). Furthermore, the self-determined actions (i.e., action-control beliefs, volitional action, and agentic action) are the ones that enable a person to act as a causal agent, which is the central feature of the theory (Shogren et al., 2019).

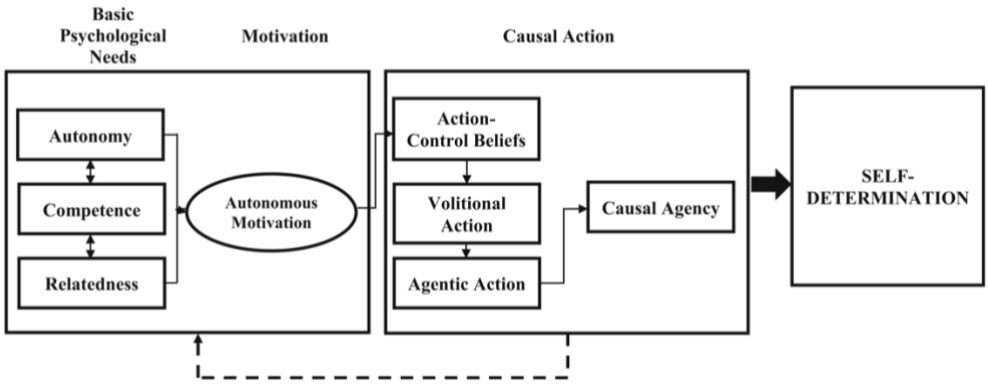

Figure 2. Causal Agency Theory: Development of self-determination (reprinted, Shogren et al., 2019, p. 120).

The figure above outlines the development of self-determination through the perspective of Causal Agency Theory. It begins with the *basic psychological needs* for *autonomy, competence* and *relatedness* from SDT (outlined in Section 2.7.1) whose satisfaction facilitates *autonomous motivation* (Shogren et al., 2019). The latter in turn, enables people to pursue goals to satisfy their psychological needs, which initiates a sequence of *causal action.* Opportunities and environmental supports in engaging in *causal action* lead to enhanced self-determination. Thus, the theory identifies the role of the *basic psychological needs* and *autonomous*

motivation in shaping environmental conditions for self-determined actions, which in turn create opportunities for *need satisfaction* and *autonomous motivation*, which lead to enhanced *causal agency* and the development of self-determination (Shogren et al., 2019). Causal Agency Theory thus supports the idea that when the *basic psychological needs* are met, individuals are better able to engage in causal actions that support the development of self-determination.

According to Shogren (2020, p. 32), the development of self-determination within Causal Agency Theory is 'shaped by environment opportunities to (a) develop self-determination skills, (b) apply these skills across contexts, and (c) receive individualized supports necessary to express and use self-determination skills'. Throughout life individuals engage in goal setting, action planning, and evaluation cycles, choice and preference thus being critical in the selection of goals based on one's strengths, needs, and interests (Shogren, 2020).

2.7.3. **An ecological framework of self-determination in education**

According to Abery (1994), most initial research in self-determination as an educational outcome was focused on the characteristics and skills of the individual, which has led to an interpretation that the data suggests deficits in people with disabilities. This interpretation caused 'a lack of appreciation of the important role that a person's ecological contexts play in the development and use of skills relevant to self-determination' (Abery, 1994, p. 350). The perspective that people with disabilities are not capable of expressing self-determination, leads to limitations in the opportunities given to exert control over one's own life and practice skills related to self-determination, thus inhibiting its development. This is also reflected in initial instructional models of self-determination that focus primarily on the individual, and disregard environmental factors. Furthermore, the initial research looking at the influence of the environment on the development of self-determination, takes an oversimplified approach as, according to Abery and Stancliffe (1996), only addresses isolated environmental variables.

In order to address this gap in literature, Abery and Stancliffe (1996, p. 114) propose an ecological framework for self-determination, conceptualizing it as 'a product of an ongoing interaction between individuals and the multiple environments within which they function'. This is not to say that individual characteristics or other theoretical traditions are neglected,

but rather they are put within a broader perspective, that of an environmental context. Self-determination does not 'lie within the person', but rather it is:

> *'the product of both the individual and the environment - of the person using the skills, knowledge and beliefs at his/her disposal to act on the environment with the goal of obtaining valued and desired outcomes' (Abery and Stancliffe, 2003, p. 27).*

Wehmeyer (2003) explains that regarding self-determination from an ecological perspective does not disregard other theoretical traditions that focus on individual skills and capacities, but rather that it includes the individual and all of his capacities. In attempting to define self-determination, Wehmeyer (1996) explains that it cannot be reduced to a set of behaviours as any behaviour can be considered self-determined, and both the *occurrence* and *non-occurrence* of a certain behaviour can be seen as an expression of self-determination.

Environments range from being supportive to actively creating barriers to the exercise of self-determination, therefore an understanding of individual characteristics as well as the influence of ecology are needed (Abery and Stancliffe, 2003). The ecological framework of self-determination has been developed with the following assumptions in mind:

> *'All persons have a desire for and a potential to be self-determined*
>
> *Self-determination exists along a continuum*
>
> *Self-determination is a developmental/life span issue*
>
> *Self-determination results from the interplay between individuals and their ecosystems' (Abery and Stancliffe, 2003).*

The ecological framework of self-determination is based on Bronfenbrenner's bioecologial model of human development, which arose as a result of the observation that much research undertaken so far has been *ecologically invalid*, in that the laboratory conditions of experiments are in contrast with those in the child's everyday life (Bronfenbrenner, 1974). Bronfenbrenner (1979, p. 8) proposed the study of human development in context, through 'a theory of environmental interconnections and their impact on the forces directly affecting psychological growth'. This is composed by four layers, often represented through concentric circles to identify a range of environmental influences: *microsystem, mesosystem, exosystem, and macrosystem* (Bronfenbrenner, 1989). According to Bronfenbrenner (1979, p. 16), the

idea that human development is a result of the 'interaction between the growing human organism and its environment', is a commonplace and the foundation of behavioural science.

2.8. Chapter conclusions

This chapter set out to refine the following *prima facie* question: *what can teaching staff do to prepare young people with autism for life after school?* An exploration of terms related to preparation for life took place, and *self-determination* appeared most relevant and suitable for the purposes of this thesis.

Given the nature of the school, a look at the characteristics of students with autism was needed to better understand how support can be provided. The areas of difficulty demonstrate the importance of targeted attention to promoting their self-determination. A closer look at this latter term took place, as well as the most significant theories in self-determination research.

Following the reviewing of the previously mentioned areas of literature, the initial *prima facie* question can now be refined to: *what can teaching staff do to enhance students' self-determination within the school context?* In order to determine how this can be answered for the school, further exploration of literature regarding existing interventions/programmes targeting the self-determination of young people with autism is needed. The following chapter provides a systematic literature review of this literature.

3. CHAPTER THREE

SYSTEMATIC LITERATURE REVIEW - INFORMATION

3.1. Chapter overview

Chapter Two concluded with a more refined research question from the initial *prima facie* question: *what can teaching staff do to enhance students' self-determination within the school context?* This chapter aims to provide an overview of the answers to this 'what works question' by looking at existing evidence-based literature. This is achieved through a systematic approach to synthesise research in the area of self-determination. A systematic approach was chosen because, as described by Clarke (2011), it is the most reliable source of evidence to guide practice. Chapter Two concluded that an ecological perspective on self-determination seems most suitable for the purposes of this thesis. Therefore, the conceptual framework of this systematic review is similar to that of Cobb and Alwell (2009); one grounded in the ecological model of social functioning. Wachs' (1983) classical ecological question, as cited in Cobb and Alwell (2009) is used to structure the present chapter:

> *'Under what environments (situations, programs and settings) have what kinds of persons (the diverse characteristics of all youth with disabilities) changed in what kinds of behaviors (school and therapeutic persistence, violent behaviour)?' (p. 71)*

The chapter begins with an overview of the methodology of the systematic review, detailing the approach and the steps taken to identify the literature included. This is followed by a presentation of the results, which is structured in seven themes: participant characteristics, environments, interventions, research design, behaviours, measures, and effectiveness. The final sections of the chapter draw out the key implications of the findings for practice, concluding with the implications for the empirical study. Given the scarcity of self-determination research for individuals with autism (Section 2.3.4) and the needs of the students attending the school, this systematic review includes empirical studies involving participants with autism and/or *learning disabilities*. The choice for the latter term was made to reflect the preferences of the current UK context, over *intellectual disabilities*, a term more widely used in US literature (Cluley, 2018).

3.2. Methodology

An initial scoping phase conducted in 2018 using the terms *self-determination* and *review* in the search engine Google Scholar identified six literature reviews: Malian and Nevin (2002) Algozzine et al. (2001), Fowler et al. (2007), Konrad et al. (2007), Wood et al. (2005), Chambers et al. (2007) and one narrative meta-synthesis: Cobb et al. (2009). In order to ensure that all reviews regarding *self*-determination and individuals with disabilities have been considered, the search terms self-*determination* AND *disab** AND *review* were used to search the educational databases in EBSCO, PsychInfo, and Medline, which were commonly used in the reviews previously identified. One further review focusing on self-determination and academic success for students with disabilities in postsecondary education was identified: Ju et al. (2017). Another important contribution is Cobb and Alwell's (2009) systematic review on transition planning/coordinating interventions for young people with disabilities, as it undertakes an ecological framework.

3.2.1. **Search terms**

The purpose of this review is to gather information regarding the effectiveness of interventions that target self-determination. Therefore, for the initial phase of searching the literature systematically, full and truncated versions of the term *self-determination* were used. Two of the reviews previously identified, Chambers et al.'s (2007) and Cobb et al.'s (2009) meta-synthesis, also use only the term self-determination to identify studies that look at the overall concept rather than its component elements.

Due to the scarcity of research regarding self-determination in individuals with autism, as highlighted by Wehmeyer et al. (2010), systematic reviews in the areas of autism research have been consulted in order to ensure that the chosen terms ensure a comprehensive search. Three highly cited systematic reviews (Williams et al., 2004; Schlosser et al., 2008; Parsons et al., 2011) and two current reviews (Gunning et al., 2018; Penuelas-Calvo et al., 2018) were consulted to identify the terms related to autism.

Similarly, three highly cited systematic reviews (Kozma et al., 2009; Scior, 2011; Verdonschot et al., 2009) and two from the current year of review (Brown and McCann, 2018; Dagnan et al., 2018) on intellectual or learning disability have been used to inform the search terms. The same system was used to determine the search terms regarding the age of participants by using three highly cited systematic reviews (Kuntsche et al., 2005; Kwan et al., 2014; Van Sluijs et al., 2007) and two current reviews (Lima-Rodriguez et al., 2018; SmithBattle et al., 2018). All of the chosen search terms can be found in the table below.

Table 2. Search terms used the systematic literature review on the effectiveness of interventions aimed at promoting the self-determination of young people with learning disabilities and/or autism

Self-determination	**Autism**	**Intellectual disability**	**Age**
(SD) Self-determination Self determination	(A) Autis* Asperger* Pervasive develop*	(I) Intellectual* disab* Intellectual impair* Intellectual function*	Adolescen* Teen* Juvenile Young people Young adults
		(L) Learning disab* Learning disorder* Learning impair*	
		(D) Developmental* disab* Developmental* impair*	
		(M) Mental* retard* Mental* handicap* Mental* impair*	

3.2.2. **Inclusion criteria**

The studies included in this systematic review had to meet all the following inclusion criteria:

1. Published in a peer-reviewed journal in English
2. Published between 1985-2018
3. Collects primary data regarding the implementation of a programme/intervention/approach related to self-determination
4. Includes at least one participant with autism or learning disability
5. Includes at least one participant between the ages of 15-25

3.2.3. **Databases**

The previously mentioned systematic reviews have also been used to inform the choice of databases used in the first phase of identifying literature, as follows: EBSCO (including British Education Index, Child Development and Adolescent Studies, Education Abstracts, Education Resource Information Center, Educational Administration Abstracts), Ovid (including PsychInfo, Medline), ProQuest (Education Collection, International Bibliography of the Social Sciences, Social Science Database), and Web of Science (Core Collection). A consultation with an Information Specialist from the University of Birmingham Library was also used to ensure that the appropriate databases have been selected. During this meeting, guidance was also sought regarding search strategies, which led to the grouping of terms as seen in the table above.

3.2.4. **Overview of the selection process**

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement protocol for conducting systematic literature reviews and meta-analyses was used to guide the selection process for the articles included (Moher et al., 2009). The four-phase flow diagram below shows an overview of the articles included/excluded at each stage of the process.

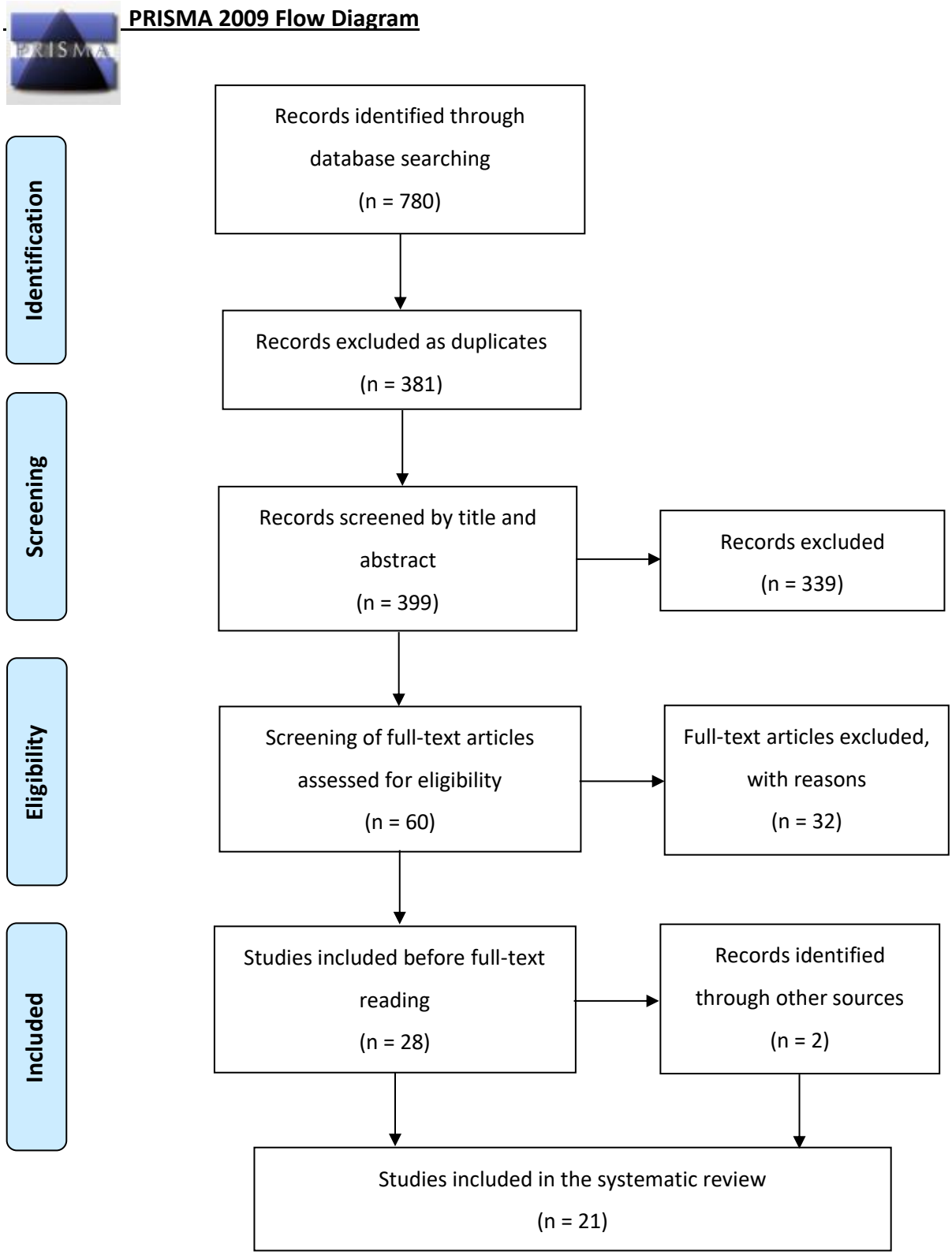

Figure 3. Prisma Flow Diagram for the systematic literature review on the effectiveness of interventions aimed at promoting the self-determination of young people with learning disabilities and/or autism

For each of the five databases identified, five searches were carried out, resulting in a total 780 articles being identified (Appendix 1a). The referencing software EndNote8 was used to manage the articles. After duplicates were removed first automatically, then manually, 399 articles remained.

Articles were screened by title and abstract first, then by reviewing the full text to ensure that all inclusion criteria are met, leading to a total of 21 articles to be included in the systematic review. Further details regarding the steps taken at each phase of the selection can be found in Appendix 1b.

3.3. Results

The following sections summarise the findings from the 21 papers included using the structure of Wachs' ecological question. The first part of this section looks at the characteristics of the individuals involved, followed by those of the environments the studies take place in, and then the behaviours targeted. The latter section also includes the ways in which behaviours were targeted, thus what interventions or programmes were used and how they were implemented, by looking at the studies' designs, methods, and measures. These sections are followed by a look at the effectiveness of the interventions used, through Kirkpatrick and Kirkpatrick's (2006) evaluative framework. The majority of studies (15) were conducted after 2010, and only one before 2000 (Cross et al., 1999).

3.3.1. **Participant characteristics**

This section looks at the characteristics of the young people taking part in the intervention/programmes evaluated in the 21 studies included. A total of 2,966 participants took part, with sample sizes ranging from seven to 493. The majority of participants (62.9%) identified as male (n=1,755), 37.1% as female (n=1,036), 0.03% as transgender (n=1), with missing or not reported information from 174 participants. These findings are in line with those of other self-determination systematic reviews, which found that male participants represented the majority: Fowler et al. (2007), Konrad et al. (2007), Burke et al. (2020).

The inclusion criteria required for at least one participant to be between the ages of 15-25, thus for the studies included, participants' ages ranged from ten to 38 years old. The most common disability was learning disability (36%, n=1085) followed by intellectual disability ranging from mild to severe/profound (29%, n=857), referred to under the following terms: mental retardation for 374 participants, intellectual impairment for 109, and intellectual disability also for 374. A further 340 (11%) participants had other or multiple disabilities not directly specified, 134 emotional/behavioural conditions, 171 mental health conditions (including depression, anxiety, and schizophrenia), 99 other health impairments, and only seven with physical disabilities including vision and hearing impairments. ADHD/ADD (54; 2%) and speech disorders (26; less than 1%) were also less common amongst participants. These findings mirror those of Algozzine et al. (2001) and Burke et al. (2020) in which learning disability and intellectual disability respectively were also the most common diagnoses for the participants in the studies they included.

There was a total of 211 (7%) participants with a diagnosis of autism/ASD/Asperger's Syndrome/PDD-NOS, being represented in 11 of the 21 studies included in this review, ranging from one to 47. Out of the 11 studies in which individuals with autism were included, only in two studies (Hagner et al., 2012; Oswald et al., 2018) all participants had this diagnosis, which also represented an inclusion criterion to take part in the study. This lack of representation of individuals with autism is not surprising and mirrors that of Burke et al. (2020) who found that only 3.4% of the over 3,000 participants in the studies included had a diagnosis of autism spectrum disorder.

A total of 17 studies reported data on participants' ethnicity, some studies only for a part of the participants, with missing or not reported information for a total of 480 participants. Out of the remaining 2,486 participants, 1550 (62%) identified as Caucasian/White, 450 (18%) as Hispanic, 382 as African American (15%), and less than 100 for each Asian/Pacific Islander (34), Native American/Alaskan Native (35), other (52) and multi-ethnic (14). Out of the 17 studies that reported on participants' ethnicity, all but one (Zhang, 2001) included a majority of Caucasian/White participants, with one study (Hagner et al., 2012) including them exclusively. These findings are not surprising and are in accordance with those of Burke et al. (2020) who also found a majority of Caucasian/White participants.

In 17 of the studies details are given regarding participants' consent. Out of these, two ask only for parental/caregiver consent (Lee et al., 2008; Palmer et al., 2004), three only for informed consent or assent from the young people themselves (Farmer et al., 2015; Sowers and Swank, 2017; Wehmeyer et al., 2000) and 12 ask for both (e.g. Oswald et al., 2018; Palmer et al., 2012).

3.3.2. **Environments**

Settings and locations

Although being conducted in a school setting was not one of the inclusion criteria, 18 of the 21 studies were conducted in schools or universities. Out of these, the majority (ten) mentioned being at least partially conducted in high schools, three in middle schools, one in an educational residential unit, and one university. The remaining three studies were conducted either in an institute (Oswald et al., 2018), programme offices and coffee shops (Sowers and Swank, 2017), or partially in the family homes (Hagner et al., 2012). This is in accordance with the findings of Fowler et al. (2007) and Konrad et al. (2007), who also found the majority of study being conducted in school settings. Almost all studies (20) were conducted in the US, and only one in Australia (Sheppard and Unsworth, 2011). Further details regarding the studies' geographical location can be found in Appendix 1c.

An exemplary study

One study that is important to note due to the way it takes into consideration the environmental factors is the Educational Residential Unit (ERU) programme evaluated by Sheppard and Unsworth (2011). This was run in a purpose-built ERU and lasted from when students finished the school day in the afternoon until it began again the following morning. The programme involves daily living tasks and increasing student mastery by reducing support to complete them, thus enhancing their self-determination. It is important to highlight that opportunities to develop skills and demonstrate self-determined behaviours were *embedded* in and guided the daily practice. This was influenced by Wehmeyer's suggestion that 'self-determination should not be seen as a separate program' and empirical evidence that demonstrated the importance of embedding social skills training into everyday learning (Sheppard and Unsworth, 2011). Furthermore, there is a recognition that the environment

was ‘designed to promote the use of self-determined behaviors on a day-to-day basis’, which was facilitated by the program’s residential nature (p. 394). The article provides clear evidence that consideration was given to environmental factors when designing the ERU program, which was implemented in a physical and social environment ‘constructed to support more autonomous functioning in everyday activities’ (p. 403). Unfortunately, no details are given regarding how this programme was developed, who was involved or whether any stakeholders were consulted, which would have brought important contributions to an area of research in need of development, as well as to the development of the empirical study presented in this thesis.

3.3.3. **Interventions**

A total of 15 different interventions (programmes/approaches) was identified, the most commonly evaluated being the *The Self-Determined Learning Model of Instruction (SDLMI)* (Wehmeyer et al., 2000), in nine (43%) studies, five of which looked at its effectiveness exclusively (Lee et al., 2008; Palmer et al., 2004; Shogren et al., 2018b; Wehmeyer et al., 2000; Wehmeyer et al., 2012).

The second most frequently evaluated intervention is the *Whose Future Is It Anyway (WFA)* (Wehmeyer et al., 2004), evaluated in six studies, out of which exclusively in two (Lee et al., 2011; Wehmeyer et al., 2011a). A further study evaluates an adaptation of *WFA, Whose Future Is It?* (Shogren et al., 2018b).

Other interventions included are *The Next S.T.E.P. Curriculum* (Wehmeyer et al., 2013; Wehmeyer et al., 2011b; Zhang, 2001), *The Beyond High School model* (Palmer et al., 2012; Wehmeyer et al., 2006), *The ChoiceMaker curriculum* (Cross et al., 1999; Wehmeyer et al., 2013), *The Self-Directed IEP* (Seong et al., 2015; Wehmeyer et al., 2011b), and *Self-Advocacy Strategy* (Wehmeyer et al., 2013; Wehmeyer et al., 2011b). One study compared the effectiveness of two self-determination interventions (Cross et al., 1999), another looked at the single and combined impact of two self-determination interventions (Shogren et al., 2018a), and a further one looked at the differential impact of using technology alongside a self-determination intervention (Lee et al., 2011). Two studies also implemented interventions not targeting self-determination in the control groups (Powers et al., 2012;

Seong et al., 2015). Three further studies evaluated the impact of more than two self-determination interventions (Wehmeyer et al., 2006; Wehmeyer et al., 2013; Wehmeyer et al., 2011b).

Burke et al. (2020) also found the SDLMI to be the most frequently used intervention in the 34 studies included, followed by WFA, Self-Advocacy Strategy, and the NEXT S.T.E.P Curriculum. Brief descriptions of the three most common interventions evaluated, as well as the two developed specifically for individuals with autism, are provided in Appendix 1d.

In the majority of studies (14), the interventions were implemented exclusively by teachers/teaching staff, who in 13 of those cases received prior training from the researchers conducting the studies. In two studies those who delivered the intervention were referred to as coaches (in one case being stated they were a parent/relative), in one by career advisors, in three by researchers, and another by both researchers and teaching staff. Burke et al. (2020) also found that in the majority (76.5%) of their studies the interventions were implemented by people natural to the settings, who received prior training from researchers or project staff.

The implementation involved varying levels of flexibility across the 21 studies. This is not surprising given the majority of studies were conducted in the real-world by individuals natural to the settings, as previously discussed. This flexibility can be seen in the structure of the implementation, such as using only parts of the intervention (Cross et al., 1999; Lee et al., 2011) or combining two or more interventions (Shogren et al., 2018a; Wehmeyer et al., 2006). Context specific adaptations are also mentioned (Powers et al., 2012), as well as those of materials (Sowers and Swank, 2017), or specific to the individual participants (Shogren et al., 2018b; Wehmeyer et al., 2000). It is also valuable to note that in two studies, teachers selected the intervention they found most suitable for their students, from a list provided by researchers (Wehmeyer et al., 2013; Wehmeyer et al., 2011b). This reinforces the idea of the crucial role teachers play when looking at the development of young people's self-determination within a school setting.

The majority of interventions evaluated had an instructional approach, often focused on goal setting, planning, and achieving. This is not surprising given that most studies are conducted

in school settings and with young people preparing for transition from school. The interventions often involve questions and worksheets (e.g. Cross et al., 1999; Farmer et al., 2015; Sowers and Swank, 2017), lessons (e.g. Lee et al., 2011; Oswald et al., 2018), meetings (e.g. Hagner et al., 2012), coaching sessions (e.g. Powers et al., 2012), or a combination of those, which are focused on the young person's goals. A different type of intervention is the ERU programme (discussed at the end of Section 3.3.2), which is embedded in the running of the setting (Sheppard and Unsworth, 2011).

3.3.4. **Research design**

All 21 studies included in the systematic review undertook an experimental design and collected pre and post-test measures, meaning standardised assessments were used to measure certain characteristics both before and after the intervention was implemented.

Out of these, five studies had a *pre-experimental design*, thus involving only one group of participants: Palmer et al. (2012), Sheppard and Unsworth (2011), Shogren et al. (2018b), Wehmeyer et al. (2006), and Wehmeyer et al. (2000). There are four studies with a quasi-experimental design: Cross et al. (1999), Farmer et al. (2015), Palmer et al. (2004), and Zhang (2001); the majority being *true experiments* (12) i.e. Hagner et al. (2012), Lee et al. (2008).

In their suggestions for further studies, Shogren et al. (2018a) highlight the need to engage all members of the stakeholder community in planning for systematic change and to promote top-down and bottom-up change. Unfortunately, none of the 21 studies take a participatory approach, with the exception of Oswald et al. (2018) who briefly describe the involvement of stakeholders in designing the intervention evaluated (further details in Appendix 1d).

3.3.5. **Behaviours**

As previously discussed, one of the inclusion criteria was that the studies evaluated interventions targeting self-determination, thus all 21 studies measured overall self-determination. Aside from this, 13 studies included at least one other target behaviour, such as skills and knowledge related to transition (Powers et al., 2012; Seong et al., 2015; Wehmeyer et al., 2011a) or career planning (Hagner et al., 2012; Sowers and Swank, 2017),

access to the general education curriculum (Palmer et al., 2004; Palmer et al., 2012), goal achievement (Shogren et al., 2018a; 2018b), and student involvement (Wehmeyer et al., 2006). This is not a surprising finding given the view of self-determination as a set of skills or through a goal-focused lens, as previously discussed, and is in accordance with Burke et al. (2020), who found that more than half (18) of the studies included measured skills related to self-determination. However, it is interesting to note that only 12 of the 34 studies included measured changes in overall self-determination (Burke et al., 2020).

3.3.6. **Effectiveness**

Measures

Each of the 21 studies included at least one standardised test/assessment that measured participants' overall self-determination. The most popular measure was *The Arc's Self-Determination Scale (SDS)* (Wehmeyer, 1995), which was used in 16 of the 21 studies. SDS is a self-report 72-item measure of self-determination by collecting data on four essential characteristics of self-determined behaviour: autonomy, self-regulation, psychological empowerment, and self-realisation (Wehmeyer et al., 2011a).

This was followed by *The AIR Self-Determination Scale* (Wolman et al., 1994), which includes a Student self-report (AIR-S), an Educator, and a Parent version. Out of these, the AIR-S was used in nine studies, two of which included also the Educator version. A total of eight studies used both the SDS and the AIR-S.

A third most commonly used measure was the *Goal Attainment Scaling (GAS)* (Kiresuk et al., 1994), being used in seven studies, to measure progress on attaining specific goals. Other self-determination measures used included: the *Self-Determination Student Scale* (Farmer et al., 2015), the *Seven Component Self-Determination Skills Survey* (Oswald et al., 2018), and the newly-developed *Self-Determination Inventory: Student-Report* (SDI:SR; Shogren et al., 2014b) and *Parent/Teacher-Report* (SDI:PTR; Shogren et al., 2014a) in Shogren et al. (2018a, 2018b). The latter two are based on Causal Agency Theory (Section 2.7.2).

19 studies measured participants' self-determination pre and post-intervention, and all but one (Wehmeyer et al., 2006) reported an increase in scores at least on one of the assessments used. This is in accordance with the findings of Burke et al. (2020) who found that all studies suggested positive outcome for at least one skill associated with self-determination. Despite this, some important conclusions are drawn from several studies regarding the measures and their accuracy, which are discussed in the paragraphs below.

Farmer et al. (2015) demonstrated the importance of involving participants in the interpretation of the findings. Participants' understanding of self-determination affected the way they interacted with the data collection tools. As participants developed their understanding, their answers changed as they realised that they did not fully understand the questions and their implications at the beginning, and the nature of the study did not allow them to go back and change their answers. This is particularly important to note as it is a common feature of self-determination interventions to teach the young people about the meanings and implications of certain skills and concepts, thus it would be valuable to capture these changes.

On a similar note, Shogren et al. (2018b) suggest that further research should focus on exploring whether teachers are observing actual changes in students' self-determination or if their perceptions of capacity change as a result of training and implementing interventions. This highlights a need for training for teachers regarding awareness for capacity for self-determination and an understanding of supportive environments.

Some studies note differences on participants' scores on the two most popular measures: SDS and AIR-S. One study argues that the difference in scores, which showed significant increases on the SDS, but not AIR-S, is due to the nature of the intervention and the skills taught being more closely linked with the former measure (Seong et al., 2015). Another study found that students in both experimental and control groups increased their self-determination scores over time (3-year study) on both measures, however the impact of the intervention was only significant on the AIR-S (Wehmeyer et al., 2013). For the AIR-S, students in the intervention group increased scores by almost triple the points as did students in the control group. The authors explain that these findings are not surprising as high school is a time when young

people acquire skills and abilities to become more self-determined, and that having structured instruction in doing so enhances this development more than it would occur normally. On the other hand, the SDS showed no intervention effect, thus all students regardless of group demonstrated the same pattern of change regarding self-determination scores (Wehmeyer et al., 2013). The authors explain that these differences confirm insights previously encountered, that the two measures assess different aspects of the self-determination construct. The AIR seems to be measuring student capacity and opportunity for self-determination, which may be more significantly influenced by exposure to interventions. Therefore, the AIR might be more sensitive to short-term changes regarding skills, attitudes, and environmental opportunities for self-determination. On the other hand, Wehmeyer et al. (2011b) found that significant improvements in self-determination scores showed only on the SDS, and not on the AIR, which is again attributed to the different aspects measured. The SDS aims to capture self-determination status at a certain point in time, whereas the AIR looks at the opportunities and skills that lead to it.

One study noted differences between the student self-report and teacher versions of the *Self-Determination Inventory* (Shogren et al., 2018b), only the latter showing significant increases. Similar to Wehmeyer et al. (2006) this is attributed to a need for longer and more repeated exposure for young people to see the changes in themselves. A suggestion is also made regarding a need for shorter term indicators and ways to determine the factors that might impact student self-report (Shogren et al., 2018b).

Evaluation

Aside from the quantifiable effectiveness shown through the use of standardised measures previously discussed, it is valuable to look at other aspects that demonstrate it. For this purpose, Kirkpatrick and Kirkpatrick's (2006) four-level model of evaluation is used, which was developed to include the different approaches that occur when evaluating the effectiveness of an intervention/programme.

Level 1 refers to *reaction*, thus evaluation from this perspective means measuring how those participating in the programme react to it, what Kirkpatrick and Kirkpatrick (2006) refer to as *customer satisfaction*, or what is also referred to as social validity. Thus, out of the 21 studies

included, only six reported collecting data regarding reactions, out of which: two from the young people only (Farmer et al., 2015; Sowers and Swank, 2017), and four from both the young people and those implementing the interventions (parents/carers – Oswald et al., 2018; teachers – Lee et al., 2008; Lee et al., 2011; Wehmeyer et al., 2000). All six studies reported positive reactions from the participants. The young people believed the interventions were useful and enjoyed taking part in them (Farmer et al., 2015; Lee et al., 2011; Oswald et al., 2018), felt they improved knowledge and skills (Lee et al., 2008; Sowers and Swank, 2017), and wished for the support they received to continue (Sowers and Swank, 2017; Wehmeyer et al., 2000).

Level 2 looks at evaluating *learning*, that is the extent to which participants change attitudes, knowledge and skills as a result of their involvement with the intervention. From the 21 studies included, only seven reported on data collected on participants' learning. This data was collected through structured interviews (Cross et al., 1999), session notes (Farmer et al., 2015), anecdotal information from teachers (Seong et al., 2015), criterion-referenced measures or knowledge assessments (Lee et al., 2011; Palmer et al., 2004; Powers et al., 2012; Wehmeyer et al., 2011a). The target areas for which participants' learning was evaluated were frequently related to transition planning and engagement (Cross et al., 1999; Lee et al., 2011; Powers et al., 2012; Wehmeyer et al., 2011a), reflection and progress on goals, plans and participants' strengths (Farmer et al., 2015), problem-solving and study planning skills (Palmer et al., 2004) or participation in IEP meetings (Seong et al., 2015). The findings supported the effectiveness of the interventions and showed increases in goals related to employment, education, residential, and leisure (Cross et al., 1999), self-determination (Farmer et al., 2015), knowledge and skills regarding transition (Lee et al., 2011; Wehmeyer et al., 2011a), problem solving and study skills (Palmer et al., 2004) and participation in IEP meetings (Seong et al., 2015).

Level 3 looks at changes occurring in *behaviour*, which were previously discussed in Section 3.3.5. These can often be seen as the most important when evaluating interventions, however, according to Kirkpatrick and Kirkpatrick (2006), bypassing levels 1 and 2 is a serious mistake, as it can limit effectiveness to changes in behaviour. As previously discussed, gathering participants' views, can not only provide further support regarding the effectiveness of an intervention, but also provide insights that cannot be captured by standardised assessments of behaviour, or even contradict the results they show (Farmer et al., 2015). As previously discussed, all 21 studies evaluate the effectiveness of self-determination interventions through an experimental research design, thus it is not surprising that they all measure changes in at least one behaviour.

Lastly, level 4 refers to *results,* that is the final results that occurred after participants were involved in an intervention. By looking at the 21 studies, this level of evaluation is the one that receives the least attention, with only five studies making at least a reference related to participants' results after being involved in an intervention. These include references made to generalisation of skills (Cross et al., 1999; Oswald et al., 2018; Sheppard and Unsworth, 2011), maintenance (Sowers and Swank, 2017), or outcomes (Powers et al., 2012; Sheppard and Unsworth, 2011; Sowers and Swank, 2017). Regarding the generalisation of skills, no study reports gathering data in a rigorous manner, which is not surprising given the real-world nature of the majority of studies. Cross et al. (1999) found that students showed limited ability to use the new skills during IEP meetings, and Oswald et al. (2018) reported that parents/carers were educated on how to facilitate generalisation of skills. Although only three studies reported on collected data regarding the maintenance of behaviour or skills, all of their findings were positive, with skills and behaviours being maintained (Powers et al., 2012; Sowers and Swank, 2017) and even increased at follow-up (Sheppard and Unsworth, 2011). The interventions also showed to have positive effects on participants outcomes such as employment and high school completion (Powers et al., 2012; Sowers and Swank, 2017), opportunities for self-determination at home (Sheppard and Unsworth, 2011), and engagement in career planning (Sowers and Swank, 2017).

3.4. Discussion – Implications for practice

The findings presented in Section 3.3 summarise the empirical evidence of 21 studies evaluating the effectiveness of self-determination interventions for young people between 15-25 years. When reflecting back on the prima facie question as phrased at the beginning of this chapter, the literature reviewed provides some answers to: *what can teaching staff do to enhance students' self-determination within the school context?*

The 21 studies provide evidence that there is a range of interventions effective in increasing students' self-determination in the school context. However, some important insights arising from these results need to be addressed. The following discussion will look at the implications for practice, with a particular focus on those relevant to the characteristics of the school involved in the empirical study and its stakeholders. This will be followed by the identification of the gaps that arise from this area of research and suggestions for future research. The discussion follows the structure of Wachs' ecological question (Section 3.1) by firstly looking at the types of people, then the types of environments (settings, interventions, research design), and finally the types of behaviours addressed (including measures).

3.4.1. **'The kinds of people'**

This review set out to identify the evidence regarding self-determination interventions for young people aged 15-25 with a diagnosis of autism and/or a learning disability. The 21 studies included demonstrate that there is empirical evidence that self-determination and related skills can be taught and enhanced through a range of interventions for this target population. This age group is the one receiving most attention in self-determination research, with only eight studies having been excluded for not meeting this criterion. These findings are mirrored by Algozzine et al. (2001) who found that adolescents were included in the majority of studies looking at self-determination interventions. This insight is not surprising given that self-determination is often looked at in the context of transition and transition-related goals when leaving formal education. However, it is important to note that recommendations are made that self-determination instruction begins earlier than around the time a young person is preparing to leave school, although this needs further investigation (Lee et al., 2011; Wehmeyer et al., 2006). Furthermore, the young people should be given sufficient time, as

well as opportunities to practice these skills (Zhang, 2001) in the environments or similar ones to those in which they are expected to use them in (Cross et al., 1999).

The 21 studies bring valuable evidence that the self-determination interventions used can be effective for young people with a diagnosis of learning disability (36%) and intellectual disability (29%), the two most common labels for the participants included in the studies. However, little attention is given to the relation between a certain diagnosis and the impact of an intervention, as well as having little representation for participants with other disability labels. For the purposes of this thesis, it is important to consider the small number of participants with a diagnosis of autism (including ASD, Asperger's Syndrome, and PDD-NOS) that represented only 7% of the almost 3,000 participants included in the studies.

As previously mentioned (Section 2.3.4), Chou et al. (2017a) stated that no studies have been undertaken to look exclusively at participants with autism, either descriptively or as an intervention study. They attributed this gap partly to the lack of instruments to have been normed with this population and the uncertainty regarding their usefulness. Furthermore, the particular characteristics of students with autism (discussed in detail in Section 2.4) might imply more targeted self-determination instruction. Research has shown that students with autism, learning disabilities, and intellectual disabilities have distinct profiles of self-determination, which implies that the focus of interventions should be tailored (Chou et al., 2017a).

This systematic review found that some targeted investigation into self-determination interventions for young people with autism has been done: Hagner et al. (2012) and Oswald et al. (2018). Both studies bring initial evidence that targeted interventions where consideration is given to the characteristics of young people with autism, can lead to enhanced self-determination and post-school outcomes. What is important to note about these two studies is the direct involvement of the young people's families, who received training and support as part of the interventions. For the transition planning approach, families attended group sessions on person-centred planning and received support during the meetings (Hagner et al., 2012), and for the ACCESS Program, they attended a group that

followed the same topics as the one for the young people, as well as having homework assignments to work on collaboratively (Oswald et al., 2018).

Although data regarding participants' experiences of the intervention is collected only in six studies in this review, the reactions are positive and promising. The young people have found their experiences enjoyable and interesting (Oswald et al., 2018), the skills and knowledge useful and beneficial (Farmer et al., 2015; Lee et al., 2011), and wished for the support they received to continue (Sowers and Swank, 2017). Similarly, teachers implementing the interventions found them accessible, appropriate, and useful for their students (Lee et al., 2011; Wehmeyer et al., 2000). These findings are supportive of the effectiveness of self-determination interventions, as they are shown to be useful not only through standardised measures, but also through the experiences of those engaging with them. This is particularly valuable in the context of self-determination and motivation for young people with autism, although further research is needed.

Another significant implication revealed by this review is that the majority of studies (15) reported that young people's consent/assent was sought (e.g. Palmer et al., 2012). This could be linked to the context of self-determination with goals often related to empowerment, but nevertheless this finding is a promising one. Whether this has an impact on the previously discussed positive experiences of the interventions deserves further investigation and could also be linked to motivation and attrition. Although the seeking of consent from the young people is an important strength of these studies, no information is given regarding how the information was presented, and the methods/tools used to ensure that the consent received was informed.

3.4.2. **'The kinds of environments'**

As previously discussed, self-determination does not occur in a vacuum, thus is it valuable to consider the characteristics of the environment in which it occurs. The majority (19) of studies in this review were conducted in natural settings with people belonging to them. Their proven effectiveness in such settings is an encouraging finding, especially when looking at school settings and their complex nature. Thus, it is important for teaching staff to know that self-determination can be taught and enhanced through targeted interventions within school

settings, 18 of the 21 studies bringing evidence to support this. There is however an increasing awareness that multiple factors come into play, the influence of which needs further exploration.

Without disregarding the effectiveness of the interventions evaluated, it is worthy to note that all but one studies were conducted in the US. This could in part be due to the increasing attention given to self-determination as an educational goal which began in the US in the 1990s (see Section 2.3.4). A closer look at the exact location of the studies reveals that at least eight (for which the exact location was clearly stated in the articles) were conducted in Midwestern states of the US (Appendix 1c). It would be valuable to explore the impact of educational legislation on the effectiveness of these interventions, however none of the studies explore this. An interesting observation to make is about the only study conducted outside of the US, in Australia, which takes a very different approach in the intervention and its implementation (Sheppard and Unsworth, 2011). The ERU programme (presented at the end of Section 3.3.2) takes an *embedded* approach to self-determination, meaning that opportunities for self-determined behaviours are part of the daily running of the setting in which it is implemented. The implementation of such a programme is likely to have been facilitated by the setting's residential nature, however it would have been valuable to know if this was impacted by existing educational policy.

The 21 studies provide little exploration of the impact of the research contexts on effectiveness, but some valuable conclusions are drawn. Firstly, there is a recognition that opportunities should be provided for young people to practice the skills and knowledge acquired through interventions, particularly in different contexts, especially in those they are expected to use them in (Zhang, 2001). Furthermore, environments should be ready to honour the choices and preferences of the young people, that is, where they are not directly involved, family and professionals should be aware of the learning, and provision should be in place to meet requests (Cross et al., 1999).

Secondly, promoting self-determination for young people with disabilities should be ongoing and not restricted to a short module of instruction (Cross et al., 1999). Although most studies involve the implementation of interventions for a specified period of time, there is a

recognition that this should begin early and be continuous (Lee et al., 2011; Wehmeyer et al., 2006). This is also reinforced by young people's views of the experience, who wished for the supported received during the interventions to continue (Sowers and Swank, 2017). The effect of time is also one that needs further exploration, as there is an indication that natural maturation can have an effect on the development of self-determination (Wehmeyer et al., 2011a).

The complex and varied nature of the school settings in which the majority of studies were conducted can bring limitations when evaluating effectiveness. The presence of bias can occur in professionals implementing the intervention and impact reporting on outcome measures (Oswald et al., 2018). Challenges also arise when looking at the impact of various factors or characteristics of individuals, as exact matching of context and environments can be difficult to achieve in the real world (Wehmeyer et al., 2012; Lee et al., 2008). However, the 21 studies demonstrate that despite complexity and variance in environments self-determination can be enhanced for individuals with a range of needs. It is important for professionals to note the role this can play when looking at effectiveness, and the young person's individual and immediate context should be given careful consideration.

The role of teachers or professionals implementing interventions is offered little investigation, but some important insights are expressed. As Wehmeyer et al. (2000, p. 451) explain: the success of an intervention 'is dependent upon the person implementing it'. This involves an awareness of each individual's needs and support needed to access the materials involved, as well as for opportunities for the practising of skills and knowledge (Cross et al., 1999; Wehmeyer et al., 2000). This relates to the supportive environments described in Section 2.7.1, and the essential role played by teachers in a classroom context in providing supports for the basic psychological needs. As discussed, this can not only lead to enhanced self-determination, but also to increasing young people's own awareness of it, as well as improving post-school outcomes. One of the 21 studies noted that what teachers did, had a more significant impact on the target behaviour than anything the students did (Lee et al., 2008). This is in accordance with Reeve (2002), discussed in Section 2.7.1, who found that what teachers did, had a more significant impact than what teachers said. Teaching practice is thus

essential to consider in the implementation of self-determination interventions and deserves further consideration.

It would also be important in this context to explore the relationship between implementing self-determination interventions and professional learning and development for teaching staff, but unfortunately none of the studies identified address this. According to Timperley (2011), both professional learning and development are intentional, systematic, and ongoing processes. They should involve active interaction with information in a way that challenges previous assumptions and creates new knowledge (Timperley, 2011). This alone does not lead to the transformation of practice, but should involve promoting staff empowerment 'to use their agency to align their values and practices' (Brennan and King, 2022, p. 175). Staff development and learning do not occur within a vacuum, and they must be conceptualised as a complex system rather than an event, taking into consideration the different elements of the environment and how they interact and combine with one another (Opfer and Pedder, 2011). Evidence shows that the effectiveness of professional learning and development is increased through collaboration (Opfer and Pedder, 2011). A better understanding of the impact of collaboration and other elements of training, information transfer and knowledge creation are needed in the wider field, which is demonstrated by the lack of investigation in the context of self-determination interventions.

The 21 studies have shown that there is a range (15) of interventions effective in improving self-determination. There are some that have been more widely investigated (SDLMI, WFA), and some for which research is still in its early stages (e.g. The ACCESS Program). They have been effectively implemented by teaching staff in schools (14 studies), who received a form of training prior to the studies. It would be valuable to investigate the role of training of staff in the effectiveness of interventions, although no studies provide any evidence or insights into this. What is particularly important to note for practice is the flexibility with which these interventions have been implemented. Some studies showed effectiveness of implementing only parts of an interventions (e.g. Lee et al., 2011), or combining them (e.g. Shogren et al., 2018a), as well as while adapting materials to contexts (Powers et al., 2012) or individuals (Shogren et al., 2018b). This is a valuable strength of the interventions evaluated, particularly

as most are designed to be implemented in complex and varied school settings, for individuals with a range of needs.

However, it is also important to highlight that the majority of interventions in the 21 studies had an instructional approach. They often involved worksheets and questions (e.g. Farmer et al., 2015), lessons (e.g. Oswald et al., 2018) and coaching sessions (e.g. Powers et al., 2012), mostly focused on goal setting, planning, and achieving. Furthermore, they were all implemented for a specific period of time. While this brings valuable evidence, in a context where increasing attention is given to self-determination as developing through the interactions of the individual with the environment, more attention should be given to interventions that are embedded, such as the ERU programme (Sheppard and Unsworth, 2011). Initial evidence is also brought about the positive effect of using technology, which was shown to increase effectiveness of self-determination interventions (Lee et al., 2011; Wehmeyer et al., 2011b).

3.4.3. **'The kinds of behaviours'**

The 21 studies included bring valuable evidence that self-determination and related skills can be improved through targeted interventions for young people with range of needs aged 15-25. The majority of studies that measured self-determination pre- and post-intervention (19 of 21) showed increases in scores after participants were involved in an intervention. Thus, the studies contribute to the growing body of knowledge that self-determination can be taught and enhanced successfully for young people with disabilities. Furthermore, evidence is brought that other related behaviours can be effectively targeted such as transition knowledge and skills (e.g. Seong et al., 2015), career planning (e.g. Hagner et al., 2012) and goal achievement (e.g. Shogren et al., 2018a).

The review shows that there is a range of standardised measures for self-determination that can be used when evaluating effectiveness. Some have been more widely and frequently used, such as *The Arc's Self-Determination Scale (SDS)* (Wehmeyer, 1995) and *the AIR Self-Determination Scale* (Wolman et al., 1994), and some are in their initial stages of development, such as the *Self-Determination Inventory: Student-Report* (SDI:SR; Shogren et al., 2014b) and *Parent/Teacher-Report* (SDI:PTR; Shogren et al., 2014a). It is important to note

that the two most frequently used tools, the *SDS* and *AIR-S* (Student version), are both self-report measures, that is the young people rate themselves on the given items. Although this is an encouraging finding as it brings contributions to the growing area of involving young people in research, consideration should be given to the way each individual engages with the measure and its items.

Self-determination interventions can involve lessons on the concept and related ones, thus young people's knowledge and understanding can change and impact the way they self-report, as seen in Farmer et al. (2015). The initial data analysis of the scores showed little to no intervention effect, however when participants were consulted, they expressed that the intervention was beneficial and that their self-awareness and self-regulation in particular, improved. When participants were asked for their interpretation of these differences, it was identified that the data collection measures were not sensitive to the typical flow of the academic semester: at the start they felt more positive and in control, but as demands increased, participants reported a decline in their self-determination levels. Furthermore, the relation between the young person and the individual providing/assisting with the measuring tools should be given careful consideration, particularly if this is a new relationship, such as having an external researcher. As Farmer et al. (2015) showed, as the study progressed, young people's trust in the researchers developed and their answers became more honest, as they explained at the end of the study. Similarly, some of the studies noted differences between the measures, which they partly attributed to the young people needing more time or repeated exposure to the intervention to increase their awareness of the changes in their self-determination (Wehmeyer et al., 2006).

It is also valuable that teaching staff are aware of the differences between measuring tools, if choosing to use them in their practice. The 21 studies have found some differences between the two most popular measures, the SDS and the AIR-S, which they partly attributed to them measuring different aspects of self-determination. Thus, the AIR scales measure student capacity and opportunity, which might be more sensitive to changes following interventions, while the SDS appears to measure precursors to the development of self-determined behaviour (Wehmeyer et al., 2013). Furthermore, certain interventions measure skills that are more or less directly measured by the specific measuring tools, thus an awareness is needed

to determine which is most suitable (Seong et al., 2015). The SDS is said to measure one's self-determination status at a given time, whereas the AIR scales look at the opportunities and skills leading to it.

3.4.4. **Highlighting the gaps**

The previous section describes the main implications for practitioners following the structure of Wachs' ecological question which was also used to present the results from the 21 studies included in the review. Several areas in need of further exploration arose, which have been highlighted throughout the chapter and are summarised in the present section. It is worthy of mention that these gaps arise from empirical research regarding self-determination interventions meeting specific inclusion criteria (Section 3.2.2), which did not include studies evaluating certain individual or environmental characteristics as predictors of self-determination.

The systematic review showed that individual participant characteristics are given little attention when evaluating the effectiveness of self-determination interventions, as seen in the 21 studies. Exploring the impact of demographic aspects such as gender and ethnicity could bring valuable contributions to the development of interventions. Only two studies (Wehmeyer et al., 2011a; Wehmeyer et al., 2013) noted the potential impact of gender on effectiveness of interventions, but further investigation is needed to provide more meaningful insights. Such developments could contribute to developing targeted interventions, suited to participants' characteristics, and thus maximise effectiveness.

Similarly, the effect of age and diagnosis should also receive increased attention. Although the present review included only studies with participants aged 15-25, suggestions are made regarding the potential benefits of beginning interventions earlier (Lee et al., 2011; Wehmeyer et al., 2006). Regarding disability labels, the review shows that targeted interventions can lead to increased self-determination for young people with a range of needs, with most evidence being brought for those with a learning or intellectual disability. However, further research is needed to determine the differential effect of self-determination interventions on young people with different diagnoses. On this matter, it is also important to mention the scarcity of empirical research regarding self-determination interventions for young people with autism,

as this is most relevant for this thesis. Although there were only two studies evaluating interventions for this population (Hagner et al., 2012; Oswald et al., 2018) they demonstrate that the self-determination of young people with autism can be increased through interventions tailored to their specific needs. However, these are only small-scale, recent developments, and further exploration is needed.

The review also shows a scarcity of research on the impact of specific characteristics of the environment on effectiveness of interventions. Even though most studies were conducted in real-world settings, which represents a strength to their demonstrated effectiveness, the complexity and variability of their different elements is little explored. An important aspect to consider is the impact of a supportive versus controlling classroom environment (Section 2.7.1). There is some recognition of this in the studies included, however no formal investigation takes place (Zhang, 2001; Cross et al., 1999). An increased understanding of the effects of a supportive over a controlling environment could lead to an even further increase in the effectiveness of self-determination interventions.

An evaluation of the impact of the immediate educational policy and legislation could also bring a better understanding of what contributes to the effectiveness of self-determination interventions. The review shows that unfortunately no investigations or insights into this aspect have been formulated so far. Furthermore, most empirical research regarding self-determination interventions for young people with autism and/or a learning disability aged 15-25 has been conducted in the US. An initial look at the only study conducted outside of the US (Sheppard and Unsworth, 2011), in Australia, shows different principles used in the intervention and its implementation, which would be valuable to explore in relation to the local legislative context. Similarly, the embedded implementation of an intervention instead of one over a short, fixed periods of time, needs further exploration, as most studies (20) belong to the latter category.

The review also highlights the lack of attention given to the role of teaching staff and their practice in the implementation of self-determination interventions in school settings. A few insights are provided regarding the role of those implementing the interventions and the need for an increased awareness of the impact they can have (Wehmeyer et al., 2000; Cross et al.,

1999). However, formal investigation is needed to better understand this role, as well as that of the different aspects of teaching practice, and how they can support or hinder effectiveness.

All studies included had an experimental design, thus there is a need for development in this area of self-determination research. One study highlights the need to involve the stakeholder community in research in order to collaborate for systematic change (Shogren et al., 2018a). Two other studies demonstrate the benefits of involving stakeholders in development of interventions (Oswald et al., 2018) and interpretation of findings (Farmer et al., 2015), and the contributions these can bring to insights and improved effectiveness. Furthermore, the studies show a scarcity regarding social validity data, even though the few studies that collected it brought promising results (e.g. Lee et al., 2008). Having a better understanding of stakeholders' experiences of the interventions can support their development and further effectiveness.

Lastly, although self-determination measures have been widely used with a range of participants, further research is needed to understand how they relate to specific participant groups and contexts. The systematic review shows that differences exist in relation to which aspect of self-determination is measured, particularly for the popular SDS and AIR scales, but further evidence is required to identify what makes them most suited to specific contexts (e.g. Seong et al., 2015). Thus, by understanding the specific characteristics of measures and how they respond to certain individual or environmental aspects, a more accurate picture of effectiveness can be provided.

3.5. Chapter conclusions

This chapter set out to bring together the answers from existing literature to the following research question (as refined at the end of Chapter 2): *what can teaching staff do to enhance students' self-determination within the school context?*

For this purpose, a systematic approach was taken to identify the answers from empirical studies evaluating self-determination interventions. To further refine the scope to fit the

needs of the school (as outlined in Section 1.1), participants included in the studies had to be aged 15-25 and have a diagnosis of autism and/or learning disability. After a detailed phased selection process, 21 studies were included in the systematic review. Their findings were reported following the structure of Wachs' ecological question to determine the types of people that have shown changes in specific behaviours in the context of specific environments.

The review showed that there is evidence for a range of interventions that can enhance the self-determination of young people with autism and/or learning disability. These have been shown to be effective in real-world school environments, under a range of conditions and for individuals with varying needs and purposes.

For the purposes of the school involved in the empirical study, the most important issue is the lack of research into self-determination for young people with autism, with only two studies including such participants exclusively (Hagner et al., 2012; Oswald et al., 2018). This gap in research was initially highlighted in Chapter 2 (Section 2.3.4) and then confirmed in the present systematic review. The complexity and range of needs of individuals with autism, as well as the still-developing understanding of self-determination as an educational construct, means that research in the area of self-determination for individuals with autism remains scarce. However, the systematic review brings valuable initial evidence that interventions can be effective for this population.

Another gap relevant for the empirical study is in the construction of self-determination from an ecological perspective (Section 2.7.3), through exploring the impact of a supportive classroom environment. The 21 studies provided little indication of how teachers can create an environment supportive of self-determination and how their practice can be adapted to suit this. However, the significant role of teachers in implementing interventions is recognised (Wehmeyer et al., 2000), as well as in providing opportunities for the practice of skills and self-determined behaviours (Cross et al., 1999; Lee et al., 2008).

Therefore, the systematic review highlights that an empirical study should be carried out in order to target the specific needs of the school. This is needed not only to address the specific

needs, but also in order to contribute to the gaps highlighted in the literature. Some of these, such as involving participants with autism in self-determination research, from an ecological perspective, in the English educational context, serve to address both the needs of the school and the gaps in research.

The review met its purpose of providing answers regarding what teaching staff can do to enhance students' self-determination in the school context. However, given the specific needs of the school and the gaps highlighted in research, a more individualised approach is required. The findings of the 21 studies and the theories that informed them help to frame how the empirical study is designed and conducted. Furthermore, insights and suggestions made by the authors are also taken into consideration as they have been written to inform future research and teaching practice. The following chapters provide the outline and reasonings for the research design and methods used in the empirical study. The empirical study aims to answer the same research question as that used in this chapter: *what can teaching staff do to enhance students' self-determination within the school context?* However, a few layers specific to the context are added: students with a diagnosis of autism with a learning disability, in a special school setting, in the context of English educational policy, more specifically the *2015 SEND Code of Practice: 0 to 25 years.* Therefore, the empirical study aims to answer this question for the specific environment in which it takes place, with aims to improve teaching practice and student outcomes.

4. CHAPTER FOUR

RESEARCH METHODOLOGY AND DESIGN – EXPLORATION, INVESTIGATION, AND COLLABORATION

4.1. Chapter overview

The narrative literature review (Chapter Two) and the systematic literature review (Chapter Three) literature highlighted that in order to address the needs of the school and its stakeholders, an empirical study is needed. For the present empirical study, the school's stakeholders are: the students (specific groups are involved at different stages for which clarifications are provided), the teaching staff (including teachers, teaching assistants, and the senior leadership team), and parents/carers.

As all students attending the school have a diagnosis of autism, their particular characteristics should be taken into consideration (described in Section 2.4). Moreover, teaching staff expressed an initial need to target the way they interact with the students, thus addressing teaching practice is essential in this empirical study. Taking into consideration the specific characteristics of the school and its stakeholders, the research question can be further defined as: *how can teaching practice enhance the self-determination of students with autism in a specialist school in England, UK?*

This chapter outlines the research paradigm, methodology, and design of the empirical study. The researcher's philosophical underpinnings are described, which drive the decisions made regarding the approach, design, and methods used to address the question. The chapter concludes with a brief overview of the school and its stakeholders, and the ethical considerations, with the methods being described in the following chapter.

4.2. Research paradigm and philosophical underpinnings

4.2.1. **The research paradigms**

The *research paradigm* or *research approach* refers to the ways one thinks about and researches the world, more precisely how we seek knowledge and how we use it (Thomas, 2017). It includes a system of beliefs and assumptions about the nature of realities encountered in research (ontological), about human knowledge (epistemological), and about the role of the researcher's own values in the research process (axiological) (Saunders et al., 2019).

A distinctive characteristic of educational research is variety, with different approaches being used to answer different questions (Pring, 2004). One way of classifying educational research is through the two-paradigm typology: *positivist* vs. *interpretive* (Coe, 2012). *Positivism* relates to the philosophical stance of the natural scientist, for which knowledge can be obtained objectively, whereas in *interpretivism,* the social world is not as objectively perceivable, but as constructed by individuals in different ways (Thomas, 2017). This dichotomy between positivist and interpretivist, is what Pring (2004, p. 33) calls a 'philosophical trap', 'an ancient dualism between the mind and the body', which is limiting, as educational research is both and neither. In an attempt to move away from this false dichotomy, further paradigms have been developed including critical realism, postmodernism, and pragmatism (Saunders et al., 2019).

Pragmatism implies a rejection of philosophical dichotomies, and can be loosely interpreted as *what works*, meaning that the research methods used and data collected are those that address the research purposes and questions (Cohen et al., 2017). Pragmatists are concerned with finding solutions to problems and whether they can make a practical difference for future practice, rather than generating truths. Pragmatists do not engage in the debate over quantitative versus qualitative methods, but rather prioritise whether they serve the purpose and deliver the data the research is after (Cohen et al., 2017). Theories are seen as instruments for understanding reality and are judged by their practical utility (Cohen et al., 2017). Concepts, ideas, research findings and theories are regarded in terms of their roles as

instruments of thought and action, as well as their practical implications in specific contexts (Saunders et al., 2019).

As the initial need for the empirical study arose from a need to develop teaching practice, situating it within *pragmatism* seems most appropriate. This aligns with the aims to make a practical difference and solve problems, which are linked to observable consequences and practical applications of theory. The research does not strive to use a mix of methods, but rather to allow the purposes of the empirical study as informed by the needs of the school's stakeholders, to inform these choices. In order to understand the implications of situating the empirical study within pragmatism, it is important to explain the *ontological*, *epistemological* and *axiological* research assumptions made, which are described in the following paragraphs.

4.2.2. **The research assumptions or philosophical underpinnings**

As previously discussed, decisions made in the process of planning and conducting an empirical study are guided by research assumptions made by the researcher (ontological, epistemological, and axiological).

One way of formulating *ontological* positions is along a realism-relativism continuum, the first supporting the existence of a single objective reality independent of individuals' perceptions, and the latter arguing for multiple realities constructed by individuals (Waring, 2012). The empirical study sits somewhere in the middle of this continuum, being what Morgan (2007) described as *intersubjective,* thus both objective and subjective and accepting of one reality and multiple interpretations to it. Maarouf (2019) conceptualises this stance as *the reality circle.* This implies the existence of one reality in a certain context at a certain point in time, which is perceived differently by social actors and which in turn, causes it to change in a continuous process.

Regarding *epistemology, o*n the positivist-interpretivist continuum, the empirical study sits on the *interpretivist* half, without an attempt for extremism. Thus, the researcher acknowledges the value of both observable and measurable facts, as well as the interpretations and understandings of those experiencing them. For the purposes of this empirical study, which aims to address a specific problem, in a given context at a certain point in time and for a

particular group of individuals, their experiences and perceptions serve as the bigger drivers of the process. This more interpretivist perspective comes with an awareness of the complexity of the social world, and a drive to conduct research that is meaningful to those directly impacted by it. In this sense, there is a tendency towards *phenomenology,* which focuses on participants' lived experiences (Saunders et al., 2019). Therefore, in trying to understand what teaching staff can do in their practice to enhance students' self-determination, emphasis is placed on the experience of this process for both groups.

Axiology involves an awareness of researcher values and how they influence research decisions, involving continuous reflexivity (Saunders et al., 2019). Researcher values developed from previous knowledge and experience should enrich the research process, by helping to add insights and discover more sides of the shared reality, not to manipulate it in a certain direction (Maarouf, 2019). Thus, for this empirical study, the researcher does not aim to conduct a value-free or bias-free research, but rather to use existing knowledge and experience to support the stakeholders in developing research that is valuable to them. The researcher's prior knowledge of self-determination research and theoretical frameworks, as well as the experience as a member of the teaching staff at the school and familiarity with stakeholders, are used to inform and develop the research decisions.

Therefore, the researcher develops an empirical study in order to answer the broad research question: *how can teaching practice enhance the self-determination of students with autism in a specialist school in England, UK?* The underlying principles of *pragmatism* to use *what works* in terms of methods and data, and to find practical solutions to real problems and impact future practice, make it appropriate to situate the empirical study within this paradigm. The researcher is driven by a belief that choices such as research design and methods used should be mainly influenced by the problem that needs addressing, rather than one's personal convictions. In order to answer the research question, the most suitable design and methodology should be considered, but first, the question should be further refined, which is done in the following section.

4.3. Aims and research questions

The experiences and needs of the school's stakeholders are central to the present research inquiry, thus it is essential to ensure that the initially identified problem, and the research question formulated, accurately represent them. Hence, the researcher should consult with all stakeholders impacted by the outcomes of the empirical study, which indicates a phased approach. The questions for each of the three phases conducted are presented below. The remaining sections of this chapter outline the research design in which the phases were conducted, with the following chapter looking at the methods used.

4.3.1. **Phase 1 - *Exploration***

Aims

a. To explore the knowledge and views of a small sample of teaching staff and parents/carers regarding the term *self-determination*, the current statutory guidance, and current curriculum
b. To pilot the language used in Phase 2 and determine its suitability for all three participant groups
c. To gain a better understanding of the running of the Post-16 setting

Research questions

1. What are the initial thoughts of teaching staff and parents/carers on the term *self-determination*, the current statutory guidance, and current curriculum?
2. Are the terms used suitable for the teaching staff and parent/carer groups?
3. Which means are most suitable to gather the views of students?

4.3.2. **Phase 2 - *Investigation***

Aims

a. To determine if the initial need for development of self-determination is relevant to all stakeholder groups: teaching staff, students, and parents/carers
b. To explore stakeholders' awareness and opinions on the statutory guidance as outlined in the *2015 SEND Code of Practice: 0 to 25 years* to enhance students' self-determination
c. To gather stakeholders' opinions on the current curriculum and how it can be used to enhance students' self-determination

Research questions

1. Are stakeholders aware of the term *self-determination* and its implications?
2. Is self-determination an important educational outcome for stakeholders? Does it need further development within the school?
3. How do stakeholders see the statutory guidance as providing a framework for the development of self-determination?
4. What are stakeholders' views of the current curriculum and how it prepares students for life after school?

4.3.3. **Phase 3 - Collaboration**

Aims

a. To collaboratively develop an approach embedded in teaching practice to enhance students' self-determination
b. To develop a collaborative partnership in which teaching staff and students are provided equal opportunities for contribution, guided by the researcher
c. To explore the potential of video as a tool for reflection in the development of an approach targeting teaching practice

Research questions

1. What aspects of existing teaching practice promote students' self-determination? How can they be used to further enhance it?
2. Is video a useful methodological tool in highlighting the positive aspects of teaching practice that enhance students' self-determination?
3. What are the views of teaching staff and students regarding the approach developed and the overall process?

The empirical study has what Saunders et al. (2019) call an *exploratory* purpose, the overall one being: *exploring how to collaboratively design an approach to enhance students' self-determination from existing teaching practice.* In order to meet this aim, the researcher takes a phased approach, each phase meant to collect data to inform the next. Phase 1 and Phase 2 set out to gather the opinions of the three stakeholder groups: staff, students, and parents/carers. This is to ensure that the initial problem identified in the school represents an important area of development for those involved. Phase 1 is meant to pilot the questions used in Phase 2 with a small sample of stakeholders, and to provide data to further inform and develop these questions. Thus, qualitative methods (interview and observation) appear suitable in meeting these purposes as the rich data generated can provide new insights from participants' experiences that have not yet been highlighted in the literature reviewed. As Phase 2 aims to gather the opinions of all stakeholders, quantitative methods (survey) seem more appropriate as participants can be reached more efficiently and generalisations for the specific context of the school can be made. Phase 3 is intended as a collaboration with the teaching staff and students in the Post-16 setting. These methods are further discussed in Chapter Five, but firstly a mixed methods research design appears suitable to encompass the three phases of the study. Given the nature of the study as embedded in practice and its participatory and emancipatory aims, an action research methodology is followed. The data from each phase is used to inform and develop the next which gives the study an emergent nature, one that is grounded in practice throughout. The implications for all these characteristics are described in the following sections.

4.4. Research design

Similar to the paradigm dichotomy, research designs are commonly categorised as quantitative or qualitative, based on the data they generate. This perspective can however be problematic, as studies may require the use of both numerical and non-numerical data, which is also the case of the empirical study (Saunders et al., 2019). In these cases, a mixed methods research design is most suitable.

Mixed methods designs involve combining or integrating quantitative and qualitative methods and data in a research study (Creswell and Creswell, 2017). According to Johnson et al. (2007), mixed methods research is not new, but a new movement, that arose as a response to the debate between quantitative and qualitative research and is receiving increasing attention. Denscombe (2017) identifies three characteristics that set apart mixed methods research in the social sciences:

- *'the combination of different types of research – from different paradigms and traditions*
- *viewing research problems from a variety of perspectives – including regarding the use of different methods as beneficial in terms of quality and fullness of data*
- *choosing methods based on what works best for the specific problem – the research problem is considered the most important aspect when choosing methods' (pp. 162-3)*

Mixed methods research is claimed to provide a more comprehensive and complete understanding of phenomena than single methods. The particular type of mixed methods design used is a *sequential multi-phase* kind, in which the different types of methods are used at different points in the research process. This is achieved through an action research methodology, which is described below.

4.5. Research methodology

4.5.1. **Overview of action research**

An action research design involves an emergent and iterative process of inquiry that is meant to develop solutions for problems and improve practice in real organisations or institutions, through a participative and collaborative approach (Saunders et al., 2019). It uses different forms of knowledge and has direct and practical applications for the participants involved. Cohen et al. (2017, p. 440) describe action research as 'useful tool for change and improvement at the local level'. It usually involves a small-scale study and is conducted in real world settings.

The term *action research* was coined by Kurt Lewin in 1946 to describe a type of cyclical research aimed at problem solving. Its purposes are often practical, and begin from identifying issues in a specific group, then planning, taking, and evaluating action that targets the issues with aims to bring improvement. Unlike traditional research that aims to discover new facts or revise existing knowledge, action research focuses on acquiring information useful to bringing specific solutions to real problems (Punch and Oancea, 2014). Action research does not only have practical outcomes, but also contributes to the development of theory, especially those related to human emancipation, ecology, and ways of being together (Reason and Bradbury, 2007). Furthermore, the knowledge generated is sought to be shared not only in scholarly publications, but also with the community of interest in appropriate modes, which is essential to the improvement of educational practice. For the empirical study, although the initial aim is to target the teaching practice in the Post-16 setting of the school, the broader aim is to develop an approach that can be used across the school.

Reason and Bradbury (2007) define action research as:

> *'a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.' (p. 4)*

The process of inquiry in action research is a living, emergent one, that develops along with those involved, as they broaden their understanding and develop their abilities. This is reflected in the empirical study through the phased approach, in which the researcher uses a range of tools to generate different types of data. The data collected in each phase is used to shape and design the data collection tools used in the subsequent one, as informed by stakeholders' knowledge and lived experience.

4.5.2. **Action research in education**

Although action research was founded in the social sciences in the mid-1940s, it began gaining recognition in its applications to education in the 1970s in the UK. Lawrence Stenhouse was an important influence in this area, as he argued that teachers should study their own work themselves and contribute to curriculum research and development (Atkins and Wallace, 2012). According to Kemmis (2009, p. 643), action research aims to create change in three areas: 'practitioners' *practices*, their *understandings* of their practices, and the *conditions* in which they practise'. This makes action research a suitable framework for the empirical study, as the aim is to investigate and develop teaching practice.

Action research is seen as targeting to bridge the gap between educational research and teaching practice. In contextualising action research in education, as a process to examine one's own educational practice, Ferrance (2000, p. 1) outlines the following assumptions about teaching staff:

> - *'work best on problems that they have identified for themselves;*
> - *become more effective when they are encouraged to examine and assess their own work and then consider ways of working differently;*
> - *help each other by working collaboratively;*
> - *help each other in their professional development by working together.'*
>
> *(as cited in Cohen et al., 2017, p. 441)*

This quality of action research to target the bridging of research and teaching practice, also addresses a gap in autism research. Autism research in education is broadly dominated by studies conducted in controlled environments and following experimental research designs, in which the views and lived experiences of those directly impacted by the research are overlooked (Guldberg, 2017). The empirical study strives to contribute to this by allowing the

data collected from stakeholders to not only contribute to the development of the approach in Phase 3, but also to inform the development of the data collection tools used and shape the process of the empirical study. This in turn contributes to addressing the need for investigation into the relationship between collaborating to research and developing an approach targeting self-determination, and staff's professional development and learning. The action research methodology thus allows for a space for empowerment and collaboration which contribute to increasing the effectiveness of professional learning and development (Opfer and Pedder, 2011).

4.5.3. **The structure of action research**

As discussed in previous sections, the process of action research is an emergent and iterative one, structured in a number of steps, each with different purposes, often including: identifying issues, planning action, taking action, and evaluating action (Saunders et al., 2019). As the research develops, the question might change and become more focused, as illustrated in the two literature review chapters (Chapter Two and Chapter Three). The process of action research inquiry is an iterative one, meaning that steps are repeated, and often seen as a cyclical process and illustrated through spirals or cycle diagrams (Figure 4).

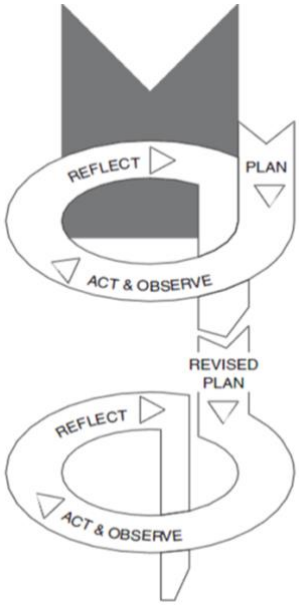

Figure 4. The Action Research Spiral (from Kemmis and McTaggart, 2000, p. 4)

The structure of action research has been conceptualised and described in many ways, with a range of numbers of steps, all or some of which are repeated throughout the process, and all including the elements of: planning, acting, observing, and reflecting. These are illustrated in Figure 4 and are derived from Lewin's early descriptions of the process (Cohen et al., 2017). Some frameworks involve the steps being split into smaller ones, as is the case of the empirical study.

Figure 1. The steps taken in the research inquiry

Figure 1 shows the steps taken in the research inquiry, or the bigger picture of the action research which includes the empirical study (*Exploration, Investigation* and *Collaboration*). After the initial problem was identified in the school, that of preparing students for life after school (*Identification*; Chapter One), an extensive process of *planning* took place. This included the *Inquiry* (presented in Chapter Two) which looked at broad areas of literature in order to narrow the *prima facie* question, which was followed by *Information* (Chapter Three) where specific self-determination literature was systematically reviewed. The researcher highlighted the gaps in this literature, to which the empirical study could contribute, without disregarding its main purpose of addressing the initial problem identified in the school.

Phase 1 (*Exploration*) of the empirical study furthers the *planning* process by gaining initial knowledge on areas explored in Phase 2 *(Investigation)*, piloting the questions used, and allowing the researcher to gain a better understanding of the Post-16 setting.

Although this phase belongs to the *planning* stage, the researcher also observes the setting and its context, while also using the data collected in *acting* on shaping the questions used in Phase 2 and *reflecting* on new insights that arise. The data collected in Phase 2 serves the overall purpose of confirming that the initial problem reflects the needs of stakeholders. Furthermore, it helps to bring together aspects of self-determination, the current curriculum, and statutory guidance that are important to stakeholders, and support the development of the approach in Phase 3 *(Collaboration)*. Thus, this data is *observed* and *reflected* upon, leading to *acting* which involves shaping the methodological tools. Although this is not the practical *acting* which action research is concerned with and which takes place in Phase 3, the methods used are developed from data previously collected which can be seen as another type of action (further details provided in Chapter Five).

Phase 3 takes a more traditional action research approach that is cyclical in the four steps of planning, acting, observing, and reflecting. These are taken to develop the 10 principles of the Enhancing Self-Determination Approach (ESDA), which are formed collaboratively with the teaching staff and students in the Post-16 setting. Three cycles take place to generate the principles, and a further three meetings to discuss their suitability for the setting, concluding with a final reflection meeting. The steps taken to achieve this, and the methods used are detailed in Chapter Five.

4.5.4. **Advantages of action research**

There are many advantages to conducting an action research study. As previously discussed, by being emergent in nature, action research allows the development of the research inquiry to follow the needs of participants in addressing the research problem. This allows for flexibility to use a range of research methods and to draw from different paradigms, in a manner that focuses on the research questions instead of following a set system of beliefs (Saunders et al., 2019).

Action research fosters participation, focusing on the view and lived experiences of those directly impacted by research. Therefore, it leads to research inquiries that are valuable to

participants and contributes to bridging research and practice (Guldberg, 2017). It provides opportunities for reflection and professional self-development (Denscombe, 2017). Thus, educators are actively involved in matters that are important to them in a way that develops their reflective skills and sense of empowerment, as is the case of the empirical study.

4.5.5. **Limitations of action research**

Despite the numerous benefits to action research there are also some limitations, which can sometimes lead to criticism. Although the ability to create a targeted and flexible research inquiry through action research is a valuable one, it limits the scope of findings for generalisation. This means that often solutions developed through an action research are so specific to the problem, its context and participants, that they cannot be directly transferred to different environments, people or situations (Descombe, 2017). However, action research studies, including the empirical study, bring contributions to wider areas of research and development of theory through the insights generated.

According to Descombe (2017), it is difficult for the action researcher to be detached or impartial to the study. Whilst this might be seen as problematic in creating bias, for the empirical study, the researcher does not strive to be detached, but rather to use previous knowledge and experience as tools to support the participants.

Conducting research in the real-world setting can also bring challenges to the process. These can range from the needs of participants, to those of the setting, their previous plans and commitments, that the researcher should work around. Therefore, it is essential for a researcher carrying out research in naturalistic settings to be flexible and adaptable in moving the process forward.

These aspects have been considered by the researcher before choosing an action research methodology, and the aim is to address them in a way that they become advantages and work in a manner that benefits the participants.

4.5.6. **Characteristics**

The action research methodology for the empirical study is described as emergent, participatory, and emancipatory. This section provides explanations of these terms and what they mean for the empirical study.

An *emergent methodology* does not demonstrate a lack of planning ahead, but rather a trust and recognition in the data analysis as a core element in guiding the research inquiry (Wright, 2009). According to Reason and Bradbury (2007, p. 8), good action research emerges and develops over time, 'as individuals develop skills of inquiry and as communities of inquiry develop within communities of practice'. It thus involves a researcher that is familiarised with the data and the needs of participants, and works together with them in addressing the problem. For the empirical study, following an emergent methodology refers to the shaping of the data collection tools following the analysis of the data from the previous phase. This approach has been chosen to reach as many stakeholders as possible, and provide opportunities for them to contribute (further details in Chapter Five).

Action research that is characterised as *participatory*, or sometimes called participatory action research, implies that the barriers between researchers and participants are broken, with the power being equalised, the research becoming a collective task (Cohen et al., 2017). Reason and Bradbury (2007, p. 8) describe participation as an attitude towards inquiry and 'developing an understanding that we are embodied beings part of a social and ecological order, and radically interconnected with all other beings', and not existing in isolation. It also involves a move away from regarding participants as subjects, to seeing and valuing them as co-researchers. Although the researcher uses participants' lived experiences and needs as drivers of the empirical study throughout, this participation is most clearly displayed through the collaboration that takes place in Phase 3 (Chapter Five). In this phase, the researcher uses participants' observations of the teaching practice as springboards for discussions, from which the ESDA principles are generated.

In encouraging participants to reflect and discuss their practice, the researcher fosters ownership. Thus, the empirical study is also *emancipatory*, as it leads not only to the creation of new knowledge, but also to the development of new skills to create this knowledge (Reason and Bradbury, 2007). Through encouraging teaching staff to reflect on their practice and think about change and future, a space for *empowerment* is created. This challenges participants to think beyond the practical solutions of the research and reflect on the broader framework in which practice occurs (Denscombe, 2008).

Another important way of characterising research is by evaluating its quality. This is crucial in maintaining certain standards across paradigms and research designs. The conceptualisation of quality for action research takes many forms, from implementing those that are characteristic to other types of research, to using alternative concepts, and creating entirely new frameworks. The *five principles for validation* as outlined by Heikkinen et al. (2007) are used for the empirical study and outlined below.

4.6. The five principles for validation

In the long tradition of educational research, a range of innovative concepts and approaches has been brought to the traditional concepts of *validity* and *reliability* used to assess the quality of experimental research. The principles outlined below have been developed specifically for action research, through viewing it as a narrative (Heikkinen et al., 2007). The paragraphs below outline the steps taken by the researcher to ensure *the five principles for validation* are addressed.

The first proposed principle is the *principle of historical continuity,* which implies an awareness of the socio-historical frame of the action research project. A good action research study involves both awareness at the macro and micro-level phenomena, thus focusing on the broader historical, political, and ideological trends that shape action on all levels (Heikkinen et al., 2007). This is addressed in the empirical study in two ways: by gaining knowledge from existing literature and through understanding participants' experiences. The first is presented in Chapter Two and Chapter Three, where the historical development of self-determination is overviewed in the context of education, including existing theories and frameworks, and by

contextualising it within the current statutory guidance. Furthermore, the researcher gains knowledge of existing evidence by gathering and analysing empirical literature systematically, as well as highlighting the gaps that arise. This knowledge is used to shape the data collection tools aimed at understanding participants' experiences of the concepts researched and their implications in their lives.

Second is the *principle of reflexivity,* which is pivotal to action research, for which development is based on reflection on previous actions (Heikkinen et al., 2007). The action researcher consciously reflects on their pre-insights (ontological assumptions) and how they impact the research inquiry throughout. The researcher strives to engage in a reflexive process throughout the empirical study. The perspective taken and philosophical assumptions are clearly stated, as well as having transparency in the development of the data collection tools and how they were shaped by the data. A reflective journal is kept throughout and particularly detailed for the process of developing the ESDA priciples in Phase 3. The researcher is aware of own knowledge and expectations, as well as the context of the school and the needs of the participants, thus reflexivity is crucial. There are no claims being made regarding the ESDA principles being suitable for individuals with autism in similar contexts, but rather through their analysis in light of theory, contributions are brought to the areas of self-determination and autism educational research.

Third comes the *principle of dialectics*, meaning that *truth* is constructed in interaction. It implies that the multiplicity of perspectives is ideal to reporting an action research study and that the social reality is constructed as a dialectical process in discussion (Heikkinen et al., 2007). Thus, the researcher should ensure that the reporting is not a monologue of one's voice, but rather that space is given optimally to the different voices and interpretations. The informants' voices should be heard clearly and authentically in the report and the researcher should discuss how language has been chosen and what voice is being used. The empirical study places stakeholders' voices at the centre, the researcher clarifying throughout that the reporting represents a clear and accurate description of their experiences. This is evidenced through the purpose of Phase 1 to pilot the questions used for a larger scale in Phase 2 in order to ensure that appropriate language and communication means are used. The findings of the first two phases drive Phase 3, in which participants' voices are even more clearly

evidenced and reported given the close collaboration with the researcher. Thus, the researcher frequently uses direct quotations from participants when reporting the findings. Furthermore, when drafting the ESDA principles, the researcher uses participants' language, and initial drafts are reviewed collaboratively, to ensure that they are an accurate representation.

The fourth principle is *the principle of workability*, rooted in pragmatism, and implying that researchers evaluate whether the action research has given rise to changes in social actions (Heikkinen et al., 2007). It implies that *truth* is linked to the functionality or utility of ideas, that is if they offer viable solutions to the problems researched. This aspect is addressed through the final group interview. As the researcher strives to allow the research to be guided by participants needs and experiences, this appeared the most suitable way to evaluate its *workability.* Unfortunately, the Covid-19 pandemic prevented the researcher from gaining students' reflections on the *workability* of the principles of ESDA. However, the teaching staff involved provided valuable reflections regarding both theirs and their students' experiences of the collaboration. Although Reason (2006) argues for the importance of practical purposes in action research, he argues that limiting it to nothing further provides a narrow and simplistic view. Action research should integrate theory and practice, which is the case of the empirical study. By analysing the principles of ESDA through the framework of SDT and the satisfaction of basic psychological needs, the empirical study also brings contributions to theory development.

Lastly, Heikkinen et al. (2007, p. 16) propose the *principle of evocativeness,* meaning that good quality research 'awakens and provokes a person to think about things in a new and different way'. The researcher uses students' observations about teaching practice in Phase 3 to guide teaching staff's discussions, thus encouraging them to see it from students' perspective, sometimes implying thinking in new or different ways. In doing so, and through the use of video, the researcher also introduces an innovative way of generating an approach embedded in practice.

4.7. Outline of the sample

Sampling involves decisions made by the researcher regarding the population included in an empirical study, when it is not feasible to involve every one of its members (Descombe, 2017). Types of sampling include *probability sampling*, which relies on random selection and is associated with large and representative samples, and *non-probability sampling,* which involves an element of choice from the researcher at some point during the selection process and is associated with smaller and exploratory samples (Descombe, 2017). For the empirical study *non-probability* appears suitable, given the small target population and the exploratory purposes of the study. The specific *non-probability sampling technique* used is that of *purposive sampling,* where the researcher knows something about the participants or the events, and they are seen to produce the most valuable data (Descombe, 2017). The initial need for the study arose during the researcher's time as a member of staff at the school, thus there is familiarity and prior knowledge of the population. Furthermore, the specific school has been chosen for its particular characteristics and exemplary practice it provides in the field, as presented below. The following paragraphs provide an overview of the school and its characteristics, with further details regarding the participants involved at the different stages of the empirical study being provided when discussing the respective methods (Chapter Five).

The researcher worked in the school between September 2015-July 2018. The proposal for this thesis was put forward in 2017, and data collection began in December 2018. The school discussed in this thesis is an all-through maintained (funded by the Local Authority) day special school, located in England, UK. It serves students between the ages of three to 19 with social and communication difficulties which fall within the autism spectrum. The school is comprised of three sites, mainly serving Early Years and Foundation Stage (EYFS) and primary together (Key Stages 1 and 2), secondary (Key Stages 3 and 4) and Post-16 age (Key Stage 5) students, all within close proximity of each other. When the researcher first began working at the school it was only operating on a single site and had an Ofsted grading of Outstanding for the last three inspections. However, following the expansion to three sites and many changes, including in leadership, at the most recent Ofsted inspection at the writing of this thesis, the school received a grading of Good. The school has a long-standing tradition of high-quality provision for children and young people with autism, being valued in its local community.

At the writing of this thesis, the school catered for over 200 students, all of whom have a diagnosis of autism, most of whom having additional diagnoses such as learning disabilities, sensory and social, or emotional and mental health needs. The majority of students come from a White British background, although the school has numbers above average of students from minority ethnic backgrounds and those who speak English as an additional language. Almost half of the students attending the school are classified as disadvantaged and many do not live in the immediate locality of the school. The majority of students (almost three quarters) are male (information taken from public Ofsted report 2019).

The school has a '*can do'* approach to learning, having high expectations of students and focusing on what they can do rather on what they cannot. A close and productive relationship with families is fostered as the two parties work together to determine what is in the best interest of the child. Careful attention is given to each student's specific needs and skills as determined through assessment, and an eclectic mix of approaches and interventions is used. There is a recognition that students learn best when there is enjoyment, thus teaching staff strive to incorporate special interests into learning when appropriate. This eclectic mix combines elements of developmental approaches such as TEACCH (Treatment and Education of Autistic and related Communications Handicapped Children; Lord and Schopler, 1994) and SCERTS (Social Communication Emotional Regulation Transactional Support; Prizant et al., 2006), alongside principles of the traditional behavioural approach ABA (Applied Behaviour Analysis; Cooper et al., 2007). The classroom environment includes elements of the SPELL framework (Structure Positive approaches Empathy Low arousal settings and Links with parents; NAS, 2016), and for certain students, elements of relationship-based interventions such as Intensive Interaction (Nind and Hewett, 1994) and The Son-Rise Program (Kaufman, 1994) are used.

Staff strive for all students to acquire functional and meaningful communication which is targeted through a picture-based communication system, which has been developed in the school since the 1990s in light of new research. The system includes photographs, drawings and symbols which are taught in conjunction with the written and spoken word, in accordance with the student's level of understanding. The aim is to develop functional communication in the shortest time possible.

The school provides a personalised approach to curriculum design and planning, which is under development at the writing of this thesis. It follows the Foundation Stage and National Curriculum with modification including the extended curriculum, which overlap and provide a smooth transition for students if needed.

In the Post-16 (Sixth Form) students are broadly grouped in two strands (extended and main) but will follow a pathway with their Post-19 destination in mind. Students on the extended strand work towards an ASDAN (Award Scheme Development and Accreditation Network) Diploma in Personal Progress, while those in the main classes undertake a range of activities leading to Entry level accreditation in ASDAN Personal and Social Development, ASDAN Employability and Open College Awards. The students engage in activities targeting the development of a range of skills including functional skills in English, Math and ICT (Information and Communications Technology), community access, arts and humanities, cooking, cleaning, self-care, and many others. They also have opportunities to develop work-related skills through receiving careers guidance and instructional learning, as well as practical opportunities for work experience both on and off-site. Furthermore, students have access to activities based on their interests such as animal care and horticulture, as well as physical education, hobbies, and leisure.

Staff strive to foster a close relationship with parents/carers through various communication means such as home school books and newsletters, as well as in person events such as coffee mornings and community days, while also offering workshops to families of new students. The approach towards behaviour that challenges is one of pre-empting through a range of means in the environment, the curriculum, communication and relationships with staff, as well as providing students with opportunities to learn how to recognise their emotions and strategies

to manage them (all information in the previous paragraphs is public on the school's website which, in order to protect participants' identity, will not be referenced in this thesis).

The school thus provides exemplary practice in its approach to address the needs of its students with autism, through the eclectic mix of interventions, targeted communication strategies, an environment suitable for their needs, and staff who are knowledgeable of the best ways to address them. The curriculum and learning provided are flexible and tailored to each individual, taking into consideration both their needs, as well as interests and aspirations for future. These aspects, along with the researcher's prior insider knowledge and the need that arose for the study, make it a suitable sample for the empirical study. The paragraphs below provide an overview of the ethical considerations in engaging with the sample, with further details also being provided when discussing the methods in the following chapter.

4.8. Ethical considerations

Ethics are concerned with principles of conduct about what is good and bad, right and wrong. In the context of research, these principles 'encompass some decisions and dilemmas that do not just pit right against wrong, but balance one right action against another right action, taking into account the possibly conflicting interests of the parties involved' (Thomas, 2017, p. 58). Researchers must take into account the possible effects of the research on the participants and should act in a way that preserves their dignity as human beings (Cohen et al., 2017). The empirical study was carried out in accordance with the British Educational Research Association (BERA, 2018) and the University of Birmingham's Code of Practice for Research (2020).

Due to the emergent nature of the empirical study and the development of the data collection tools from the analysis of the data collected in previous phases, ethical approval was gained in two stages from the Humanities and Social Sciences Ethical Review Committee reporting to the Research Governance, Ethics and Integrity Committee at the University of Birmingham. For Phase 1 of the study, ethical clearance was received on 10th December 2018 (submitted on 9th October 2018, Application for Ethical Review ERN_18-0815, Appendix 2a) and for Phase 2 and Phase 3 on 23rd May 2019 (submitted on 3rd April 2019, Application for Ethical Review

ERN_18-0815A, Appendix 2b). The data collection process for Phase 1 and Phase 2 began on the same days ethical approval was received, with the data being collected for Phase 3 after the prior data collection and analysis were completed, in October 2019. The paragraphs below outline the main ethical considerations for the empirical study and how they were addressed by the researcher.

4.8.1. **Gaining access and transparency**

Initial access for the empirical study was gained from the school's headteacher. This was essential as not only was the study intended to be carried out on the school premises, but also that different stakeholder groups were to be involved (staff, parents/carers and students). A meeting was held with the headteacher, where the researcher provided an overview of the whole study and its aims, as well as drafts of documents intended to be used with the participant groups.

Transparency is achieved through an open and honest relationship with participants, typically by sharing the purposes of the research, participant implication, and other relevant details. For the empirical study, all participants were provided with the relevant research information before informed consent was sought. Staff and parents/carers involved in the interviews conducted in Phase 1 were provided with a Research Information Sheet (Appendices 3a and 3b). This included information regarding the need for the study, expected participant contribution, data analysis, management, and right to withdraw. A more succinct version of this information was included in the observation (Phase 1) and questionnaire (Phase 2) consent forms, discussed in the following section.

An adapted version of the Research Information Sheet (Appendix 5a) was used for Phase 3, with changes mainly regarding participant contribution. The research information for students was also provided in their respective consent forms. In all sections regarding research information, participants' right to withdraw without any questioning or consequences was clearly stated. Given the emergent nature of the study which involved analysing some data while collecting other, meant that the researcher had to state a deadline regarding withdrawal. It was also stated that the disposal of data was to be done in accordance with the University of Birmingham guidelines.

4.8.2. **Recruitment and informed consent**

The principle of *informed consent* stems from participant's right to freedom and self-determination (Cohen et al., 2017). It protects and respects participants' rights, whilst also placing on them some of the responsibility of the research. The empirical study involved *voluntary participation* from all participant groups, the decision to be involved being free and belonging entirely to the participant. No incentives were used, and all efforts were made to provide equal opportunities for participation, as well as an accurate understanding of the research and expectations. Participants were recruited via a range of means including through presenting the research in person (Phase 1 and Phase 3 for staff and students), telephone contact by the school (Phase 1 parents/carers), emails, school newsletter and word of mouth (Phase 2). Further details about the process and specific forms are presented in the following chapter. The most significant ethical consideration for the empirical study was gaining informed consent from the young people and children involved. As the study was conducted within the school, according to the school's policy, headteacher and parent/carer consent would have been sufficient to involve the students. However, it was important to the researcher, given the values driving the empirical study, to gain informed consent from the students themselves as well. The researcher worked collaboratively with the school's communication team, the teaching staff, and used her prior knowledge and experience to present students with the necessary information in the most appropriate manner. Materials were thus developed to meet the range of needs of the students recruited including a PowerPoint presentation with visual representations and minimal text used for Phase 3, as well as specific research information and consent forms for the different phases of the research, which will be presented in following chapters for each method used.

4.8.3. **Privacy and data management**

According to the BERA Ethical Guidelines for Educational Research (BERA, 2018, p. 21) 'the confidential and anonymous treatment of participants' data is considered the norm for the conduct of research'. The researcher treated the data collected in accordance with the BERA and the University of Birmingham guidelines. For Phase 1 and Phase 3 anonymity could not be achieved given the researcher's direct involvement with the participants. However, minimal information that could identify the participants was collected and stored only in hard copies

in a safe, locked storage. No information that could identify the individual participants is included in the reporting of this thesis or in future publications. All participants from whom quotations are reported are given pseudonyms not related to their real names. The researcher took all precautions to prevent the location of the school to be identified.

All data was stored in accordance with the University of Birmingham's Research Data Management Policy, as stated in the Data Management Plan (Appendix 2c). The data was stored using the University of Birmingham's BEAR storage, which could only be accessed by the researcher and her two supervisors. The data was also stored on an encrypted external hard-drive, used as back-up, which was updated at the end of each day of data collection. Hard copies of questionnaires, consent forms, field notes, assessments and any other documents containing participant data or information were kept in a secure, locked location within the University of Birmingham. After the thesis completion, a subset of the data that will be transferred to the University of Birmingham's Research Data Archive (RDA).

Another important ethical consideration regarding privacy and safeguarding of students was researcher's awareness of policies and procedures regarding disclosure. The researcher was provided with the school's safeguarding policy before beginning the data collection and respected it while on the premises. The researcher was informed and aware of the steps that should be followed in case of disclosure.

4.8.4. **Power and position**

According to Cohen et al. (2017), researchers can often be seen in an asymmetric position of power with regard to participants, either because of status, position, knowledge, role or other characteristics. Careful consideration to aspects of power and position was given in the empirical study, particularly to ensure an equal and positive collaboration. In order to address this, the researcher chose to meet with the students and teaching staff separately in Phase 3, so the former could express their views without concerns about the latter's opinions. The researcher was aware of her prior position as teaching assistant in the school, thus she explained to the students in suitable language that she was now in a different position. To consolidate this, she insisted on them addressing her by her first name, to foster a more informal relationship. Furthermore, efforts were made to explain the voluntary nature of the

study, and that students had no obligation to participate. Positive language was used to reinforce the value of their views in the empirical study, the researcher reminding them they were there to help her and the teaching staff understand how to best support them. Respect was given to the particular situation of each student, the researcher adapting and being flexible throughout. As the data collection took place during the school day, it sometimes meant that students had to miss certain activities to take part. If a student felt reluctant to take part in the data collection at a particular point, but without expressing the desire to withdraw entirely, the researcher moved forward with the willing participants. It was important that the students' wishes were respected, and teaching staff agreed with the researcher in this aspect.

The researcher also aimed to establish an equal and positive relationship with the teaching staff involved in the empirical study. Due to many changes to the school structure, the majority of the teaching staff in the Post-16 setting, which represented the sample for Phase 1 and Phase 3, were not familiar with the researcher. To address this, the researcher attended staff meetings before the beginning of both phases during which she introduced herself as well as the study, and expected participant contributions. During the meetings conducted in Phase 3, the researcher used a positive guiding approach, prompting only when necessary and encouraging all to contribute. For Phase 2, the researcher contacted all staff via email as well as introduced the study during staff meetings, to ensure a collaborative relationship. Similar to the interaction with the students, the researcher showed appreciation and gratitude for teaching staff's contributions throughout, as well as offering to adapt and be flexible. The same approach was also taken in establishing the relationship with parents/carers, all efforts being made by the researcher to show the importance and value of their views to the research.

4.8.5. **Dissemination and reciprocity**

Educational researchers have a responsibility to communicate their findings and their practical implications to various audiences using appropriate language. This is to benefit other professionals and their practice, as well as contribute to the development of policy and services. During the empirical study, the researcher shared preliminary findings with the school and its stakeholders, as well as at national and international conferences. A

presentation of the Phase 3 findings was given to all teaching staff in the Post-16 setting and, unfortunately, the one planned for the whole school was postponed because of the Covid-19 pandemic. However, the researcher has informed the headteacher that this will be available for the foreseeable future. As the principles of ESDA were developed to contribute to a whole-school approach, it is essential that they are shared with staff working with children and young people across the school. A summary of findings was sent to the students and parents/carers involved in the research, as well as a shorter summary being published in the school's newsletter. The researcher presented findings at different points in the research at the University of Birmingham's *School of Education PGR Conferences* and *Annual Research Poster Conference*, as well as international conferences such as *International Autism Conference Bucharest* (2018), *7th International Self-Determination Theory Conference* (2019), and *12th Autism-Europe International Congress* (2019). Findings and reflections from the research inquiry were also shared with other educational practitioners or trainees, through guest lectures delivered within the University of Birmingham for the MEd Autism (Children) and SPMLD master's, and PGCE programmes. The researcher intends to publish the findings and other parts of this thesis in academic journals, as well as deliver further conference presentations and lectures after the submission of the thesis.

4.9. Chapter conclusions

This chapter provided an overview of the research paradigm, design, methodology, and ethical considerations of the empirical study presented in this thesis, as well as the sample population involved. These were used to answer the research question: *how can teaching practice enhance the self-determination of students with autism in a specialist school in England, UK?*

The empirical study sits within pragmatism due to its aim to find practical solutions for an existing problem. The construction of reality, in this case for the concept of *self-determination,* is seen as existing in a certain context at a certain point in time, with multiple ways of understanding it, which causes it to continuously evolve through the interaction of different factors. To construct it, the experiences of those involved are most valuable and they should be sought and represented as accurately as possible.

The most suitable way to address the overall research question and aims is through following a mixed methods design, which allows choices of both quantitative and qualitative methods to be made to suit the purposes of the different stages of research. An action research methodology is chosen, which allows for an inquiry suitable to answering the research question, while also providing a framework for participants to be involved collaboratively. In order to implement the action research, the stakeholders of the school where the initial need was identified were recruited. Careful consideration was given to ethical matters such as access, recruitment, informed consent, data protection, power, and dissemination of results. The following chapter provides further details regarding the methods used across the three phases of the empirical study.

5. CHAPTER FIVE

METHODS - EXPLORATION, INVESTIGATION, AND COLLABORATION

5.1. Chapter overview

The present empirical study followed a mixed methods design and an action research methodology, structured in three phases. Similar to the reviewing of the literature, the empirical study began with a broad *Exploration* in Phase 1 aimed to gain a better understanding of stakeholders' (staff, students, parents/carers) views on the concepts researched. The data collected was used to develop the methods for the *Investigation* in Phase 2 which aimed to involve larger stakeholder groups. Overall, Phase 1 and Phase 2 served the broader purpose of informing Phase 3, during which, collaboratively with the staff and students in the Post-16 setting, the ESDA principles were developed.

The methods used across the three phases were both qualitative and quantitative, given the choice for a mixed methods design to allow for this combination. This chapter provides a description and explanation of the methods used to collect data across the three phases of the empirical study. This includes the purposes and reasons that motivated these choices, how the data collection tools were developed from literature and previously collected data, their structures and the participant groups involved. For the purposes of the thesis, greater emphasis has been placed upon Phase 3 with the findings of Phase 1 and 2 summarised with the central purpose of demonstrating the participatory and data driven approach to developing the Phase 3 methods (and the thesis as a whole). With this strategy in mind, only summary findings for Phase 1 and 2 are presented in this chapter (with cross-reference to appendices). Furthermore, when offering rationale for the methods used in Phase 2 and Phase 3, selected findings from the previous phases are presented to demonstrate how the methods were contingent upon the views of the participants – i.e. participatory in nature.

5.2. Phase 1 – Exploration – Aims and research questions

As discussed in the previous chapter, Phase 1 of the empirical study was designed to meet the following aims and answer the research questions below:

5.2.1. Aims

a. To explore the knowledge and views of a small sample of teaching staff and parents/carers regarding the term *self-determination*, the current statutory guidance, and current curriculum
b. To pilot the language used in Phase 2 and determine its suitability for all three participant groups
c. To gain a better understanding of the running of the Post-16 setting

5.2.2. Research questions

1. What are the initial thoughts of teaching staff and parents/carers on the term *self-determination*, the current statutory guidance, and current curriculum?
2. Are the terms used suitable for the teaching staff and parent/carer groups?
3. Which means are most suitable to gather the views of students?

Phase 1 or the *Exploration* set out to meet three aims, which could be described as: exploratory, methodological, and relational, and are detailed below.

A common approach in conducting a mixed methods study is to use qualitative methods (interviews in Phase 1) to inform quantitative ones (survey in Phase 2) (Cohen et al., 2017; Saunders et al., 2019). This is to *explore* the relevance and need for the research, and that of concepts and ideas related to it. This type of exploration was needed for the empirical study in order to get a better understanding of stakeholders' views on the need to investigate how teaching practice can enhance the self-determination of students with autism in a specialist school in England, UK, the overall aim of this study. Although this was not achieved in Phase 1 alone, but also in Phase 2, this broad exploration was needed as an initial step. The main ideas that needed exploring at this stage were those related to the concept of *self-determination* and its context, including the school setting, the current statutory guidance, and the current curriculum.

The second aim of Phase 1 was a *methodological* one, meaning that the data collected was used to develop subsequent methods, in this case the survey conducted in Phase 2. Drafts of the questionnaires used in Phase 2 were developed in accordance with the data from Phase 1, further piloting, and consultations with the school's communication team. These steps are fundamental for the action research, which strives to represent the multitude of participants' voices, as previously discussed in Section 4.6. This is particularly relevant for the empirical study which strives not only to represent participants' voices in the presentation of the findings, but also to be emancipatory in supporting the development of their skills and knowledge. For this specific purpose, interviews with the students were also considered. However, given the range and individual needs of students with autism, it appeared most suitable to consult with experts, in this case the school's communication team, to develop the questionnaire which was used in Phase 2 with the students.

Lastly, the third aim of Phase 1 was a *relational* one, meaning that it laid the foundation for the collaborative relationships with stakeholders which evolved throughout the study and culminated in Phase 3. The value of engaging with participants and developing a trusting relationship before collecting data was identified as one of the strengths of a study conducted by Crane et al. (2021) evaluating an Autistic-led programme. Careful attention should thus be given to the research inquiry process and the development of trusting relationships, that lead to the co-production of knowledge (Crane et al., 2021). Although the students were familiar with the researcher from her time working in the school, organisational changes meant that current staff were not. Furthermore, the researcher did not have any prior experience working in the Post-16 setting of the school, thus a better understanding of how this was run was essential. As previously explained, establishing a collaborative and equal relationship with participants as co-researchers is crucial in an action research study (Sections 4.5.2 and 4.5.6). This is not only to address the *participatory* nature of the research and ensure it meets participants' needs and expectations, but also to address gaps in educational and autism research (Guldberg, 2017).

In order to address these three aims and answer the three related research questions outlined above, in Phase 1 of the empirical study two methods of data collection were used: interview and observation. The following sections provide details regarding the reasons for choosing these methods, the participants involved, and the development of the data collection tools.

5.3. Phase 1 Overview

Table 3. Overview of Phase 1

Method	**Aim**	**Tool**	**Participants**	**Duration to collect**
Interview	Explore knowledge and views regarding *self-determination*, the current statutory guidance, and current curriculum Pilot questions for Phase 2 Gain a better understanding of the Post-16 setting	Semi-structured interview schedule – using question, follow up and probe (Appendices 3i and 3j)	Seven members of teaching staff: five working in Post-16, the Deputy Head Teacher and Head Teacher Five parents of students in Post-16	Three months
Observation	Gain a better understanding of the Post-16 setting	Semi-structured observation schedule (Appendix 3k)	15 students in Post-16 Five members of teaching staff in Post-16	Ten days

Table 3 outlines the two methods used in Phase 1 of the empirical study, the aims they addressed, the data collection tools used, the participants involved, and the duration of their completion. To the aims above, the overall aim of Phase 1 and Phase 2 is added, which is to confirm that the need for the study, initially identified by the researcher and through the literature, aligns with stakeholders' needs and expectations.

5.4. Phase 1 Interview

5.4.1. Participants, recruitment, and informed consent

Table 4. Demographic data about teaching staff involved in Phase 1 interviews

Pseudonym	Current position	Professional background	Time working in the school	Duration of interview
Anne	Assistant Head Teacher (AHT)	Special education	13 years	59 mins
Greta	Head Teacher (HT)	Special and mainstream (primary)	Three months	38 mins
Martha	Teaching Assistant (TA)	Support worker, administration	One year	39 mins
Olivia	Class Teacher (CT)	Special education	Eight years	30 mins
Robert	Assistant Head Teacher (AHT)	Mainstream (secondary) education	Three years	65 mins
Sarah	Deputy Head Teacher (DHT)	Mainstream (primary) and special education	Nine years	65 mins
Tara	Teaching Assistant (TA)	Project implementation, special education	Three months	35 mins

Table 4 provides information regarding the seven members of teaching staff interviewed in Phase 1 of the empirical study. The researcher used what has been described in Section 4.7. as *purposive sampling*, meaning that there was prior knowledge of the participants. The seven members of staff were approached because of their knowledge of the Post-16 setting, its development until that point, and the existing curriculum. They were thus in a suitable position to provide valuable data regarding the need for the study and how this could be addressed through the development of the approach in Phase 3. Furthermore, interviewing the seven members of staff allowed the researcher to gain a better understanding of their knowledge and awareness of the terms used to shape the questions in Phase 2. They were approached during a staff meeting as recommended by Anne (AHT). The researcher was aware that this was not a representative sample of the school's population, but ensured that there was variety in roles and experience. The interviews also allowed the researcher to gain

a better understanding of the running and development of the Post-16 setting and its curriculum, which was supported through the observation method described later in the chapter.

In the small purposive sample of staff interviewed, there was a range of experience in the school, current positions, and professional backgrounds. This provided the researcher with a broad understanding of teaching staff's views and expectations across positions and levels of experience. The interviews also varied in length, ranging from 30 to 65 minutes. All interviews were conducted in the school, during lunch breaks, before or after school hours depending on participants' preferences. Alongside the staff interviewed, a purposive sample of parents of students attending the Post-16 setting was also contacted, their characteristics being presented below.

Table 5. Demographic data about parents/carers involved in Phase 1 interviews

Pseudonym	**Relationship to the student**	**Time young person has attended the school**	**Duration of interview**
Barbara	Mother	Eight years	54 mins
Elizabeth	Mother	13 years	45 mins
Hannah	Mother	Six years	75 mins
Jane	Mother	11 years	21 mins
Ruth	Mother	Two years	28 mins

Purposive sampling was also used to recruit parents/carers for the interviews in Phase 1. As Phase 3 was planned to involve a collaboration with the students in the Post-16 setting, it was essential to gather their parents/carers' views regarding self-determination, preparing for life after school, and the current curriculum. Furthermore, the interviews were used to pilot the questions used in the survey in Phase 2 that was aimed at parents/carers of students across the school.

Table 5 presents data regarding the five mothers who volunteered to take part in the interviews in Phase 1. Following a discussion with Anne (AHT), parents/carers of all students in the Post-16 setting were contacted via telephone by the school's office as this was seen as both efficient and reliable. Those that expressed an interest provided an email address which

the researcher used to send the Research Information Sheet (Appendix 3b), the Interview Consent Form (Appendix 3c), and arrange a date and time for the interview. All but one interviews were conducted in an office in the school at a time suitable for the mothers. Due to Barbara's (P) mobility difficulties she requested a home interview, which the researcher agreed to after completing the Lone Working Protocol (Appendix 2d). The mothers had varying experience of their young people attending the school (between two-13 years) and the duration of interviews was between 21-75 minutes.

5.4.2. **Rationale**

The *interview* as a method for social research is a purposeful conversation during which clear questions are asked on a specific topic (Saunders et al., 2019). According to Kvale (1996), using interviews in educational research implies a move towards seeing knowledge as generated between humans, as an interchange of views on a topic of mutual interest (cited in Cohen et al., 2017). This perspective is in accordance with the *intersubjective ontology* of the empirical study (Section 4.2.2), as it allows for interviewers and interviewees to discuss their interpretations of the world and their views on specific situations (Cohen et al., 2017). It offers opportunities to understand the authentic perspective of the participant and their social world (Freebody, 2003).

The interview as a research method can serve a range of purposes for the research inquiry, such as understanding or evaluating a person or situation, effecting therapeutic change, developing hypotheses or research instruments, gathering data, or sampling opinions (Cohen et al., 2017). The interview thus seems suitable in meeting the aims of Phase 1 as described in Section 5.2.1 and characterised as exploratory, methodological, and relational. The knowledge and opinions of participants are explored, while relationships are built and strengthened, and the resulting data is used to shape the questionnaires used in Phase 2. The interviews were audio recorded and transcribed verbatim by the researcher. Notes were also made regarding the context of the interview, significant observations about the situation, the participants, and their behaviour during the interview (an example can be found in Appendix 3l).

5.4.3. **Structure of data collection tools**

Interviews can be differentiated in relation to their structure, or the rigorousness with which a set schedule of questions is followed. Interviews with methodological purposes, such as the ones used in Phase 1, usually follow a structured schedule of questions. However, given the exploratory purposes of the method in Phase 1, as well as the aims to build relationships and understand participants' experiences, the *semi-structured interview* was considered most suitable (Cohen et al., 2017). This allowed the researcher the flexibility to use both fixed-alternative and open-ended items, that took both direct and indirect forms, and could be characterised as descriptive, experience, knowledge, and feelings questions (Cohen et al., 2017). The complete schedules for the staff and parent/carer interviews used in Phase 1 can be found in Appendices 3i and 3j. The questions were organised by subject, three of the sections being maintained in the questionnaires in Phase 2: Section B – self-determination, Section C – statutory guidance and Section D – curriculum. The interviews began with an introduction and two *warm-up* questions, as suggested by Robson and McCartan (2016), meant to put the participant at ease and settle them into the interview. The introduction was used to check that participants have read the Research Information Sheet (Appendix 3a) and signed the Interview Consent Form (Appendix 3b), and to provide opportunities to ask questions or seek clarifications.

All three main sections of the interview schedule, following three topics (self-determination, statutory guidance and curriculum), had both exploratory and methodological purposes. A fourth section on the Post-16 curriculum was added, meant to gain a better understanding of the setting and stakeholders' needs. Probes and prompts were used by the researcher to ask participants to extend, exemplify, elaborate, seek clarifications or further details on their answers. This was to allow richness, depth, comprehensiveness, and understanding participants' thought processes (Cohen et al., 2017). The prompts and probes used were *emergent*, the researcher used a combination of follow-up questions (why/how, can you provide an example, can you think of a time this occurred), repeating answers and using participants' words, and showing interest and understanding through facial expressions and gestures, based on participants' answers and the flow of the interview.

5.5. Phase 1 Observations

As previously outlined in Section 5.3, ten days of observations were conducted in the Post-16 setting of the school with 15 students and five members of teaching staff, also as part of Phase 1 of the study. Details regarding the reasons for choosing this method, the participant groups, and structure of the observation schedule are provided in the paragraphs below.

5.5.1. **Participants, recruitment, and informed consent**

All participants involved in the observations in Phase 1 were recruited from the Post-16 setting of the school, using *purposive sampling*. The staff involved in the observations were working in the Post-16 setting at the time the data was collected: Anne (AHT), Martha (TA), Olivia (CT), Robert (AHT) and Tara (TA). They were informed about the observations through the same presentation delivered at a staff meeting (Section 5.4.1) and were presented with a Research Information Sheet (Appendix 3d) and asked to sign an Observation Consent Form (Appendix 3f).

The 15 students involved in observations were between the ages of 16-19 and attended the Post-16 setting of the school at the time of data collection. All 15 students formed a main curriculum class (detailed in Section 4.7) and were often taught in smaller groups for different subjects. Anne (AHT) and Olivia (CT) introduced the researcher to the students, although most were familiar with the researcher in her prior position at the school.

All efforts were made by the researcher and school staff to present students with all relevant information regarding their participation in the study, and opportunities were offered throughout to seek clarifications and ask questions. Research involving children or vulnerable young people or adults often refers to this process as providing *assent* or *informed assent,* which implies their affirmation for participation and it is not a legal endorsement (Lambert and Glacken, 2011). For this empirical study, students were informed that their participation was voluntary and there would be no consequences for their refusal. The points outlined in the Observation Consent Form for Students (Appendix 3h) were presented and the researcher allowed time for questions and clarifications. All students who gave initial verbal consent were

provided with a consent form, as well as one for their parents/carers (Appendix 3g), and the Observation Research Information Sheet (Appendix 3e).

5.5.2. **Rationale**

Observation means looking carefully, which can happen in different ways depending on the approach taken in the research inquiry, and involves focusing on aspects such as behaviours, events, settings, routines, relationships, interactions and many others (Thomas, 2017). A distinctive feature of *observation* is that it provides the researcher with the opportunity to gather 'first-hand' data in natural situations, which has the potential to be more authentic (Cohen et al., 2017). Robson and McCartan (2016, p. 320) explain that directness is another important strength of *observation* as 'you do not ask people about their views, feelings or attitudes; you watch what they do and listen to what they say', as what people say they do may differ from what they actually do.

The authenticity and directness of the observation method were particularly valuable at the early stages of the empirical study, particularly in the researcher's interaction with the students. As previously discussed, when an initial need for the study arose, staff were aware of the challenges in encouraging students to express their authentic thoughts and feelings, instead of relying on adult prompting. Thus, observation appeared a suitable method for the purposes of this initial phase of the study. Furthermore, most students had prior experience of the researcher as a member of teaching staff, thus her presence in the classroom was not an alien element.

The choice for observation also reflected the exploratory, methodological and relational purposes of Phase 1. The opportunity to observe the interactions between students and teaching staff in their natural environment, as well as the different aspects of the teaching practice contributed to the exploration of self-determination *in context*. The presence of the researcher in this context also contributed to the development of relationships with participants and paved the way for the closer collaboration in Phase 3. Furthermore, along with the data collected from the interviews, the observations provided data that shaped the questionnaires used in Phase 2, particularly when addressing the existing curriculum and teaching practice.

5.5.3. **Structure of data collection tools**

Observations range in focus and level of structure, and it is argued that they cannot be neutral and theory-free (Cohen et al., 2017). As previously discussed (Section 4.2.2), the researcher does not aim to conduct a value-free study, but rather to use own knowledge and experiences to support participants in engaging in research that is purposeful and helpful in meeting their needs. Regarding the level of structure in conducting observations, they are often dichotomised between *structured* and *unstructured*, or viewed as a continuum, with *semi-structured* observation sitting somewhere in the middle (Denscombe, 2017). A semi-structured observation seemed most suitable for Phase 1 of the empirical study as the researcher was aware of the need for the research, but without having formed any hypotheses at this point. Furthermore, the initial need for the study was confirmed and further defined by Phase 1 and Phase 2, thus an openness to observe more broadly at this stage was essential.

Another way of distinguishing between types of observations is through the role of the observer in the situation observed, and the extent of their participation (Robson and McCartan, 2016). This dimension can also be seen as a dichotomy or across a continuum, with the *pure observer* using a structured tool at one end, and the *participant observer* using a more unstructured and flexible approach at the other. The role of the *participant-as-observer* seemed most appropriate for Phase 1 of the empirical study. As staff and students were already familiar with the researcher and aware of her position, the researcher's identity and purposes could not have been concealed. This role was chosen following a discussion with Anne (AHT) over the *complete participant*, to avoid confusing the students about the researcher's position. As a former member of staff in the school, a role of complete participant would have made it harder for the students to distinguish her position as a researcher in a collaborative study. Furthermore, the role of *participant-as-observer* allowed the researcher the chance to ask for clarifications and engage in discussions regarding situations observed, as well as continue to develop relationships with the participants (Robson and McCartan, 2016).

5.6. Phase 1 – Summary of findings

As explained in the chapter overview (5.1), only summary findings of Phase 1 *(Exploration)* are presented here. Selective themes in the four areas of the interview schedules are presented below, for a full list of the themes and coding labels, please see Appendix 3m.

5.6.1. **Self-determination**

One of the purposes of Phase 1 *(Exploration)* was to confirm if the need for developing an approach to teaching practice to enhance students' self-determination was agreed upon and prioritised by all stakeholders. For this, it was essential to confirm the choice for *self-determination* as the focus of the empirical study by exploring participants' understanding of its meanings. All staff interviewed were familiar with the term, whereas the majority of the mothers were unsure. All participants shared their interpretations of the term, those unsure receiving a definition from the researcher. The themes that arose from these interpretations were: motivation, independence, being determined, learning life skills (further details in Section 5.10.4).

While all participants agreed on the importance and value of promoting students' self-determination both at school and at home, they also agreed on the challenges this brings for students with autism, particularly in teaching skills related to the instructional domains of self-determination. These were taken from Wehmeyer, Agran, and Hughes' (2000) study which were developed from the component elements discussed in Section 2.5.3 (further details in Section 5.10.4). Key themes are summarised in the following paragraphs.

Promoting student voice and addressing prompt dependence

These areas for development were identified by both staff and mothers, with the agreement that in order to promote student voice successfully, a unified approach between home and school is needed. This came with a recognition that developments should be made to ensure students' authentic voices are placed at the centre of their learning, to promote an understanding that they have a say in shaping their futures, a valuable skill in life after school.

All participants also agreed that adults are often too quick to take away responsibilities from young people, to protect them from taking risks and facing disappointment. It is important that the appropriate balance is found between providing structure and opportunities to take responsibility, with the aim of moving away from reliance on adult prompting.

Skills related to the instructional domains of self-determination - important, but challenging to teach

All participants agreed that teaching students the instructional domains of self-determination is valuable in preparing them for life after school, but they all bring challenges both in opportunities and understanding. Integrating problem-solving in teaching, for example, is an area for development, participants agreeing that more opportunities should be provided in the curriculum. Similar ideas were discussed on decision-making, opportunities to practice this skill often varying amongst students. Both skills involve first developing self-awareness and self-knowledge, along with promoting an understanding for students that they have a voice and access to opportunities to express it. This also impacts abilities to make choices and self-regulate, both of which are well addressed in the school. It is not to say that these areas are not in need of improvement, particularly around broadening student options around choices and strategies to self-regulate. In order for all composing skills to be taught successfully, collaboration between home and school is essential, to provide consistency and maximise opportunities.

5.6.2. **Current school curriculum**

Phase 1 also aimed to gather participants' thoughts on the current whole-school curriculum. The questions and prompts aimed to encourage them to engage critically in the conversation, participants focusing on areas for development, some of which are outlined below.

Stakeholder involvement in curriculum development

Participants agreed that gathering the input of both students and their parents/carers in curriculum development decisions is an area that needs improving across the school. Staff expressed how they aspire to actively involve students in future, and gather their views and preferences in shaping a new curriculum. All participants agreed that parental input is also

crucial, but at present this is not gathered systematically. Furthermore, the communication between school and home needs improving, both stakeholder groups expressing their wishes for working more collaboratively in future.

Future curriculum wishes

A number of changes to include in a future curriculum were highlighted by participants. One of these is a new approach to teaching practice, to reflect some of the gradual changes in staff's thinking, but also to address the reluctance to change in structure of others. This will be reflected through a curriculum that is more flexible, more student focused, through which their authentic voices can be reflected. A need for better engagement with the local community was also highlighted, which includes opportunities for the students and increasing awareness and training in the community. A move away from focusing on achievement through accreditations was also discussed, which is driven by the education system. The pressure put on the school to encourage students towards accreditations and the focus on meeting the milestones of the national curriculum, can translate into learning that is not meaningful and suitable to all.

5.6.3. **Statutory guidance**

This section aimed to explore participants' awareness and understanding of the statutory guidance as outlined in the *2015 SEND Code of Practice: 0 to 25 years*. This varied amongst the participants. All staff were familiar with the overall guidance, but not all were aware of the specific guidance for Post-16 settings. The mothers were familiar with the EHC Plan process and gave examples of how their young people were involved and prepared for the meetings.

Difficult to translate into practice

Staff highlighted the challenges of translating the guidelines outlined in the statutory guidance, and how this is not always appropriate for students with autism. A lack of support and involvement from the local authority was highlighted, and the responsibility the school took in developing the Post-16 curriculum by consulting other similar provisions.

Student involvement in the EHC Plan process – an area for development

Participants discussed how efforts are made to involve students in the EHCP plan process, however these are not standardised and uniform across the school. Staff are motivated to improve the way they teach and prepare students to express their thoughts and preferences, having better structures in place for translating these into the EHC Plans. This is linked to the wider challenge which brought forth the need for the research, of capturing students' authentic views, and promoting an understanding that they have opportunities to express them. An increase in awareness of the goals outlined in the EHC Plan is also needed, along with a striving to make the process of setting them more meaningful and interesting for the students.

5.6.4. **Post-16 curriculum**

The aim of this section was to encourage participants to reflect on the development of the Post-16 curriculum and highlight any areas for improvement. Participants' views were positive, in that it was carefully developed, appropriate for students' needs, demonstrating 'steps in the right direction', but with some areas for improvement.

Step forward from the traditional curriculum

The Post-16 curriculum shows a move away from the 'traditional' curriculum through its focus on *independent living skills*, which are prioritised over academic achievements. It is a 'functional' curriculum, delivered in a setting with suitable facilities, that are appropriate in equipping students for life after school. Its implementation so far has been successful, with areas for improvement still outstanding, particularly around the delivery of 'statutory subjects' such as English and Maths. This was reflected in the two weeks of observations carried out in Phase 1, during which the focus on independent living skills was shown through a range of activities: cooking, cleaning, accessing the community, leisure skills, self-care, relaxation, and exercise.

Student-centred

The development of the Post-16 curriculum and its delivery are student-centred, with each individuals' needs and preferences being taken into consideration. Moreover, students are involved in their EHC Plan meetings and given support to prepare beforehand. This occurred during the observations, in a session during which students revised their 'learning targets', were asked to self-evaluate their progress, and make appropriate changes if they have been met. During the two weeks of observation, the student-centred approach was evident, much of the learning being focused on students' interests and preferences, the expression of which was encouraged consistently by staff, and discussed through open and informal conversations. Students were also given age-appropriate responsibilities, such as leading a workout session, choosing how to spend their leisure time and where to go in the local community, as well as having opportunities for informal and open conversations with the staff.

Collaboration with parents/carers

Another strength of the Post-16 curriculum is the collaboration with students' parents/carers. They are involved in decision-making regarding the curriculum and preparing students for leaving school. This close collaboration is also translated in the uniform approach to providing opportunities for students to practice independent living skills and to access the local community. An interesting conversation on the topic took place during the observations, regarding Katie's toy business. With encouragement from staff, Katie shared with the researcher how she is supported at home to explore this interest, and how she is learning related skills at school. Staff appeared supportive and encouraging of this interest, and shared how the collaboration between home and school has facilitated Katie to gain this experience.

Areas for development

The areas previously mentioned as the strengths of the Post-16 curriculum were also discussed as in need for further improvement by the participants interviewed. Although there has been a shift away from focusing on academic subjects, the teaching of statutory subjects should be further developed by making it more interesting, 'fun', and meaningful. With this shift away from the academic focus, a need arises for ways to capture student progress in

areas of personal and social development. During the observations, different approaches to teaching practice, which prompted the need for the study, were noted amongst staff. These were evident particularly in the approach to academic tasks, during which some staff provided more prompting and support, than they did when teaching independent living skills.

Despite efforts to make the curriculum meaningful, activities remain which are there 'to fill the time', and staff are motivated to address them moving forward. A best practice example of this was observed when Tara (TA) engaged in an open conversation with a student regarding cleaning the home. She asked appropriate questions to support the student to understand the importance of cleaning the home, and why this activity is meaningful for them, which the students shared that 'it makes me feel more independent'.

5.7. Phase 1 Conclusions

Phase 1 of the empirical study looking at how teaching practice can enhance the self-determination of students with autism in a specialist school in England used semi-structured interviews and semi-structured observations. The purposes of this phase were to explore stakeholders' perspectives of the topics of the research, with the aim of confirming the need for the study and informing the data collection tools used in subsequent phases.

As previously discussed, the interviews were transcribed verbatim, as well as the notes regarding the context they were conducted in, and field notes from the semi-structured observations. The interview transcripts were inputted in NVivo and coded into themes generated by the interview schedules. This deductive method of coding was chosen over an inductive one with themes generated from the data to meet the methodological purposes of Phase 1. Given the emergent nature of the empirical study, and the ongoing development of the data collection tools, an efficient way to look at the initial data was needed in order to progress with the study. The following section explains how the data collected in Phase 1 was used to inform Phase 2, as well as presenting relevant findings.

5.8. Phase 2 – Investigation – Aims and research questions

Phase 1 and Phase 2 had the overall purpose of confirming that the research initially identified in the school and through the reviewing of the literature, addressed the needs of the stakeholders. Whilst Phase 1 had an *exploratory* purpose and gathered initial qualitative data aimed to develop the tools used in Phase 2, the latter had the purpose to *investigate* the matters further, and together inform Phase 3 and the development of the ESDA principles. The empirical study engaged those directly affected by the findings as co-researchers, in an inquiry that was *participatory, collaborative*, and *emancipatory*. In order to have a successful and equal collaboration, it was valuable that the thoughts and opinions of as many individuals from all the stakeholder groups were included: the staff, the students, and their parents/carers. The most efficient and systematic way to gather this data was considered a survey, involving three different questionnaires structured similarly and addressing the same topics. Thus, Phase 2 of the empirical study addressed the aims and research questions below:

5.8.1. **Aims**

a. To determine if the initial need for development of self-determination is relevant to all stakeholder groups: teaching staff, students, and parents/carers
b. To explore stakeholders' awareness and opinions on the statutory guidance as outlined in the *2015 SEND Code of Practice: 0 to 25 years* to enhance students' self-determination
c. To gather stakeholders' opinions on the current curriculum and how it can be used to enhance students' self-determination

5.8.2. **Research questions**

1. Are stakeholders aware of the term *self-determination* and its implications?
2. Is self-determination an important educational outcome for stakeholders? Does it need further development within the school?
3. How do stakeholders see the statutory guidance as providing a framework for the development of self-determination?
4. What are stakeholders' views of the current curriculum and how it prepares students for life after school?

5.9. Phase 2 Overview

Table 6. Overview of Phase 2

Method	Aim	Tool	Participants	Duration to collect
Survey	Confirm initial need for the research Explore stakeholders' views on the statutory guidance Explore stakeholders' views of the current curriculum	Staff questionnaire	31	Two months
		Parent/carer questionnaire	23	Three months
		Student questionnaire	35	Two months

5.10. Phase 2 Survey

5.10.1. **Participants, recruitment, and informed consent**

As seen in Table 6, a total of 89 participants took part in the survey conducted in Phase 2, with similar distribution across the three stakeholder groups: 31 staff, 23 parent/carers, and 35 students (details regarding participant demographics can be found in Table 7, Table 8, and Table 9). Staff were recruited via email (see Appendix 4b) and in person during a whole-school staff meeting. Parents/carers were recruited through the school newsletter following recommendations from Greta (HT) and, as the uptake was low, further recruitment took place during school events (Appendix 4b). The students were approached via their teachers, following recommendations from Carla (Communication Lead; CL), who received an email containing guidance on how to support the students (Appendix 4b). Support was received from the Computing teachers who added the link to the Student Questionnaire to the desktops of all school computers for ease of access. Informed consent was collected through the first question of each questionnaire, as seen in Appendices 4c, 4d, and 4e. The three questionnaires were set up on a web-platform called Qualtrics, which was also used to analyse the data.

Table 7. Demographic data of staff working in an all-age autism specialist school in the West Midlands, United Kingdom

Staff (N = 31)		**N**	**%**
Gender	Male	6	19
	Female	20	65
	Prefer to self-describe	1	3
	Not answered	4	13
Age	18-30	8	26
	31-40	8	26
	41-50	6	19
	51-60	9	29
Ethnicity	White British	23	74
	Asian/Asian British	5	16
	White other	1	3
	African/Black/Black British/Caribbean	1	3
	Mixed/Multiple ethnic groups	1	3
Education	GCSE	2	6
	A levels	2	6
	University degree (undergraduate)	7	23
	University degree (postgraduate)	13	42
	Other	7	23
Key Stages (KS) taught (select all that apply)	Primary (EYFS - KS2)	12	27
	Secondary (KS3 – KS4)	22	50
	Post-16 (KS5)	8	18
	Whole school	2	5
Position	Teacher	14	45
	Teaching Assistant	11	35
	Senior Management	2	6
	Other (HLTA, pastoral, communication support)	4	13
Experience in specialist education	Less than 5 years	12	39
	5-10 years	9	29
	10-20 years	4	13
	20-30 years	6	19

Table 8. Demographic data of parents/carers of pupils attending an all-age autism specialist school in the West Midlands, United Kingdom

Parents/Carers (N = 23)		**N**	**%**
Gender	Male	4	17
	Female	19	83
Age	18-30	1	4
	31-40	5	22
	41-50	13	57
	51-60	4	17
Ethnicity	White British	12	52
	Asian/Asian British	2	9
	White other	3	13
	African/Black/Black British/Caribbean	4	17
	Mixed/Multiple ethnic groups	2	9
Education	GCSE	9	39
	A levels	2	9
	University degree (undergraduate)	7	30
	University degree (postgraduate)	3	13
	Other	2	9
Relationship to student	Parent	22	96
	Grandparent	1	4

Table 9. Demographic data of pupils attending an all-age autism specialist school in the West Midlands, United Kingdom

Pupils (N = 35)		**N**	**%**
Gender	Boy	25	71
	Girl	8	23
	Don’t want to say	2	6
Key stage	Primary (Y5)	6	17
	Secondary (Y6-Y10)	14	40
	Post-16 (Y11-Y14)	15	43
Class	Main	28	80
	Extended	7	20

5.10.2. **Rationale**

The *survey* gathers data at a particular point and can be useful during the initial phases of a research inquiry, as it can collect a range of information with 'relative ease', generating data for further exploration and investigation (Koshy, 2005). Saunders et al. (2019) explain that the survey can give the researcher more control over the research process as it can generate findings representative for a certain population. Although initial exploratory data was gathered in Phase 1, this phase served a dual purpose to both *investigate* the matters further, as well as more widely, by engaging a larger sample of participants. This was valuable for the overall purposes of the *emancipatory* and *collaborative* research inquiry, where the needs of those directly impacted by the findings were the drivers of the research. With only one researcher collecting this data and the aim to involve as many participants as possible from all stakeholder groups, a survey was deemed most suitable.

Surveys are flexible and adaptable to suit a range of contexts, and often involve questionnaires or structured interviews that can be administered through a range of means including face-to-face, telephone, internet, or a postal response. Furthermore, data can be collected by researchers or through self-administered tools, for participants to complete on their own (Robson and McCartan, 2016). The design of the data collection tools used in a questionnaire requires planning, testing and reviewing, all of which can involve significant time investment and resources. For the present empirical study this process began before and during Phase 1 which served a methodological purpose. The literature reviewed (Chapter Two and Chapter Three) informed the interview schedules used in Phase 1, which along with further piloting and discussions with professionals in the field, informed the questionnaires used in Phase 2. The choice to use self-administered questionnaires for Phase 2 of the study was informed by the resources available to the sole researcher and the aim to involve participants from the three stakeholder groups. This however required careful planning and reviewing of the structure of the questionnaire, the questions included, the terminology and language used, to ensure that a wide range of participants can be reached.

The purposes of Phase 2 can be thus described as *exploratory, descriptive,* and *methodological.* Following the initial exploration conducted in Phase 1, this following phase of data collection gathered the thoughts and opinions of a wider group of stakeholders. Similar

to Phase 1, the survey in Phase 2 explored participants' understanding of self-determination and its significance as an educational outcome for young people with autism. Participants' views on the school context were also investigated, focusing on the current curriculum and statutory guidance. The data collected served to provide an overview of staff, students and their parent/carers' views on the areas researched, with the aims of confirming the need for the study and informing the data collection tools used in Phase 3. The survey identified which areas of the existing curriculum are viewed as significant and in need of development by the stakeholder groups, which informed the activities filmed in Phase 3.

5.10.3. **Structure of data collection tools**

Three self-administered questionnaires were used in Phase 2 of the empirical study, one for each participant group. The questionnaires were developed by the researcher and informed by the literature reviewed and the data collected in Phase 1, as well as further piloting and consultations.

Table 10. Piloting and consultation of questionnaires drafted after Phase 1

Piloting/consultation	Description of participant(s)	Examples of changes made
Piloting and consultation 1: Staff questionnaire pilot Parent/carer questionnaire pilot Student questionnaire consultation	Beatrice (TA/P)– practitioner with over 13 years of experience working with children with SEN teaching assistant in a partner school in the same local authority parent of a child with multiple SEN	Adding answer choice 'prefer not to say' to demographic questions Changing 'important' to 'relevant' to avoid creating bias Adding answer choice 'not sure' to questions in Sections C for the parent/carer questionnaire Adding 'there are no right or answers' to student questionnaire
Piloting and consultation 2: Staff questionnaire pilot Parent/carer questionnaire consultation Student questionnaire consultation	Kelly (CT) – teacher in the school the study is carried in with over 5 years of experience	Including explanations to some of the instructional domains of self-determination Changing scales for Section C Changes to wording and structure of questions for the student questionnaire
Piloting and consultation 3: Parent/carer questionnaire pilot Student questionnaire pilot	Lynne (P) – parent of a young person with autism not attending the school Sienna (YP) – young person with autism not attending the school; aged 15 when the data was collected	No changes to either questionnaire as they thought the questions and structure were clear and easy to follow
Consultation 4: Student questionnaire consultation	Carla (CL) – Communication Lead; teaching with additional responsibilities to oversee the school's communications system	The answer choices for all questions have been changed from text to photos of 'smiley faces' to match those used in the school's own surveys

The questionnaires used in Phase 2 were shaped by literature reviewed (Chapter Two and Chapter Three) and the insights provided by the piloting of the questions in Phase 1. After the initial drafts of the questionnaires were designed, four different stages of piloting and consultation followed, which are summarised in Table 10. Detailed notes regarding the changes made through piloting and consultation can be found in Appendix 4a.

In each version of the questionnaire, the first question asks participants to consent in taking part in the study. This includes a brief introduction to the researcher's professional background, the study's aims, rationale, and purposes of Phase 2. Participants are also provided with information regarding their voluntary participation, consent, data storage and management, confidentiality, and right to withdraw. The same information is presented in all three versions of the questionnaire, with simplified language for the students in order to match their level of understanding with short, structured sentences, and headings to make the information easier to follow. No changes were made to this part of the questionnaire throughout the four stages of piloting and consultation, as all participants expressed this was clearly and concisely expressed.

5.10.4. **Staff questionnaire**

For teaching staff, the questionnaire is structured in four sections, with Section A focusing on collecting demographic data, Section B on knowledge regarding self-determination and its composing elements, Section C looking at knowledge and importance given to different elements of the statutory guidance, and Section D gathering data on the curriculum.

Section A:

Section A is composed of seven demographic questions. This section is aimed at generating useful data that might provide insight into the relationship between knowledge and importance given to self-determination and demographic factors such as: gender, age, ethnicity, professional experience, job position, and level of education. Similar instruments used in self-determination research also begin with a section gathering demographic data (Wehmeyer, Agran and Hughes, 2000; Carter et al., 2008; Carter et al. 2013). Several changes were made to this section after the piloting with Beatrice (TA/P), who made several

recommendations to making the questionnaires more inclusive: changing ‘mother/father’ to ‘parent/carer’, and adding the ‘prefer not to say option’ to all questions.

Section B:

Section B of the questionnaire is focused on gathering data regarding staff’s knowledge of self-determination, the importance given to its instructional domains, and views on how the current school curriculum is addressing them. The structure of this section draws upon elements of the questionnaire used by Wehmeyer, Agran and Hughes (2000) when collecting data regarding secondary special education teachers’ opinion on the value of self-determination.

Defining self-determination

The first question in this section is that used by Wehmeyer, Agran and Hughes (2000) which asks participants if they are familiar with the term *self-determination*. Following a binary Yes/No choice, a positive answer brings six definitions of the term and the option of ‘Not sure/Don’t know’, participants being asked to choose the one that is closest to their understanding. This was informed by the piloting of questions in Phase 1, as some participants were familiar with the term but were unsure of its meanings. Agran, Snow and Swaner (1999) also asked teachers about their understanding of *self-determination* and what it is concerned with. Of the six definitions included, three are adapted from the literature regarding self-determination in education, and three have been informed by participants’ responses in Phase 1. The six definitions included were:

a. Having the motivation to pursue your dreams and aspirations
b. Having the abilities and skills needed to set goals and plan the steps to achieve them
c. Being determined to do things for oneself
d. Making choices and decisions based on self-knowledge and in pursuit of one's needs and interests
e. Having as much control over one's life as possible
f. Being independent in everyday life

The first definition informed by the literature (b.) is adapted from that of Ward (1988) which defines the term in relation to goal-setting and devising the steps to achieve them, a second one represents a simplified version of Wehmeyer and Berkobien (1991) where the self-determined individual is the primary causal agent in one's life (e.), and the third one is adapted from the OSERS 1993 definition, which is most comprehensive and mainly used throughout this study (d.).

In the Phase 1 interviews, after the two warm-up questions, participants were asked if they were familiar with the term *self-determination*, and their understanding of its meanings. Their responses were used to shape the other three definitions included in the questionnaire. The same definitions were used in both the staff and the parent/carer questionnaire and have been informed by the interviews conducted with both groups.

The first definition relates to the meaning of the term in relation to *motivation*, which is closer to the understanding within cognitive psychology, where Self-Determination Theory (Deci and Ryan, 1985) was founded (a.). References to motivation and being motivated to do things for oneself have been made by the two teaching assistants interviewed and one parent (Barbara). One such examples was given by Tara (TA): 'what motivates yourself, what trigger can motivate you to carry on'. A definition regarding self-determination as manifested through *independence in daily life* has also been included (f.), due to the common references made to the term and its derivatives by four members of staff: Tara (TA), Robert (AHT), Anne (AHT), Greta (HT); and two mothers: Barbara (P) and Elizabeth (P). Elizabeth (P) summarised this as: 'independent, I would take it to mean your self-independence, independence skills'. Lastly, a definition regarding the idea of *being determined to do things for oneself* has also been included (c.) as it was highlighted in the explanations of more than half of parents: Barbara (P), Jane (P), Elizabeth (P): 'the child is really determined to do whatever he wants to do' (Jane, P).

Alternatively, if a negative answer was selected in response to the question regarding familiarity with the term self-determination, the full 1993 OSERS definition was provided, as the explanation is broad, clear, comprehensive, and the main one used in this study.

Promoting self-determination for young people with autism

The following question in Section B asks participants about the relevance they give to promoting self-determination through the school curriculum. This is similar to that asked by Agran, Snow and Swaner (1999, p. 296) when gathering teacher's perceptions of self-determination: 'How important is self-determination as a curricular area?'. The choice to use 'relevant' instead of 'important' came as a result of the piloting with Beatrice (TA/P) who suggested that the use of the latter term can lead to bias.

The question regarding the relevance to promoting students' self-determination is followed by an opinion matrix table asking staff to rate the relevance of teaching the instructional domains related to self-determination, developed from the component elements discussed in Section 2.5.3, question also asked by Wehmeyer, Agran and Hughes (2000). However, unlike this latter question which asked teachers to rate the relevance of the domains to their students, the present questionnaire asks for staff's opinion. Students have the opportunity to share their opinions in a separate questionnaire. The domains included in the questionnaire were similar to those used by Wehmeyer, Agran and Hughes (2000), although changes were made to the wording of the answer choices in accordance with the data collected in Phase 1:

Table 11. The instructional domains of self-determination included in the staff and parent/carer questionnaires

Instructional domains in Wehmeyer, Agran and Hughes' (2000) study	Instructional domains in the present study	Reasons for change
Choice making	Making choices	Language used by participants in Phase 1
Decision making	Making decisions	Language used by participants in Phase 1
Problem solving	Problem solving (being able to find solutions to everyday problems)	Explanation added following the piloting and consultations with Beatrice (TA/P) and Kelly (CT)
Goal setting and attainment	Setting a target/goal and planning the steps to reach it	Language used by participants in Phase 1
Self-advocacy	Self-advocacy (speaking up for your rights, interests, thoughts, opinions, etc.)	Explanation added following the piloting and consultations with Beatrice (TA/P) and Kelly (CT)
Self-management and self-regulation skills	Self-awareness and self-knowledge (understanding your strengths, weaknesses, feelings, preferences, etc.)	Explanation added following the piloting and consultations with Beatrice (TA/P) and Kelly (CT)
Self-awareness and self-knowledge	Self-regulation (being able to control your emotions and behaviour)	Explanation added following the piloting and consultations with Beatrice (TA/P) and Kelly (CT)

Another matrix table follows asking staff to rate how well the current school curriculum is addressing the instructional domains. This is to identify the areas of focus for Phase 3, and to compare the opinions of staff to those of parents/carers.

Section C:

Section C of the questionnaire collects data regarding the *2015 SEND Code of Practice: 0 to 25 years*, and aims to determine how self-determination, as described in the statutory guidance, is addressed in the current school curriculum. As previously discussed (Section 2.6.2), the current statutory guidance defines *independent living*, one of the four target areas in preparation for adulthood, as 'having choice, control, and freedom over their lives and the support they have' (Department for Education, p. 122).

It can thus be drawn that settings for children and young people with SEND should prepare them to express their choices, and have control and freedom over their lives and the support in place. It was thus valuable to explore the views of teaching staff, as well as those of parents/carers, regarding the opportunities the school has in place to develop these abilities, and to inform the development of the approach in Phase 3.

During the interviews conducted in Phase 1, most staff responded that they were familiar with the statutory guidance, and all but one question addressing its different references to self-determination were clear, and staff did not ask for any further clarifications. The first question in this section regarding the new definition of *independent living* provided in the statutory guidance caused some confusion during the interviews in Phase 1, as several members of staff focused only on the idea of 'living independently'. Throughout Phase 1, different variations of the question and further explanations regarding uses of the term in the previous statutory guidance were trialled to clear confusion, but none were able to shift the focus from the literal understanding of *independent living* as 'living by oneself'. Therefore, the term *independent living* has been removed from the questionnaires, and for the present question, replaced with *preparation for adulthood*. This decision was made based on the statutory guidance which includes *independent living* as one of the areas schools should address in *preparing students for adulthood*.

The following two questions address two further elements discussed in the statutory guidance regarding students' involvement in discussions regarding their aspirations, needs, education and development. They refer to students' involvement in setting their EHC Plan targets and during their EHC Plan annual review meetings, which have been piloted in Phase 1, and

required no further clarifications for staff. Students' involvement in their EHC Plan meetings is addressed in the statutory guidance which mentions they should be actively involved from Year 9 onwards, and relates to the domain of goal-setting and attainment in self-determination literature.

Section D:

The last section of the questionnaire includes two matrix tables asking participants to rate the importance of current areas of the curriculum, as well as how well the current school curriculum is addressing them. These have been drawn from the observations conducted in Phase 1 and included the following: financial skills, employability skills, social skills, independent living skills (cooking, cleaning, self-care), leisure skills, community involvement and self-advocacy.

The purpose of these questions is to determine what areas of the current school curriculum are considered most valuable by the three participant groups, to be used in Phase 3 when developing the approach. The questions have not been piloted in the interviews conducted in Phase 1, but the observations conducted during the same phase support the areas included. Although self-advocacy or social skills are not currently independent subjects in the school curriculum, they are integrated as part of the whole-school curriculum and given significant importance as revealed by staff's answers during the interviews.

The questionnaire ends with three open-ended questions, the first two asking for participants' opinions on how the current curriculum and current teaching practice can be improved, and the last one offering the opportunity to add anything that has not been previously addressed. The decision to include these final open-ended questions was to provide participants with the opportunity to share any thoughts or ideas that might have been prompted by previous closed questions. As the questionnaires were anonymous, they provided an opportunity for participants to share their honest views and make suggestions for future development.

5.10.5. **Parent/carer questionnaire**

The parent/carer questionnaire follows the same structure as that for teaching staff, as did the interview schedules in Phase 1. Some minor differences appear which are detailed in the sections below.

Section A:

Section A which collects demographic data has been reduced to five questions, four of which are the same as in the teaching staff questionnaire and will gather data related to parents/carers' gender, age, level of education, and ethnicity. A question regarding their relationship with the student enrolled at the school was added.

Section B:

This section begins in the same way as that in the staff questionnaire, by asking participants if they are familiar with the term *self-determination*. As previously discussed, the answer choices provided following a positive answer are the same as in the staff questionnaire, as they have been put together from the insights drawn from the two sets of interviews in Phase 1.

The following questions asking parents/carers to rate the instructional domains of self-determination are similar to the ones used in the staff questionnaire with the first question being duplicated to ask separately about promoting the domains at school and at home. Furthermore, 'important' is used rather than 'relevant' to avoid confusion particularly for the large number of parents/carers with English as an additional language.

When asked to discuss the importance of having their child learn about choice-making during the interviews conducted in Phase 1, all parents agreed on it having a high importance, and did not ask any clarifications regarding the term. The answers provided demonstrated their full understanding of the term and its implications, thus it was maintained in the final version of the questionnaire. Similarly, all parents were familiar with the idea of decision-making, and provided answers that demonstrated their understanding of the term. Although the term problem-solving did not require any clarifications from any of the parents interviewed, one of

them (Barbara) asked 'what kind of problems?' the researcher referred to. Thus, the additional information of 'being able to find solutions to everyday problems' has been included in brackets after the term. All parents interviewed also understood the meaning of goal setting and achievement, however three of them used the term *target* in the responses they provided. This is likely to be due to the terminology used in preparation and during EHC Plan meetings, which all the mothers interviewed were familiar with. Furthermore, for one parent who has difficulty communicating in English, the term was used in addition to that of goal setting, and was the one she chose to use in her reply. As a result, the term has been added to the instructional domain of goal setting and achievement.

The term *self-advocacy* required most clarifications, three parents expressing they were not sure of its meanings (Barbara, Jane, Ruth), and one providing a definition but not being sure if on the right track (Hannah). Therefore, an explanation of the term has been added, as follows: speaking up for your rights, interests, thoughts, opinions, etc. This is based on the explanations piloted by the researcher when providing clarifications during the interviews conducted in Phase 1, and which most successfully prompted mothers to express their insight. Similarly, *self-awareness* and *self-knowledge* brought expressions of confusion, thus the researcher often explained the terms immediately after asking the initial question included in the interview schedule. The examples used informed those included in the final version of the questionnaires. Lastly, the use of the term *self-regulation* required further explanations and examples in the interviews of more than half of the parents, which have also been added to the questionnaire. The explanation was informed by the examples provided by staff interviewed in Phase 1 and worded as: being able to control your emotions and behaviour.

Section C:

The three questions regarding the *2015 SEND Code of Practice: 0 to 25 years* used in the staff questionnaire have been maintained, with minor modifications to the language used. Thus, the first question introduces the statutory guidance and explains its purpose of providing guidance which schools must follow by law. This was added following the interviews in Phase 1. The focus has been shifted from asking how this translates into the curriculum to parents/carers' individual experiences of the opportunities given to the young person in their care. The two questions regarding young people's involvement in setting their EHC Plan

targets and during the meetings have been maintained, but the wording has been changed again to ask for parents/carers to reflect on their experience with the young person in their care. All parents interviewed in Phase 1 were familiar with the acronym ECHP, thus this was used in the questionnaire.

Section D:

The two matrix tables from the same section of the staff questionnaire have been maintained using the same terminology for the areas of the curriculum. Although these terms have not been piloted during Phase 1, they are part of the school curriculum, and frequently related to EHC Plan targets, thus should not represent unfamiliar concepts for the parents/carers. However, the question has been changed to gain insight in parents/carers' own opinion of their importance in relation to the young person in their care, unlike relating it to the school curriculum as in the staff questionnaire. The same three open-ended questions as those in the staff questionnaire have been added to that for parents/carers, in order to provide them with the opportunity to provide insights that might have not been addressed in previous questions. This decision has been made based on the valuable insights gained at the end of each interview conducted in Phase 1 where all participants have been given the opportunity to add anything they considered relevant to the topics discussed.

5.10.6. **Student questionnaire**

The student questionnaire follows a similar structure to the staff and parent/carer questionnaires previously described, with shorter questions, clear and simple language.

The student cohort attending the school when the study was conducted was varied and students had a range of SEND (previously described in Section 4.7). The researcher aimed to gather the opinions of as many students as possible, to confirm the need for the study aligns with their needs and expectations from the school and teaching practice. The researcher used her prior knowledge of the student cohort to design the initial draft of the questionnaire. Following the consultations with Beatrice (TA/P) and Kelly (CT), changes were made to the language used to make the questions and answers as clear as possible and avoid creating bias (for further details see notes in Appendix 4a). This next draft of the questionnaire was reviewed by Carla (CL) who suggested changing the answer choices to pictures of smiley faces,

colour-coded as a traffic light (Table 12). The suggestion was made based on the school's experience of conducting wellbeing surveys which used the same pictographic choice of answers. The students responded well to the smiley faces, particularly when colour-coded as a traffic light, which is a system used in the school to support self-regulation.

Table 12. Pictographic answer choices used in the student questionnaire

= I agree.	= Sometimes I agree and sometimes I do not.	= I do not agree.	= I am not sure.

Section A:

The demographic section of the questionnaire was reduced to only three questions collecting information related to students' gender, the school year and curriculum pathway they were enrolled in at the time the data was conducted. During the first consultation with Beatrice (TA/P), a suggestion was made to add the option of 'don't want to say' to the question asking for students' gender, which was subsequently implemented. The initial draft of the questionnaire asked students to select which setting they attended (primary, secondary and Post-16), but following a suggestion from the second consultation with Kelly (CT), this was changed to a text-entry question where the students were asked to input the school year they were in at the time the data was collected.

Section B:

The next section gathers data regarding students' opinions on the instructional domains of self-determination, but without using matrix tables to avoid confusion. Instead, separate questions are asked about each of the instructional domains with three types of questions being used: perception of own ability to perform the skill, opportunities to learn provided at school, and the support from teaching staff to learn or practice the skill. Students were thus asked about the following: making choices, solving problems, setting targets, talking about

thoughts and feelings, awareness of strengths and difficulties, and self-regulation. Following a suggestion from Carla (CL), the question regarding students' ability to make choices was divided over five different areas, in order to make it clear and specific to students: free time, work at school, food and drink, friendships, and clothes.

Section C:

The last section of the questionnaire asks students to rate their preferences of current areas of the school curriculum, with one question addressing each area, in order to determine which are most valued by students. The same areas of the curriculum as those used in the teaching staff and student questionnaire were used, with minor changes being brought to the language used.

5.11. Phase 2 – Summary of findings

As explained in the chapter overview (5.1), only summary findings of Phase 2 are presented here (for the three stakeholder groups: staff, students, and their parents/carers). For a fuller report, see Appendix 7.

5.11.1. **Section B – Self-determination**

The majority of both staff (almost 80%) and parents/carers (almost 70%) responded that they were familiar with the term *self-determination*. Most staff (30%) understood its meaning as defined in the adapted OSERS definition (1993) (i.e. making choices and decisions based on self-knowledge and in pursuit of one's needs and interests), whereas most (over 30%) parents/carers chose the definition related to goal setting. Regarding the relevance of promoting self-determination at school for students with autism, almost all staff and parents/carers agreed this was 'extremely' or 'very important'.

All seven of the instructional domains of self-determination (making choices, making decisions, problem solving, setting a target/goal and planning the steps to reach it, self-advocacy, self-awareness and self-knowledge, self-regulation) were rated as either 'extremely' or 'very' relevant to teach to students with autism by both staff and parents/carers, both at school and at home for the latter group. However, when asked how

well they are addressed in the current curriculum, most staff and parents/carers responded with 'moderately well', highlighting areas for improvement.

The majority of students agreed that they could make choices in all the areas of life included. However, larger majorities were recorded for making choices about friends (82%), free time (71%), and food and drink (63%), than for clothes (51%) and work at school (43%). Students also agreed that they learn about making choices at school (80%), and that teachers support them with this (70%).

Self-advocacy was seen as 'extremely' relevant by most staff and parents/carers, and 'moderately' or 'very' well addressed in the current curriculum. The majority of students (56%) agreed that they can talk to their teachers about their thoughts and feelings, however less than 30% agreed that they are 'good' at doing so. Regarding their own strengths (77%) and weaknesses (60%) however, most students agreed they know what these are, although the majority of staff saw this as 'very' or 'moderately' well addressed in the curriculum.

5.11.2. **Section C - The application of the statutory guidance as set in the *2015 SEND Code of Practice: 0 to 25 years:***

Staff and parents/carers were asked for their views on how well/frequently the school is providing students with opportunities for self-determination, to discuss their needs for their education and future, and their involvement in the EHC Plan process, as outlined in the *2015 SEND Code of Practice: 0 to 25 years.*

Regarding opportunities for choice, control and freedom, most staff (46%) responded that this is 'moderately' well addressed, and 44% parents/carers said that these are provided 'most of the time at school', with almost 40% being unsure. Similar answers were given for opportunities for discussions about own aspirations, needs, and support, as well as about own education and development.

Staff and parents/carers views regarding students' involvement in setting their EHC Plan targets differed. Staff's responses concentrated around the second half of the scale ranging from 'moderately' to 'not at all', with most answers characterising the involvement as 'a little'

(46%). Parents/carers responses were more mixed, with most responding 'not at all' (30%), followed by 'a great deal' (23%), and 13% being 'not sure'. Similar responses were recorded for students' involvement in the EHC Plan meetings, staff responding that this ranges between 'moderately' to 'not at all', the majority of parents/carers' answers being divided between 'a great deal' (31%) and 'not at all' (31%).

5.11.3. **Section D - The relevance and teaching of different areas of the curriculum:**

The final section of the questionnaires asked participants to rate how relevant/important, and how well addressed the following areas of the curriculum were: financial skills, employability skills, social skills, independent living skills, leisure skills, community involvement/access, and self-advocacy.

The majority of both staff and parents/carers rated all the areas as either 'extremely' or 'very' relevant to teach at an appropriate level to students with autism. *Independent living skills* and *social skills* were seen as 'extremely' relevant by over 70% of both staff and parents/carers, followed by *leisure skills* and *community involvement/access*. Responses regarding how well the areas were addressed in the current curriculum were mixed, which could be linked to participants' experiences of the different key stages and the lack of consistency in approach to teaching practice that initiated the empirical study. *Social skills* were reported as 'very' well addressed by almost half of both staff and parents/carers, whereas *independent living skills* were seen as 'extremely' to 'moderately' well addressed by parents/carers, but only 'moderately' or 'slightly' well addressed by half of the staff. For staff, *community involvement/access* also needed improvement, with the majority (36%) reporting this as only 'slightly' well addressed.

The majority of students agreed with statements that they enjoy learning about all areas of the curriculum included, with the highest percentages for 'making friends' (80%), 'cooking' (80%), 'what I can do in my free time' (80%), and 'cleaning' (71%).

5.12. Phase 2 Conclusions

Phase 2 of the empirical study looked at how teaching practice can enhance the self-determination of students with autism in a specialist school in England, UK had the overall purpose to further *investigate* the areas researched aiming to confirm that the need for the study reflects the needs of those directly impacted by the research. In order to reach as many participants as possible from all stakeholder groups (teaching staff, parents/carers, students) the researcher chose to conduct a whole-school survey, using three different data collection tools, one questionnaire for each group. Aside from its aim to investigate, Phase 2 also served a methodological purpose. The data collected through the survey served to inform the development of Phase 3 methods that are presented in the following sections (and includes extensive reference to Phase 2 findings).

5.13. Phase 3 – Collaboration – Aims and research questions

Phase 3 involved the development of the ESDA principles, through the *collaboration* between the researcher and a small group of staff and students in the Post-16 site of the school. The process was guided by the framework and principles of VIG, and informed by the data collected in Phase 1 and Phase 2.

5.13.1. **Aims**

a. To collaboratively develop an approach embedded in teaching practice to enhance students' self-determination
b. To develop a collaborative partnership in which teaching staff and students are provided equal opportunities for contribution, guided by the researcher
c. To explore the potential of video as a tool for reflection in the development of an approach targeting teaching practice

5.13.2. **Research questions**

1. What aspects of existing teaching practice promote students' self-determination? How can they be used to further enhance it?
2. Is video a useful methodological tool in highlighting the positive aspects of teaching practice that enhance students' self-determination?

3. What are the views of teaching staff and students regarding the approach developed and the overall process?

5.14. Phase 3 Overview

The collaborative development of the ESDA principles took place over eight weeks, the most significant events and their outcomes being outlined in Table 13. The data collected in Phase 1 and Phase 2 confirmed initial ideas regarding the need for the development of an approach targeting self-determination. All three participant groups recognised the importance of self-determination for young people with autism, and the need to develop existing teaching practice through increased focus on reflective skills and self-determination.

All participant groups highlighted the area of *independent living skills* as most important in the current school curriculum, and also in need of most attention and development. Therefore, three cycles of VIG took place, involving three group meetings for each participant group, where clips focusing on *independent living skills* were shared. The observations and reflections made by all participants during all six meetings were transcribed, and grouped into themes grounded in the data. The themes were subsequently grouped to form the first three drafts of the ESDA principles, which were reviewed in the meetings. The following sections provide further details on how the data from Phase 1 and Phase 2 was used to inform the development of Phase 3, followed by a description of each step of the latter and the data that was collected as a result.

Table 13. Overview of Phase 3

When	Events that took place	Outcomes
Week 1	Initial meeting with Anne (AHT): - researcher shared methodology and plan for data collection	- Anne (AHT) expressed her support for the study and willingness to participate - Anne (AHT) shared concerns about time commitment for staff
	Initial meeting with staff regarding Phase 3: - introduction to the study and initial findings - outline of Phase 3 and commitment	- staff seemed interested in taking part - Anne (AHT) suggested that the researcher sends an email to staff to which they can reply if interested

Week 2	Initial meeting with students regarding Phase 3: - introduction to the study, its importance, and initial findings - outline of Phase 3 and contribution	- initial interest was expressed from seven students - Research Information Sheet and Consent Form were sent home in an envelope for each interested student
Week 3	Parents' evening: - the researcher attended and was available for questions and concerns	- discussion with Micah's father, who consented for him to be audio recorded; Micah took part in the meetings and was placed outside of the frame
	AIR Self-determination Scale	- AIR Self-determination Scale – Student Form completed by Abi, James, and Micah
	First filming for: - Julie (TA) - Anne (AHT) - Martha (TA)	- videos less than 10 minutes were filmed for each staff member interacting with one or more of the students involved
Week 4	First filming for: - Claire (CT) - TA who withdrew from the study	videos less than 10 minutes were filmed for each staff member interacting with one or more of the students involved
	AIR Self-determination Scale	- AIR Self-determination Scale – Student Form completed by Katie and Alex - AIR Self-determination Scale – Educator form completed by Chris (CT) for all students involved
	First shared review with students	- two clips were watched from the filming of Julie (TA), Anne (AHT), and Martha (TA)
	First shared review with staff	- two clips were watched from the filming of Julie (TA) and Anne (AHT)
Week 5	Second shared review with students	- two clips were watched from the filming of Claire (CT)
	Second shared review with staff	- two clips were watched from the filming of Martha (TA) and Claire (CT)
Week 6	Second filming for: - Julie (TA) - Anne (AHT) - Martha (TA) - Claire (CT)	- videos less than 10 minutes were filmed for each staff member interacting with one or more of the students involved
Week 7	Third shared review with students	- one clip was watched from the filming of Julie (TA), Anne (AHT), Martha (TA), and Claire (CT)
Week 8	Third shared review with staff	- one clip was watched from the filming of Julie (TA), Anne (AHT), Martha (TA), and Claire (CT)

5.15. Participants

All participants were recruited from the Post-16 setting of the all-age autism specialist school. This decision was made by the researcher based on initial informal conversations *(Identification)*, during which the need to promote students' self-determination in preparing them for life after school was highlighted. Prior knowledge of the students and their familiarity with the researcher also contributed to the decision, as well as the support expressed by Anne (AHT) in carrying out the study and using reflection in teaching practice.

Participants were recruited over a period of three weeks, as seen in Table 13, through presentations delivered by the researcher to gather initial interest (Appendix 5b). The researcher shared preliminary findings from Phase 1 and Phase 2 in the staff presentation and shared the Phase 3 Research Information Sheet (Appendix 5a) and the Video Consent Form (Appendix 5c). Students who expressed an interest received a Phase 3 Research Information Sheet (Appendix 5a) and a Video Recording Parental Consent Form (Appendix 5d), along with the Student Information Sheet and Consent Form (Appendix 5e).

Table 14. Participants in Phase 3 of the empirical study

Staff		**Students**
Name	**Position**	
Anne	Assistant Head Teacher (AHT)	Abi
Claire	Class Teacher (CT)	Alex
Julie	Teaching Assistant (TA)	James
Martha	Teaching Assistant (TA)	Katie
Chris	Class Teacher (CT)	Micah

Before the beginning of the first VIG cycle, students' self-determination was measured using the American Institutes for Research (AIR) Self-Determination Scale which involves a Student, a Parent, and an Educator form (Appendix 5f). It was developed to provide a profile of student's level of self-determination, to identify areas of strength and improvement, and to help in the development of strategies. The scale has three capacity sections: ability, knowledge and perceptions, and two opportunity sections for at home and at school.

The AIR scales measure capacity and opportunity to act in a self-determined manner. The AIR Self-Determination Scale – Student Form has 24 questions and provides Capacity and Opportunity sub-scale scores. The Capacity sub-scale refers to 'students' knowledge, abilities, and perceptions that enable them to be self-determined and feel good about it' (Wolman et al., 1994, p. 5). The Opportunity sub-scale gathers data regarding their perceptions of opportunities to perform self-determined behaviours at school and at home (Wehmeyer et al., 2013). The tool was developed with students with and without disabilities, and demonstrated to have adequate reliability and validity in the measurement of capacity and opportunity for self-determined behaviour (Wehmeyer et al., 2013). All five students involved in Phase 3 of the empirical study completed the AIR Self-Determination Scale – Student Form. A teacher not involved in Phase 3, Chris (CT), who taught physical education to the five students, completed the AIR Self-Determination Scale – Educator Form. The Air Self-Determination Scale Parent Form was shared with the parents/carers of the five students, but unfortunately none were completed and returned. The scores are presented in Table 15 and Table 16.

Table 15. Students' scores on the AIR Self-Determination Scale – Student Form

Name	**Things I do**	**How I feel**	**What happens at school**	**What happens at home**
Abi	17	20	20	18
	Capacity score: 37		Opportunity score: 38	
	Level of self-determination: 75 (62.5%)			
Alex	29	30	30	28
	Capacity score: 59		Opportunity score: 58	
	Level of self-determination: 117 (97.5%)			
James	22	24	28	26
	Capacity score: 46		Opportunity score: 54	
	Level of self-determination: 100 (83.3%)			
Katie	12	24	18	12
	Capacity score: 36		Opportunity score: 30	
	Level of self-determination: 66 (55%)			
Micah	24	22	22	23
	Capacity score: 46		Opportunity score: 45	
	Level of self-determination: 91 (75.83%)			

Table 16. Students' scores on the AIR Self-Determination Scale – Educator Form

Name	Knowledge	Ability	Perception	Opportunity at school	Opportunity
Abi	18	15	15	21	19
	Capacity score: 48			Opportunity score: 40	
	Level of self-determination: 88 (58.66%)				
Alex	20	15	17	23	17
	Capacity score: 52			Opportunity score: 40	
	Level of self-determination: 92 (61.33%)				
James	13	12	10	17	16
	Capacity score: 35			Opportunity score: 33	
	Level of self-determination: 68 (45.3%)				
Katie	13	14	16	20	19
	Capacity score: 43			Opportunity score: 39	
	Level of self-determination: 82 (54.66%)				
Micah	15	12	11	21	14
	Capacity score: 38			Opportunity score: 35	
	Level of self-determination: 73 (48.66%)				

Abi

Abi was a 17-year old female student in the Post-16 setting of the school at the time the study was conducted. Abi has autism and mild learning disabilities. Abi enjoys socialising with her friends, cooking, and working on her employability skills. She self-reported a capacity score of 37 and an opportunity score of 38 (20 at school and 18 at home) on the AIR Self-Determination Scale - Student Form. Abi self-reported a score of 75, meaning her level self-determination was 62.5%. Chris (CT) scored Abi at a very similar level of self-determination: 58.66%, with similar opportunities at both school and at home.

Alex

Alex was an 18-year old male student in the Post-16 setting of the school at the time the study was conducted. Alex has autism and mild learning disabilities. He enjoys football and is interested in technology. Alex self-reported high scores on the AIR Self-Determination Scale - Student Form, with 59 for capacity and 58 for opportunity, his level of self-determination

being 97.5%. Chris (CT), on the other hand, gave Alex a lower total level of self-determination of 61.33%.

James

James was an 18-year old male student in the Post-16 setting of the school at the time the study was conducted. James has autism and moderate learning disabilities. He enjoys spending time with his peers and is very interested in baking and animal care. James self-reported a capacity score of 46 and an opportunity score of 54, his total self-determination level being 83.3%. Similarly to Alex, Chris (CT) gave James a lower score of 45.3% for self-determination level.

Katie

Katie was a 19-year old female student in the Post-16 setting of the school at the time the study was conducted. Katie has autism and moderate learning disabilities. She enjoys listening to music, dancing, and runs a small business selling toys. Katie self-reported a capacity score of 36, and an opportunity score of 30, with a lower score for opportunities at home (12) than at school (18). Katie's self-reported level of self-determination was 55%, which was almost the same as that reported by Chris (CT) of 54.66%.

Micah

Micah was a 19-year old male student in the Post-16 setting of the school at the time the study was conducted. Micah has autism and mild learning disabilities. He is a talented artist who enjoys drawing and film-making. On the AIR Self-Determination Scale - Student Form, Micah had a score of 46 for Capacity and 45 for Opportunity (out of 60). Micah rated opportunities at school (22) and at home (23) similarly. Micah had a total score of 91, meaning he was around the 75% mark of the self-determination scale. Chris (CT) scored opportunities for Micah at school similarly (21), but lower at school (14). The Capacity score was significantly lower (38 out of 90), with a total self-determination level of 48.66%.

5.16. Rationale

5.16.1. **Confirming the need to address self-determination**

The interviews conducted in Phase 1 support the researcher's initial ideas regarding the need for further development of existing teaching practice to promote students' self-determination. All staff interviewed recognise the importance of promoting self-determination, Robert (AHT) stating that it is 'key to what we're really about', and Tara (TA) explaining that 'it is the most important thing', because, according to Anne (AHT) 'it should have a huge impact on their life'. Furthermore, Sarah (DHT) and Robert (AHT) recognise the importance of students having an input 'in determining what their life will look like in the school and beyond school' (Robert, AHT), by allowing them 'to make choices about how they want to live their life' (Sarah, DHT). Similarly, the five mothers interviewed in Phase 1, agreed that self-determination is 'really important' for young people with autism. For Barbara (P), having a son who is self-determined is important because she 'will not be around with him all the time', and she wants 'him to be able to do things for himself when he's alone, just basic everyday things'. Elizabeth (P) and Hannah (P) add that self-determination is important for 'confidence and it's for their self-esteem' (Elizabeth, P), and 'to be happy, confident, and function in the world' (Hannah, P). The data collected through questionnaires in Phase 2 also confirmed the value of self-determination for the participant groups. Over 85% of staff and 90% of parents/carers responded that promoting self-determination as part of the school curriculum is either extremely or very important.

In Phase 1, staff and parents also reinforced the importance of teaching young people with autism *independent living skills* in order to equip them for adult life. For Barbara (P), mother of a student in Post-16, learning independent living skills 'is the main thing', because she wants him 'to be independent, so he doesn't need anybody'. For Hannah (P), a mother of two students enrolled in the school, 'life skills are really important', and for Elizabeth (P), 'life skills are as important as qualifications'. Martha (TA) explains that students' voices are taken into consideration when shaping their curriculum, which is 'being adapted towards daily living skills and community access, it's not just education'. Similarly, Anne (AHT) recognises the importance given to community involvement when designing the Post-16 curriculum:

> *'They also need to know that they can action things in the community, that's why I chose the community action, so that they can do a project, perhaps a regeneration project, I haven't done that, something that can have an impact on the community so that they can see they can make a difference, so I choose the units.' ANNE (AHT)*

In Phase 2, 100% of staff and over 90% of parents/carers reported *independent living skills* as an extremely or very important area to teach at an appropriate level. However, less than half of staff and around 60% of parents/carers responded that this was extremely or very well addressed in the current curriculum. Students were asked for their opinion regarding different aspects of *independent living skills*, and in average 75% agreed with the statements regarding their enjoyment of learning about them.

Regarding the opportunities for self-determination provided, as outlined in the *2015 SEND Code of Practice: 0 to 25 years*, most staff believed these were addressed moderately well (46%), followed by very well (36%). Most parents/carers (44%) believed these opportunities were provided most of the time, however a large percentage expressed they were not sure (39%). Robert (AHT) explained how providing students with opportunities for self-determination is the direction the school is moving in:

> *'I think a lot of the things that we said are moving us towards that, it's part of the underlying philosophy of what we're trying do to. It was interesting there about making choices about the support they have, but as we keep saying some of them will always need some form of support and then it comes back to how aware are they of what support they need and what voice they have, and that's a real sticking point, but I think it's really important that we try to promote all of that. There's a new emphasis at looking at our curriculum in particular and looking at how we're gonna meet that sort of statement.' ROBERT (AHT)*

5.16.2. **Confirming the need for reflection and shared practice**

The interviews conducted with staff in Phase 1 and the questionnaires collected in Phase 2 highlighted a need for staff's development of reflective skills and creating a culture of shared practice, with the aim of reaching a common ethos that is clearly defined. Anne (AHT), who has responsibilities for developing the Post-16 curriculum is a pioneer of the importance of reflection in practice. During her semi-structured interview, she explained her passion for:

> *'actually moving people towards a model that is reflective and that it's not about right and wrong and it's about learning new approaches, I think that's*

> *where I'd like to get us as a team, that's what I've been trying to do in terms of staff meetings.' ANNE (AHT)*

She follows this with an explanation of how this can be achieved through further staff training through 'role play where I'll use scenarios that have been used on students and I want staff to reflect how that feels as an adult'. The need for further staff training was also highlighted by Olivia (CT), a teacher in Post-16, especially in the area of making choices, by ensuring that:

> *'they're sort of allowing free choice instead of expecting the student, I think there's a lot of expectation that this is something the student wants, and giving it to them without actually giving the students time to make a choice about it.' OLIVIA (CT)*

This is also emphasised by Robert (AHT), who recognises the importance of staff training in the area of a common mindset for staff that is more empowering and less controlling for the pupils:

> *'also a mindset with the teaching staff which we haven't quite conquered, but we're getting better, letting go a little bit, it is a staff training issue, we still feel as though we need to control every second of every minute because we think it's a positive and purposeful way, actually sometimes it's good to step back'. ROBERT (AHT)*

The responses given by staff to the open question of the questionnaire in Phase 2 regarding the improvement of current teaching practice support those provided in the interviews. One participant highlights explicitly the need 'to develop training and discussion time to ensure a shared understanding - improve consistency and continuity'. Furthermore, five responses mentioned the importance of shared practice, by having 'more opportunities to team teach' and to 'see how other teachers approach lessons/topics'.

5.16.3. **Reflective teaching**

The data collected in Phases 1 and 2 highlights a need for reflective, shared practice, and further staff development, which have shaped the development of the approach in Phase 3.

John Dewey, an early 20th-century educational philosopher, was one of the first theorists to view teachers as reflective practitioners, his work being at the foundation of the increasing importance given to reflective practice in educators' development. Dewey explains that 'reflection does not consist of a series of steps or procedures', but rather a holistic way of

responding to problems that involves intuition, emotion and passion (Zeichner and Liston, 2014). According to Hodge and Chantler (2010), a reflective teacher is willing to engage in constant self-appraisal and development, and to develop their flexibility, rigorous analysis and social awareness. As previously described, these ideas are in accordance with those highlighted by the data generated in Phase 1 and Phase 2. Staff identify the need for promoting students' self-determination with the aim of equipping them for life after leaving school, and in that the need for further training and development. Furthermore, they recognise the importance of reflective and shared practice in generating a common ethos in order to provide students with consistency and continuity.

Reflective teaching focuses on the recognition that teachers are the experts in their classroom, and they have the knowledge, skills, and abilities to identify, frame, and solve problems. Seeing teachers as reflective practitioners also involves a recognition that they are important contributors to the body of knowledge regarding education, and they can play a part in the development of practice (Zeichner and Liston, 2014). This latter idea was also highlighted by Anne (AHT) in her semi-structured interview and in conversations during the observations conducted in Phase 1. As an experienced teacher with senior leadership responsibilities, she believes that more work should be done in order to empower educators in the classroom, to be able to try different strategies, analyse their effectiveness, and adapt accordingly. Furthermore, she explains that all staff agree and are willing to work on promoting students' self-determination, but that is often difficult to translate into practice.

As explained by Dewey, reflection is not a step-by-step standardised process, thus, there are many ways in which reflection can be implemented and recorded by educators, one which has been gaining increasing attention over the last decades being the use of video. According to a literature review conducted by Gaudin and Chalies (2015), over the last decade, video viewing has been widely used in the education of preservice teachers and in the professional development of in-service teachers, all over the world. This increasing popularity of the use of video is due to its provision for a greater access than traditional observation, continuing improvements in technology, and for its role to facilitate the implementation of institutional reforms (Gaudin and Chalies, 2015). The use of video viewing in teacher education and development has proven effective not only for their own development, but also for that of

their practice and setting, including 'heightened motivation, optimized selective attention and knowledge-based reasoning, and improved classroom practice' (Gaudin and Chalies, 2015, p. 53).

5.16.4. **Video Interaction Guidance**

One intervention that uses video as an active tool is Video Interaction Guidance (VIG; Kennedy, Landor and Todd, 2011). VIG is an evidence-based intervention that focuses on improving communication within relationships. VIG is often used to target relationships between children/young people and the adults involved in their lives, but can also be used with groups. Its applications are vast and current uses spread across a wide range of settings from clients' homes, schools, institutional settings, court proceedings, to suit a range of purposes depending on the clients' needs. The ethos of the intervention is based on values of respect, empowerment, a belief the people in difficult situations can change, and that they have the power and responsibility to do so.

VIG focuses on seeking moments of 'attuned interactions', where the partners involved in the communication are taking each other's thoughts, values, emotions into consideration (Kennedy, Landor, and Todd, 2011). The use of video in VIG is unique in that it represents a tool for positive reflection on the strengths of the interaction. The intervention is carried out by a trained professional called the VIG guider, who has undergone a training consisting of delivering the intervention with at least six clients, under the supervision of a qualified practitioner, and has successfully passed two points of assessment. The researcher, a VIG practitioner in training, fulfilled all the requirements (attended the Initial Training Course) needed to deliver the intervention and had access to relevant resources at the time the data was collected. The researcher acted as the VIG guider in this phase of the research inquiry.

Although initially designed as a parent/carer intervention, VIG is also widely used in education settings to target staff-student interaction, communication, and relationships, as well as for staff development. For these purposes, VIG is often conducted with a group of staff, currently known as VIG with a group, and previously known as VERP (Video Enhanced Reflective Practice; Kennedy, Landor, and Todd, 2015). This is based on the same principles and ethos as VIG, the main difference consisting in the positive reflection on the videos taking place with a

group, instead of individually with the guider. The staff involved take turns in sharing their videos, and are guided to reflect on them by the VIG guider, who also encourages peer reflection.

Thus, the framework and principles of VIG appear suitable in meeting the aims of the *Collaboration*. VIG with a group is not only valuable for staff's professional development by having the opportunity to analyse each other's practice and share knowledge, but also because of its contribution to teambuilding and improving relationships. By having staff positively reflect on each other's practice, their relationships are strengthened, as the discussions are based on values of respect, empowerment, and trust. VIG fosters a space for empowerment and collaboration which increase the effectiveness of professional learning and development. Furthermore, the positive reinforcement nature of VIG and the values of respect and empowerment are in agreement with Anne (AHT)'s desire to empower staff through encouraging them to reflect on their practice and how it can be adapted to best meet students' needs. Conducting VIG with a group can also help staff recognise and agree on a common ethos, or the values that are driving their practice, which represents another important outcome for the study.

The school also uses photos and videos to record student progress, thus both staff and students are familiar with being recorded and the presence of the camera should not inhibit participants. The student participants share a particular interest in film making and drama, making the use of video as a tool even more suitable.

The values of VIG and its aim of focusing on positive reflection, align with those of the researcher and the drivers of the research inquiry. The intervention was not implemented in the traditional way, changes having been made to suit the aims of the research inquiry, as detailed in the following paragraphs.

5.17. The structure of the collaboration

5.17.1. **The helping question**

The first step in delivering VIG is to have an initial meeting with the client - the adult with whom the intervention is delivered - to discuss their current worries and concerns, their hopes from the process, and how this will be delivered. This conversation is guided by values of hope, compassion, trust, cooperation, and appreciation, with the aim of setting a *helping question* to support the client to work towards a goal(s) they are looking to achieve (Kennedy, Landor and Todd, 2011). Clients are skilfully guided to form their helping questions, in a way that puts the focus on the strengths of their own behaviour and not on what they are looking to change in the behaviour of their child/young person. This is another unique feature of VIG, that sets it apart from other interventions. VIG is non-invasive for the child or young person, without an aim of achieving or correcting a certain behaviour, but rather empowering the adult to recognise what they are doing when the desired behaviour occurs.

The helping question for the VIG carried out in this study is: *what are the existing strengths of teaching practice that are enhancing students' expression of self-determination?* This is in line with the research questions for Phase 3:

- what aspects of existing teaching practice promote students' self-determination? How can they be used to further enhance it?

The helping question for the present study was formulated by the researcher from the *prima facie* question, and the need for the study which was confirmed by participants in Phase 1 and Phase 2.

5.17.2. **The filming**

The next step in the VIG process after the initial meeting is to conduct the filming. This involves the VIG guider taking a clip of around 10-minutes of a natural interaction between the young person and the adult, during an activity of their choice. Although the activity should be chosen by the client and be familiar to both partners, the guider's role is to encourage the choice of an activity that allows for communication and interaction between the two.

The choice of activities filmed was guided by the data collected in Phase 1 and Phase 2 which highlighted *independent living skills* as the area most valued by all stakeholder groups, as well as being in need of development and attention (see Section 5.16.1). Staff were made aware of this before their initial filming, and the researcher supported them in choosing suitable activities. The guider then edits this filming to select short clips (usually two or three) that demonstrate the most successful elements of the interaction in relation to the helping question.

5.17.3. **The shared review**

The next step in the VIG process following the filming is the shared review. This typically represents a discussion between the VIG guider and the client, where they review the short clips selected by the former. The clips selected by the VIG guider are typically less than one-minute long, and they represent 'better than usual' moments of interaction, in which the two partners are attuned. The clips are micro-analysed, by positively reflecting on the strengths of the practice in relation to the helping question. The role of the guider is to support the client to reflect and analyse for themselves, in order for them to become empowered and increase their confidence in their existing skills. The guider uses the *Principles of Attuned Interaction and Guidance* (Appendix 6) during the shared review to encourage and empower the client to reflect on the strengths of the interaction. Furthermore, the client is guided to recognise the principles they are displaying in the clips shown.

5.17.4. **A different approach**

The implementation of the VIG with a group principles and framework in the present research inquiry is unique in the way the student participants are involved. Aside from the shared reviews carried out with the group of staff, separate shared reviews also took place with the students who volunteered to take part. The researcher used the same approach, the VIG framework and principles as with the staff, albeit more prompting was needed for the students initially (further details in Chapter Seven). The researcher aimed to create an open and safe space for students to share their views on the teaching practice, whilst also exploring their thoughts and feelings during the interaction. The students shared review was always carried out before the staff one, at least one day apart, to allow the researcher to bring

students' insights into the staff shared review. This proved essential to the reflections and discussion had, as it allowed staff to deepen their thinking and understanding of students' experiences (details about this impact are provided in Chapters Six and Seven).

5.18. The implementation

A VIG cycle is typically represented by one filming and one shared review. It is recommended that VIG is delivered in three cycles for each client, as the most progress is seen after the first two shared reviews. Phase 3 also involved three VIG cycles, but with two shared reviews in each, one for the staff and one for the student groups.

The purpose of delivering VIG with a group for the present study was not only to empower staff to identify the existing strengths of their practice that enhance students' self-determination, but also to support with achieving a consistent approach. For this purpose, the Enhancing Self-Determination Approach (ESDA) principles were generated from existing practice and through reflection in the shared reviews.

To support the development of the ESDA principles, all shared reviews were video-recorded and transcribed verbatim by the researcher. Each turn taken by a participant was given a code, a word, or short phrase, that best summarised it. The codes were grouped to form themes, which were subsequently grouped to form the ESDA principles using NVivo12 (Appendix 8). The themes are presented in Chapter Six. Participant turns are described as either *observations* or *reflections* to reflect the different ways of engaging with the clips shown. An *observation* refers to an element that can be seen objectively in the screen, whereas a *reflection* represents an insight into an observation. The ESDA principles were drafted during each cycle and shared with all participants for feedback. The principles were worded using participants' terminology and language in accordance with the VIG values and to promote shared ownership. The ESDA principles are analysed in light of Self-Determination Theory (SDT; Deci and Ryan, 1985) in Chapter Seven.

5.19. Chapter conclusions

The present research inquiry looked at the need to develop teaching practice in a special school for students with autism which arose in the context of preparing them for life after school. The study used a mixed methods design, an action research methodology and a phased approach to data collection. The three phases had an emergent approach meaning that the data collection tools used were developed from the data collected as the research progressed.

This chapter presented the methods used in Phase 1 and Phase 2 of the research, and the impact of the data collected in the first on the data collection tools used in the second. Both phases served to inform the *Collaboration* between the researcher and the teaching staff and students at the school which culminated with the development of the Enhancing Self-Determination Approach (ESDA) principles. The gathering of this initial data was valuable for the collaborative research which aimed to meet the needs of those directly impacted by its outcomes.

6. CHAPTER SIX

COLLABORATION

6.1. Development of the ESDA principles through VIG

The principles of the Enhancing Self-Determination Approach (ESDA) have been developed during three cycles of Video Interaction Guidance (VIG) with a group, for each of the staff and student participant groups. For each cycle, the staff shared review always followed the student one, to encourage staff to reflect on the observations and reflections made by the students. All videos used were recorded during a lesson or activity already existing in the curriculum and aimed at promoting students' *independent living skills* (Table 17). This is in accordance with the findings from Phase 1 and Phase 2, which highlighted the area of *independent living skills* as being most important and in need of development both at school and at home, by all participant groups. Short video clips were selected from each filming and presented during the shared reviews (Table 18). All staff and student *observations* and *reflections* were coded and grouped into themes to generate the ESDA principles. The themes arising at each stage of the process are detailed below and presented in chronological order of appearance in the data, with the themes regarding the VIG process presented at the end. The initial draft of the ESDA principles was developed after the first student and staff shared reviews (first cycle), and subsequently discussed and amended following each shared review. The findings at each stage of this process are detailed below.

Table 17. Description of participants and tasks during staff filming

Filming	Students involved	Description of task
Julie (TA)'s first filming	James	Maths time-related test – Julie (TA) going through the answers with James, and supporting him to fix his mistakes, as instructed by class teacher.
Anne (AHT)'s first filming	Abi, Alex, James, Katie, Micah	Open discussion about friendship – making friends, maintaining friendships, topics of conversation, difficulties, bullying, sharing ideas in a discussion, opportunities to spend time with peers outside of school (students came up with the idea of organising an after-school/weekend club and Anne (AHT) gave them the responsibility to organise it)
Martha (TA)'s first filming	Abi, Alex, James, Katie	Cleaning the guinea pigs' area – tasks included: sweeping, moving the guinea pigs, making new boxes for hiding places, changing bedding, sanitising the cages, putting rubbish away
Claire (CT)'s first filming	Abi, Alex, James, Katie	Cooking a simple meal – tasks included: coming up with the steps to follow, collecting equipment, cutting, using a microwave, toaster, and cooker
Julie (TA)'s second filming	Abi, Alex	Open conversation about fears – prompted by an article in a newspapers, discussion about individual fears, feeling towards them, ways to manage them
Anne (AHT)'s second filming	Abi, Alex, James, Micah	Open conversation about other people's impressions – prompted by post-it notes with adjectives and first modelled by Anne (AHT) showing first what she thinks others think when they first meet her, compared to what they think when they know her well. Each student had a turn to do the same, and ideas were shared with the group.
Claire (CT)'s second filming	Alex	Open conversation whilst making a Christmas card – talked about ways to improve the craft, personal phone use in school, the value of face-to-face communication, giving consent to taking photos, music preferences
Martha (TA)'s second filming	Alex	Cleaning the guinea pigs' area – tasks included: sweeping, changing bedding, putting rubbish away, making conversation about tasks and other topics

Table 18. Descriptions and reasons for selecting the clips used in the shared reviews

Filming	Clip reference	Staff practice strengths
Julie (TA)'s first filming	Julie (TA)'s first clip	Provides positive feedback Promotes self-confidence
	Julie (TA)'s second clip	Allows for processing time Guides through questions
Anne (AHT)'s first filming	Anne (AHT)'s first clip	Encourages an equal conversation Uses age-appropriate language and tone of voice
	Anne (AHT)'s second clip	Encourages students' initiatives Gives responsibility for an age-appropriate task
Martha (TA)'s first filming	Martha (TA)'s first clip	Follows students' initiatives Guides through questions
	Martha (TA)'s second clip	Provides positive feedback Provides opportunities for choice-making
Claire (CT)'s first filming	Claire (CT)'s first clip	Allows for processing time Guides through questions
	Claire (CT)'s second clip	Provides positive feedback Follows students' initiatives
Julie (TA)'s second filming	Julie (TA)'s third clip	Promotes an age-appropriate open conversation Follows students' initiatives
Anne (AHT)'s second filming	Anne (AHT)'s third clip	Gives responsibility to run activity Follows students' initiatives
Martha (TA)'s second filming	Martha (TA)'s third clip	Gives responsibility Follows students' initiatives
Claire (CT)'s second filming	Claire (CT)'s third clip	Promotes an age-appropriate open conversation Follows students' initiatives

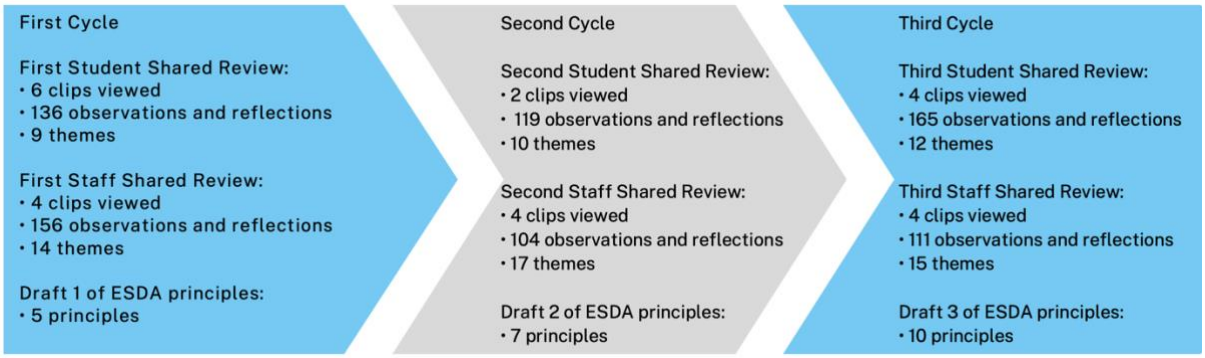

Figure 5. Structure and findings of Phase 3 *(Collaboration)* to develop the ESDA principles

Figure 5 shows the three cycles of the *Collaboration* with a small group of staff and students in the Post-16 setting. The following sections present the findings of each cycle, and how they contributed to the development of the final ten ESDA principles.

6.2. First cycle

6.2.1. **Student shared review**

The first student shared review was 35 minutes long and took place during a morning lesson of Leisure, so the students would not miss any teaching time. All students were present and participated in the discussion. A total of six video clips was used, belonging to first three members of staff filmed: Julie (TA), Anne (AHT), and Martha (TA). This number exceeded the standard VIG recommendations of a maximum of four clips, but this decision was taken as, at this stage of the process, five members of staff have been filmed leading to a total of ten clips to be reviewed during the first two shared reviews.

Students were enthusiastic to reflect on the clips and appeared comfortable and engaged in the process. The structure of VIG with a group was followed, by encouraging the student/s in the clip to reflect first, then openly inviting the others to contribute. The standard VIG activating questions, such as: 'What did you think of the video?', 'What was good about the video?', 'What was your favourite thing about the video?', proved effective as they encouraged students to share their ideas. Questions inquiring about the events in the video and those aimed at encouraging reflection on thoughts and feelings in the clip, either from the student filmed or the others, also proved activating and encouraged reflections.

Table 19. Observations and reflections made by students in the First Shared Review

Student	First Shared Review
Abi	37
Alex	24
James	36
Katie	22
Micah	17
Total	**136**

Students were very engaged in the discussion and the reflective process of the clips shown, with a total of 136 observations and reflections having been transcribed (Table 19). The observations and reflections made were fairly equally distributed between the students. All students expressed positive opinions about the process, the clips viewed, their interaction with staff, the task recorded, and their feelings during or towards it.

Table 20. References made by students to the themes developed in the First Shared Review

Theme	First Shared Review
1) Working independently	10
2) Tone of voice	6
3) Support with work	11
4) Giving time	1
5) Guiding	18
6) Supportive environment	4
7) Trust and give responsibility	9
8) Positive thoughts about clips	17
9) Positive feelings	27
Total	**103**

The observations and reflections were grouped into nine themes, seven of which regarded teaching practice, approach to learning and relationships, the last two being concerned with the VIG process (Table 20). Further details and examples for each theme, as well as significant ideas and points of discussion, are provided in the paragraphs below.

1) Working independently

This theme brought together students' observations and reflections related to the ability to work independently, either explicitly stated: 'I almost did it independently' (James), or

implied: ‘she didn’t even help me’ (James). It was the first idea brought forward to the discussion, especially by James who made nine out of the ten references coded to this theme. This could have been driven by the two clips of him and Julie (TA), which showed him completing a time-related task, which was a more academic, structured task than those shown in the other videos. The support offered by Julie (TA), by asking leading questions and ‘giving clues’, made James recognise his abilities related to the task, as he stated: ‘I almost did it independently’ (James), when referring to Julie (TA)’s first clip. The increase in his self-confidence was notable throughout the shared review, as he stated: ‘I was doing nice work’, ‘I was doing really well’, and ‘I know it by heart’ (James). Furthermore, James mentioned to the researcher, who has worked with him prior to the study, that: ‘I can do it more independently now’, to highlight his progress. This was a result of James seeing himself in the clips perform tasks with little support, and also through the positive and encouraging feedback from his peers and the researcher.

2) Tone of voice

This theme referred to students’ observations and reflections related to the tone of voice used by staff, which received positive feedback, and the experience of hearing one’s own voice on the video. The first represented an interesting finding and was mentioned in an observation made by James in relation to Julie (TA)’s first clip, during which he was working on a time-related task: ‘I like Miss Julie (TA)’s voice’, later on expanding with: ‘her voice stands out’ (James). Micah and Abi also made observations about Julie (TA)’s voice: she was ‘talking really softly’ (Micah), and liking the clip ‘because of Julie (TA)’s voice’ (Abi). Abi shared her embarrassment when hearing herself in Anne (AHT)’s first clip, which was received with an encouragement from Micah who explained ‘the nature of talking on a video it sometimes can be a bit embarrassing’.

3) Support with work

This theme consisted of observations and reflections regarding teaching practice in relation to the tasks filmed, and students’ feelings towards the support received from staff. Students made positive observations about teaching practice; when asked what was good about Julie (TA)’s first clip, Micah said: ‘the way she works, the way she helped with James’, and Alex

added: ‘the way that Miss Julie (TA) was explaining to James really well’. Positive reflections were also coded to this theme, such as Abi’s insight into how James was feeling in Julie (TA)’s first clip: ‘happy that someone was talking to him, that he had support’ (Abi).

4) Giving time

This theme referred to staff giving students the appropriate amount of time to process instructions and complete their work. In the first student shared review, this idea was brought forth in relation to teaching practice, more specifically regarding staff’s way of supporting a student with a task, through the observation that Julie (TA) and James were ‘taking their time, and basically trying to work out what it was’ (Micah). Although this theme had only one reference in the first student shared review, staff provided more detailed and frequent insights in their shared review.

5) Guiding

This theme brought together students’ observations and reflections regarding the aspect of teaching practice through which staff support them in completing their work, by asking questions or providing clues, and the feelings related to it. This represented a main point of discussion during the first student shared review (18) and was sparked by Abi’s observation when asked about how others thought James was feeling in Julie (TA)’s first clip: ‘happy that someone was talking to him, that he had support’ (Abi). The researcher encouraged further reflection by asking what Julie (TA) was doing to support James, and Abi expanded with: ‘she was leaning towards saying it, but she didn't, she was giving him a bit of a clue, not too much that to the point that she gives him the answer’. This led onto a discussion about students’ preference of staff supporting them either by providing them with the answer or with clues to lead them to it. In accordance with the VIG principle of *Receiving initiatives* (Appendix 6) by repeating/using the other’s words or phrases, the researcher took on the vocabulary used by Abi to describe being supported through ‘a bit of a clue’ (Abi). All students agreed they prefer receiving clues, such as: ‘I would say clues, always clues and never answers’ (Micah). All five students contributed without prompting to the discussion, including Katie, for whom this was a first instance, and provided a reflection longer and more complex than her others: ‘they're not giving you the answers but they're helping you’ (Katie). These ideas regarding Julie (TA)’s

first clip, were brought back to attention when looking at Martha (TA)'s first clip, where Abi explained that she 'was guiding them, wasn't helping them fully, just guiding them', because 'she didn't tell him to put it in the cupboard, she was just guiding him little by little' (Abi). The observations and reflections coded to this theme were discussed in detail during the staff shared review that followed, and sparked further discussions in subsequent ones.

6) Supportive environment

This theme referred to observations and reflections related to students' feelings of being supported and encouraged either by staff or peers. It was first brought forth to the discussion by Micah's reflection on why Julie (TA)'s first clip was good: 'because of her personality, she's got this nice soft edge to it, it feels like they're there' (Micah). Similarly, when asked to describe the experience of having an open conversation with Anne (AHT), Abi explained that 'it felt like we were all there together, we were supporting each other, not that we're alone, we're just supporting each other through what happened'. This represented a surprising reflection to Anne (AHT), whose observations and reflections on her own practice were much more critical and will further be discussed in the first staff shared review.

7) Trust and give responsibility

This theme consisted of the observations and reflections made by students regarding being trusted by staff and being given age-appropriate responsibilities. The discussion was prompted by Anne (AHT)'s second clip, where students brought the idea of organising an after-school or weekend event, and Anne (AHT) suggested they are in charge of it. Students agreed they felt positively about being given such trust and responsibility, saying they feel 'really good because we can plan it and then [Miss Anne (AHT)] can just check if it's okay and clarify it' (Alex), but also 'kinda overwhelming but at the same time calm because you have that, they trust you with the place' (Abi). When prompted to think whether such trust and responsibility would be granted to younger students, Abi explained: 'so you have to have that sort of responsibility to do things that we wanna do even on a Saturday, we have to have that responsibility to keep the school clean'. The idea of trust was also highlighted by Alex in relation to Martha (TA)'s second clip, where students 'were trusted to do stuff on our own'.

8) Positive thoughts about clips

This theme brought together students' positive observations about all the clips shown, the events taking place, the teaching practice, and the relationships with staff. These often came as a first response to open questions asked by the researcher regarding the clip or the teaching practice, which prompted further questions to gain further insights. Observations such as: 'it was really nice' (James), 'it was really good actually, really good' (Micah), and 'that was so amazing' (Alex) were common amongst the five students both in relation to the clips, and the teaching practice demonstrated.

9) Positive feelings

This theme was made up of students' positive reflections when prompted to share their thoughts and feelings during the action of the clips. This includes how they felt in regards to the support received, the environment they were interacting in, and the relationships with staff and peers. All five students frequently identified as feeling 'happy', 'excited', both in relation to the task, and regarding the relationship with the member of staff in the clip, such as: 'they felt happy they got someone there supporting them' (Abi). Regarding the open conversation Anne (AHT)'s clips, students said felt like 'quite a peaceful conversation' (Micah), and 'it was equal' (Abi).

6.2.2. **Staff shared review**

The first staff shared review was 50 minutes long and took place on the Friday afternoon of the same week as the student shared review. One hour before the meeting took place one member of staff informed the researcher that she needed to withdraw from the study, at least momentarily, due to ill-health reasons. She informed the researcher that she did not want her data to be erased yet, in the event that she might be able to return to the study at a later date. The researcher had to make a last-minute decision of which clips to show and after consulting the staff who were present, a common decision was taken to reflect on Julie (TA) and Anne (AHT)'s clips in this first shared review, which were filmed first.

Table 21. Observations and reflections made by staff in the First Shared Review

Staff	First Shared Review
Julie (TA)	34
Anne (AHT)	65
Martha (TA)	38
Claire (CT)	19
Total	**156**

Staff were very engaged with the reflective process, with a total of 156 observations and reflections having been coded, which were not only related to the clips, but also to past practice and implications for the future (Table 21). Anne (AHT) brought the most contributions to the discussion, by making 65 observations and reflections. The numbers between remaining staff were more equally distributed, with Claire (CT) having the least, partly due to her joining the meeting 10 minutes after it started. Anne (AHT)'s larger input to this first shared review did not come as a surprise to the researcher, given her explicit support for the study and recognition given to the value of reflection through the video, expressed in prior meetings. Furthermore, this could have also been due to her position in the school and her drive for staff development, seeing the VIG as an opportunity for this purpose, as well as the fact that her clips were shown in this shared review. Contributions in the following shared reviews are more equally distributed.

Table 22. References made by staff to the themes developed in the First Shared Review

Theme	First Shared Review
1) Giving the chance	5
2) Guiding	26
3) Giving positive feedback	3
4) Age appropriateness	16
5) Staff self-awareness	4
6) Confidence	16
7) Tone of voice	3
8) Responsibility	16
9) Open conversations	25
10) Giving time	4
11) Positive reflection of peer practice	34
12) Reflection on the VIG process and moving it further	23
13) Reflection of own practice	37
14) Reflection on past and future practice	30
Total	**242**

Similarly, the structure of VIG with a group was followed, prompting the staff in the clip to reflect first, then opening the invitation to the rest to contribute. The recommended VIG questions and strategies to encourage reflection were very effective, but surprisingly not often needed as all staff demonstrated well-developed reflective skills. Staff understood and implemented the ethos of VIG of positive reflection, and were able to do that effectively both regarding own practice (37), as well as that of their colleagues (34). The clips and the reflections and observations they prompted, led to in-depth discussions about teaching practice, approach to learning, and school ethos. The observations and reflections made by staff were grouped into ten themes regarding teaching practice, approach to learning, and opportunities, and a further four, presented at the end, regarding the VIG process.

Table 22 shows the observations and reflections made by staff during the first shared reviews for each theme developed. The paragraphs below provide descriptions of each of the 14 themes.

1) Giving the chance

This was the first theme to arise in the first staff shared review and refers to giving students the chance to try, to make mistakes, to express their choices and opinions, and to succeed without much adult support. It was brought to the discussion by Julie (TA)'s positive reflection on her first clip, where she explained: 'I was just trying to give him the chance to have a go at working it out without giving him too much information, so I'm glad he worked it out'. Later in the discussion, when prompted by Anne (AHT)'s reflection of thinking about the end result of a task, Julie (TA) expanded that she was:

> *'allowing him to have a go, if he makes a mistake he makes a mistake, we can work on a mistake with him, so is trying to give him as much opportunity to have a go without giving him the answer'. JULIE (TA)*

Claire (CT) brought this idea back into focus when looking at Julie (TA)'s second clip, and reflecting back to her own past practice in relation to giving James the chance to speak:

> *'quite often, I made a point of asking him first, I just say: "what do you think? or share your ideas", so he was there and could share his idea before anyone else and then just saying "yes" and agreeing with what somebody else said.' CLAIRE (CT)*

2) Guiding

Similar to the student shared review, this theme represented a main point of discussion in the first staff shared review, with 26 references coded to it. The theme included *observations* and *reflections* regarding aspects of the teaching practice related to supporting students to complete a task. It also included the differences and difficulties encountered in relation to different types of tasks, and when trying to meet individual students' needs. It was brought to the discussion after staff watched Julie (TA)'s first clip, where she 'was sort of leading him into the answer really', according to Anne (AHT), and 'then the scaffolding of the prompting of the question it made him think and then was able to answer', as explained by Claire (CT). After the researcher shared the discussion had with students regarding their preference for being given clues rather than direct answers, Claire (CT) reflected on past practice and how this has increased students' self-confidence:

> *'actually some of them will say, if we sometimes have a member of staff who's not familiar with them try to give them the answer, we have some of the students that go: "I can do that, I know that I can do that on my own", so they know, they've got that awareness as well, that they don't want to be given the answers.' CLAIRE (CT)*

Anne (AHT) and Martha (TA) also highlighted the importance of thinking of the outcomes desired from an interaction with a student, and for students in Post-16 education, they are more often related to empowerment and confidence, rather than knowledge acquisition: 'so he ended up knowing what he was doing, so he's not going to be too stressed and anxious' (Anne, AHT).

An interesting perspective on this theme was brought by Anne (AHT) through the reflection on her own practice in the first clip, through which she highlighted the difficulty in using the guiding discussed with a different task:

> *'I think because of the nature of the conversation, it's not about right or wrong, you can't do the kind of scaffolding that Julie did in terms of leading, because I don't know what they're going to say (…) It's a bit different, if it was a concept, if you're teaching a concept that would be different because I would be able to do what Julie does, and I would be able to find lots of different strategies to lead them towards the answer, so they think they got there themselves, but it's different with conversation. I'm trying to talk to them like they're adults'. ANNE (AHT)*

Furthermore, when looking at her first clip, Anne (AHT) thought she was 'the director of that show and I feel that's because of who they are and the skills they have to direct that'. This prompted her to reflect on future practice and how she can adapt her approach: 'if there was a possibility that another time I'd probably think about [Abi] trying to get some of that information from those young people and get that going' (Anne, AHT), which she later applied in her second clip.

3) Giving positive feedback

This theme referred to the importance of giving students positive and encouraging feedback for their work, and only represented a minor theme (3) in the first staff shared review. It was first highlighted in an observation made by Martha (TA), in relation to Julie (TA)'s first clip: 'Julie (TA) praised him so there was a positive approach'. She later expanded with 'he was getting the positive feedback: you've worked that out', which prompted a discussion about the impact this can have on students' confidence.

4) Age appropriateness

This represented another main theme (16) arising from this shared review, which continued to develop in the ones that followed. It brought together ideas related to aspects of teaching practice that involve staff finding the balance between interacting with students as young people their age and in accordance with their needs. This included ideas related to the language used, the attitude during the interaction, work-related tasks, and how they are presented, with the aim of empowering students in their preparation for life after school. It was first brought to the discussion through a reflection made by Anne (AHT), using her experience with her own teenage daughter: 'it doesn't sound like I would talk to my 19-year-old daughter, do you know what I mean?'. All staff shared reflections on how difficult that is to put in practice due to students' level of communication skills, and in trying to: 'get the balance between teaching someone as a special needs young person or as a young 19-year-old who doesn't know the answer to something'. Anne (AHT) also explained the increased difficulty that arises in trying to teach, and getting students to understand a concept:

> *'you know the fact that you said that [Claire (CT)] would go over that, I found the beginning of that more age-appropriate, more sort of teenager. Now some time ago we would probably say: oh you're using a bit too much*

> *language there with that young person, but actually that's very age appropriate and very much what you would say to a 19-year-old. So that intro there was great, but then when you have to lead someone to understand a concept, you somehow have to adapt your language and then it becomes a bit more 'uhh', we're a bit, do you understand what I mean? I do it all the time.' ANNE (AHT)*

Moreover, staff agreed that this difficulty of finding the balance also relates to having open conversations with the students, such as the one displayed in Anne (AHT)'s clips:

> *'that's the kind of conversation they need to have now, that's age-appropriate, it may not be skills-appropriate, but they've got to experience it, even if it feels uncomfortable, and even if it feels like 'where am I, where's my direction, where's my scaffolding?', actually in the world, in life, they're gonna find themselves like [Katie], going for dinner with her cousins waiting for someone to ask her a question. So, what I did there, I purposefully didn't do the props, didn't do anything, I just wanted to say: this is what 19-year-olds might do.' Anne (AHT)*

The idea of providing students with real-life, age-appropriate experiences has, according to Anne (AHT), 'in some way that's enabled [Katie] to use language that was a bit more grown up than she would normally, same with [Alex]', and is further developed in the second staff shared review.

5) Staff self-awareness

This theme represented a minor point of the discussion in the first staff shared review (4), but was further developed in subsequent ones. It brought together staff's reflections regarding awareness of different elements of their own practice, thoughts and feelings during the interaction with students and the impact they might have. In the first shared review, the reflections made to this theme often coincided with staff reflections on their own clips, or their own practice, such as Julie (TA)'s: 'you got to listen to your own head sometimes, and you gotta listen, and you gotta adapt it to get the best results', and 'because we go from an interaction like that which is great (…) and then you move to another interaction where you think 'I probably said the wrong thing'' (Anne, AHT).

6) Confidence

This theme brought together observations and reflections related to aspects of teaching practice aimed at promoting students' confidence, including approach to learning,

relationships, and opportunities. In this first shared review, most references (15) were about James' behaviour and how staff supported the development of his self-confidence. This is summarised by Anne (AHT) in a reflection on Julie (TA)'s approach in her first clip:

> *'he would've felt great, he would've felt like "I've achieved something, like I know what I'm doing", he's very aware of his learning difficulties though, and he would have probably thought: I worked that out with lots of help, because he has low self-esteem. But he would have felt a lot better from that exchange, than had you not said: "you've worked that out". It was that little bit at the end that made him feel like "yeah, I've achieved something", cause he does lack in confidence, doesn't he?' ANNE (AHT)*

This positive reflection on peer practice, is also complimented by another made by Claire (CT):

> *'sometimes like you said about his lack of confidence, he actually does know the answer and his mental maths and his ideas are really good and all it takes is something like that'. CLAIRE (CT)*

Reflecting back on past practice, Anne (AHT) explained the difference in James' behaviour that she was able to notice, presenting now as 'a more mature learner', which is reinforced by the other three staff: 'he's getting better at smaller prompts' (Julie, TA), 'he's having the confidence to ask which is great' (Marta, TA), 'he's got the confidence to have a go' (Claire, CT).

7) Tone of voice

This theme referred to the aspect of teaching practice related to tone of voice, including volume and age appropriateness for the young people involved and their needs. Although staff did not make many observations or reflections regarding tone of voice (3) in the first shared review, the researcher shared students' thoughts on this theme, when asked by staff to share their opinion. Anne (AHT) commented that their observations about liking Julie (TA)'s voice could have been because 'it's low voice, not too excitable, not loud?', and to later add about Julie (TA)'s second clip: 'that sounds really good, the tone of voice is really good' (Anne, AHT).

8) Responsibility

This theme includes observations and reflections related to the aspect of teaching practice through which staff give students the opportunity to take responsibility for a task or to

undertake a certain role. In the first shared review, apart from observations and reflections made about the responsibility given by Anne (AHT) to organise an afterschool or weekend activity, which were also discussed by the students, this theme came up when addressing James' development. This was prompted by his increased self-confidence and an activating question from the researcher to encourage staff to reflect on what they did to support it. Through reflection on past practice, staff described how they noticed this change after James was asked to support a new student:

> *'what I think has really helped is [Saul] starting and me asking [James] to support him and show him around, so he took the lead role and he was his support and you could see him standing up straighter and looking like "yeah, I can do this". And when he was finding it difficult to settle, [James] was the one that could direct him, tell him what to do and I think that's had a real impact.' CLAIRE (CT)*

All members of staff agreed, that 'being responsible for someone else', has helped not only his confidence but also 'his decision-making' (Anne, AHT), by 'giving him the chance to succeed and share what he knows without prompting too much' (Claire, CT). Claire (CT) highlighted that this approach works well for James personally because 'he's a really caring, helpful boy, so if he thinks he's doing something to support you, to support somebody else, that's where he shines, that's where his strengths come out'.

9) Open conversations

This theme included observations and reflections related to the opportunities provided in school for open conversations both between students, and with staff. It highlights the importance of open conversations on the development of students' social skills, the value in their preparation for adulthood, and contribution to improved relationships between peers and with staff. In the first shared review, it represented a main point of discussion (25) when Anne (AHT)'s clips were reviewed, as it showed her initiative to engage the students in an open conversation about friendships. All staff agreed on the 'huge pressure' on students during that activity, as 'the hardest thing for them is that, that's their area of difficulty is conversation' and there was 'nowhere for them to hide there'. Anne (AHT) explained her choices: 'we could've put props out there, starters and so on, but (…) to me that would be a bit patronising, but I wanted it to feel more like "come on guys, let's have a chat"'.

All staff recognised the importance of students having opportunities for open conversations and Anne (AHT)'s clips provided examples for staff to have 'an idea about the amount of scaffolding that's needed in order to get them to that place where they are comfortable chatting about any topic' (Anne, AHT). Claire (CT) explained that students often have such opportunities: 'they do have conversations when they have hobbies time or reading time, there's obviously always staff in there who just have conversations and use those opportunities to have that'. However, all staff agreed that such situations are not as 'exposing' because: 'when they're in the hobbies room there's a distraction, so you've got, there might be a book, or pretending to read while also talking, so they've got that bit of comfort blanket' (Anne, AHT).

10) Giving time

This theme included observations and reflections related to the aspect of teaching practice through which staff recognised students' individual needs for processing time, which is given both in relation to work-related tasks, as well as conversations. This represented a minor theme in the first staff shared review (4), and was mentioned in relation to Julie (TA)'s first clip, where James 'needs some processing time there and you are giving him the processing time', and in Anne (AHT)'s first clip as she 'gave them time to process what you're actually saying' (Julie, TA).

11) Positive reflection of peer practice

This theme brought together all positive observations and reflections made by staff regarding each other's practice. Staff did not need much modelling from the researcher in how to use this type of reflection, and were comfortable and engaged in the process from the first shared review. Some activating questions were used in the beginning by the researcher, such as: 'what does everyone else think of the clip?', 'would anyone else like to add anything else?', 'what did you think of this?, but as the shared review moved on, little prompting was needed. All staff appeared comfortable and confident providing positive reflections on peer practice, as well as exploring how the school's teaching practice can be developed. This theme maintained a constant number of references across the three shared reviews, with 34 in both the first and second one, and 26 in the last.

All staff were confident in providing positive reflections specific to certain aspects of the teaching practice demonstrated in the clip: 'he needs some processing time there and you are giving him the processing time' (Anne, AHT about Julie, TA's first clip); 'that's all it took that little prompt, you didn't actually say right we're going to count, you literally just put your thumb up, and that supported him to do it' (Claire, CT about Julie, TA's second clip); 'it's very clear what you're saying to them, the way you're explaining it to them it's very clear' (Julie, TA about Anne, AHT's first clip). This demonstrated not only staff's well-developed reflective skills, but also their willingness to engage with the process and to use it to improve their practice.

Furthermore, staff also provided reflections regarding thoughts and feelings: 'he got to the answer and you could see that he got to the answer with confidence', 'so he ended up knowing what he was doing, so he's not going to be too stressed and anxious', 'he would've felt great, he would've felt like I've achieved something, like I know what I'm doing' (Anne, AHT).

Staff also took the opportunity to reflect on how looking at each other's practice can be used to develop the teaching practice of their team, thus also thinking critically. This too was presented in a nurturing and positive manner, as something to work on together rather than giving this responsibility to change to one member of staff:

> *'it's like saying "you're right, that bit's right", it's giving him confidence. But I know that we're gonna say when we see our clips as well, that I'd never have a conversation like that with a 19-year-old who doesn't have special needs and it would the same when we come to ours. If you're talking, if we're talking to young people like that who are 19 (…) they would say it all feels patronising, as much as we all know why we do that because we are leading young people to an answer and to confidence (…) it doesn't sound like I would talk to my 19-year-old daughter, do you know what I mean? And I know it's going to be exactly the same when we see me talking with [Alex].' ANNE (AHT)*
>
> *'It's getting the balance between being teaching someone as a special needs young person or as a 19-year-old who doesn't know the answer to something, it's really hard.' ANNE (AHT)*

12) Reflection on the VIG process and moving it further

This theme included observations and reflections made by staff regarding the process of VIG, its value and potential in staff development and confidence, as well as the importance of shared practice. Staff engaged in this at various points across the first shared review and without any prompting from the researcher to do so. Staff felt positively towards the process: 'this [pointing towards laptop] is gonna help' (Martha, TA), 'it's nice to have the feedback and see what you're doing and what you can possibly improve on' (Julie, TA), 'such a useful tool isn't it?' (Anne, AHT).

Anne (AHT) explained the importance of being able to share moments of better-than-usual practice, when Julie (TA) was reflecting on her self-confidence, sharing that 'it's nice and I think sometimes you doubt yourself':

> *'it's because we go like that don't we [makes wave movements with hand], it's because we go from one interaction like that which is great and you think "yeah, I've done the right thing there" and then you move to another interaction where you just think: "I probably said the wrong thing, done the wrong thing, introduced it, I've been too quick, too whatever" because we just human beings that's why clips like this are good because I can say: "that's the model, that's what we're trying to aspire towards"'. ANNE (AHT)*

Furthermore, staff also provided insights into how the process of VIG can be further developed by 'hearing all their [students] views', doing 'a little bit more filming, I think more sort of incidental', and sharing ideas of how it could be integrated in their practice:

> *'but can you see how useful that is? Because if I was monitoring a lesson and I saw you working like that I would think "oh this is great for these students". They are learning, there's some good quality learning going on, and I'd think "oh what a lovely, calm bit of teaching going on there"'. ANNE (AHT)*

13) Reflection of own practice

This theme brought together all observations and reflections made by staff on their own practice. For the first shared review, both Julie (TA) and Anne (AHT), whose clips were shown, demonstrated well-developed self-reflection skills. More prompting was needed from the researcher to encourage staff self-reflection, than peer reflection, mainly due to the need to shift staff's focus from the students' perceptions to exploring their own thoughts and actions. Both Julie (TA) and Anne (AHT), shared insights on their teaching practice: 'I was just trying to

give him the chance to have a go at working it out without giving him too much information so I'm glad he worked it out', 'I'm learning every day with these young students' (Julie, TA), and:

> *'I'm using words I wouldn't use with much younger children, I wouldn't use that kind of tone with younger children, but I would also say I'm the director of that show (…) I try to do with that group a more sort of thinking kind of pose, (…) and you're encouraging people to be equal, you try to really show that you are listening' ANNE (AHT).*

14) Reflection on past and future practice

This theme included staff's observations and reflections on the clips which prompted discussions regarding past practice, and how they can use the knowledge to develop in the future. When staff discussed James' progress and increased confidence, Claire (CT) shared some approaches she tried to encourage this: 'quite often, I made a point of asking him first, I just say: "what do you think? or share your ideas", so he was there and could share his idea before anyone else', 'if we do discussions in class, usually what I do is, I partner them up or put them in threes to do like a mind map of their ideas first'. Staff also reflected on future practice, especially using the clips watched as 'models' of best practice, to give 'an idea of the amount of scaffolding that's needed to get them to that place' (Anne, AHT), and to 'have more discussions really that are sort of open ended that end up like that, where we say "what can we do to improve things?"', as seen in Anne (AHT)'s second clip.

6.2.3. **Draft 1 of the ESDA Principles**

After all student and staff observations and reflections from the first shared reviews were transcribed and coded into themes, they were grouped to generate Draft 1 of the ESDA principles, as seen in Table 23.

Table 23. The themes of the first student and staff shared reviews grouped to generate Draft 1 of the ESDA principles

Student first shared review theme	**Staff first shared review theme**	**Principle**
Working independently Support with work Giving time Guiding	Giving the chance Guiding Giving time Staff self-awareness	Provide opportunities for students to do things for themselves: - Give chance to try - Allow for thinking time - Give clues, not answers
Positive feelings	Giving positive feedback	Give encouraging, but not patronising, feedback
Tone of voice	Age appropriateness Tone of voice Open conversations	Use age-appropriate language and tone of voice
Trust and give responsibility	Responsibility	Trust and give responsibility
Supportive environment	Confidence	Emphasise personal strengths to increase confidence

Draft 1 of the ESDA Principles included five principles, to ensure staff and students were not overwhelmed. *Principle 1* included three further sub-principles, in order to provide more specific and concrete means to apply it. The ESDA principles, grounded entirely in the *observations* and *reflections* made by participants, were written as Draft 1 by the researcher, using language taken from participants' quotations. The aim was to make the principles accessible to both staff and students, thus all efforts were made to use language that was familiar and used by the latter. The order of the ESDA principles was determined by their chronological occurrence of the themes in the data and was not related to their importance. This, as well as any vocabulary, or other adaptations were open for amendments from both students and staff in all subsequent shared reviews.

Table 24. References made by students and staff to the Principles in Draft 1

Principle	First Shared Review	
	Students	Staff
Provide opportunities for students to do things for themselves: - Give chance to try - Allow for thinking time - Give clues, not answers	40	39
Give encouraging, but not patronising, feedback	27	3
Use age-appropriate language and tone of voice	6	44
Trust and give responsibility	9	16
Emphasise personal strengths to increase confidence	4	16

Table 24 shows all *observations* and *reflections* made by students and staff in the first cycle, grouped to generate Draft 1 of the ESDA Principles. *Principle 1* has the highest total number of references (79), and is representative of the discussions held in both groups which focused on aspects of teaching practice related to the support given to students when completing work-related tasks. The clips shown are likely to have played a role in leading those discussions as, for the first filming three of the staff engaged in work-related tasks, which changed organically for the second where they engaged in open conversations. Students were much more engaged in discussions regarding positive feedback and attitude (27), finding it naturally easier to provide positive comments on the clips and staff practice, whereas topics such as age-appropriateness (6) and confidence (4) were more difficult to engage in. Staff made most references (44) to *Principle 3,* which is also representative of the discussions held, through the focus given especially to age-appropriateness of practice, approach, language, and attitude.

6.3. Second cycle

6.3.1. Student Shared Review

The second student shared review was 26 minutes long and took place, exactly one week after the first shared review. Abi was reluctant to take part in the meeting after a difficult morning, but after a discussion with Claire (CT) she joined the others. All students were present and visibly more relaxed and comfortable with the process. More conversations between students took place, often prompted by ideas taken from the clips. Thus, 65 turns were coded separately under the name: *Related ideas and conversations,* compared to only 28 in the first shared review. These references represent conversations students engaged in during the shared review that were not directly related to the clips shown, but prompted by observations and reflections made in relation to them. Students were less engaged with the reflective process in the beginning than in the first shared review, but made more observations and reflections in the latter half. This could have been influenced by Abi's reluctancy to join the shared review, manifested through a lack of willingness to participate in the beginning.

Table 25. Observations and reflections made by students in the First and Second Shared Reviews

Student	First Shared Review	Second Shared Review
Abi	37	36
Alex	24	29
James	36	19
Katie	22	20
Micah	17	15
Total	**136**	**119**

Students contributed to the conversation fairly equally as in the first shared review, with most turns being taken again by Abi (36), followed by Alex (29) and Katie (20), with both James (19) and Micah (15) making less contributions than in the first shared review (Table 25). Only two clips were watched by students in the second shared review and were both taken from Claire (CT)'s filming. This was due to the withdrawal of one member of staff following the first staff shared review. More prompting and description of the actions happening in the clips was needed from the researcher than in the first shared review. This could have been due to the fact that the clips were filmed in a busy environment, which could have made it more difficult

for the students to follow. Katie was less engaged than in the first shared review, and more direct and specific questions were needed from the researcher to encourage her.

a) Reviewing Draft 1 of the ESDA Principles

The students were each presented with a copy of Draft 1 of the ESDA principles, accompanied by explanations and examples from previous clips, provided by the researcher. The researcher made all efforts to communicate clearly the meaning of each principle and how this might look like in practice for the students. All students agreed that the principles are an accurate reflection of their desires for teaching practice. Only *Principle 3. Use age-appropriate language and tone of voice* led to a more in-depth discussion. All students agreed they prefer being talked to age-appropriately, and Abi argued that: 'they're supposed to talk to us like what our age actually is, not like we're five or six, which is what they're doing at the moment'. This reaction was likely to have been caused by the discussion had with Claire (CT) before the shared review. Students also agreed that they prefer staff to talk to them age-appropriately even when they make mistakes or act inappropriately.

At the end of the second shared review, the researcher gave the students another opportunity to comment on Draft 1 introduced in the beginning. Although this was already included in *Principle 1c. Allow for thinking time*, Abi chose to reinforce the importance of having enough processing time, prompted by the events prior to the shared review: 'let us have more thinking time cause when I was there earlier I was trying to process what was happening and Claire (CT) didn't give me enough time'. All students nodded or verbally agreed with her statement, and Alex added that he would prefer 'more extra time with work finishing'. The researcher did not make any changes to Draft 1, but mentioned these observations in the following staff shared review.

b) Development of existing themes

The students continued to be positive in the second shared review, regarding the clips, the teaching practice, and the activities shown. Adjectives such as 'good' and 'amazing' were common and coded at the existing theme *8) Positive thoughts about clips* (5). Furthermore, the students continued to express *9) Positive Feelings* regarding how they felt in the clips: 'I felt amazing' (James to describe Claire, CT's first clip).

Four references were coded to each of the previous themes: *2) Tone of voice* and *3) Support with work*, with most (21) being coded to the theme of *5) Guiding*. This theme represented the idea discussed most in-depth by the students in the second shared review. When reflecting on Claire (CT)'s first clip, students remembered the vocabulary used in the first shared review, and recognised that the 'basic questions' (Alex) asked by Claire (CT) were used as 'she was giving clues not answers, she was trying to give him what to do and then he said it' (Abi). When prompted to think if James would have learned more from the approach used by Claire (CT) or if she chose to instruct him directly what to do, all students agreed is was 'from the one [the approach Claire (CT)] is doing'. Furthermore, James was able to identify this approach of 'giving clues' being used by another member of staff, working in the background of the clip with Katie. He achieved this without any prompting, which demonstrates the development of his reflective skills. This was also noticed by Claire (CT) when reflecting on her first clip, demonstrating an interesting parallelism between the student and staff shared reviews. Micah provided an interesting perspective on this theme, by explaining he felt: 'convinced, like sometimes, some of these clues I actually tend to feel like I've been heard, and I feel like that's the right clue'.

An interesting point in the conversation surrounding *5) Guiding*, occurred during the reflection on Claire (CT)'s second clip. This was sparked by a joke made by Alex who, when the open question was asked of what staff could do differently, he said: 'get all the equipment out for us and make it [smiles and looks at peers]'. His peers giggled and when the researcher asked the activating question: 'what would you have learned from that?', Abi said:

> *'Nothing, we'd learn nothing, if you don't do it yourself. Cause when we leave here, we're going to our own house and we've got to know what we gotta do*

like chores, food, cleaning, everything, so we've gotta learn here before we can move on. That's why it's called life skills!' ABI

and then expanded with:

'I mean but she would not make us have to go get it, but she's like trying to teach us how we can get things properly as well, so we don't have to leave it up to her.' ABI

These observations led the students onto an open conversation about helping at home, especially with cooking, which was the activity shown in the clips. The atmosphere was relaxed and informal, and students shared their experiences at home, made jokes, and encouraged one another. The researcher contributed only when prompted by the students to share what types of food she enjoys cooking.

Table 26. References made by students to the themes developed in the First and Second Shared Review

Theme	First Shared Review	Second Shared Review
1) Working independently	10	
2) Tone of voice	6	4
3) Support with work	11	4
4) Giving time	1	3
5) Guiding	18	21
6) Supportive environment	4	
7) Trust and give responsibility	9	
8) Positive thoughts about clips	17	5
9) Positive feelings	27	1
10) Confidence		6

c) New themes

The second student shared review brought only one new theme: *10) Confidence*. Although this theme is new to the student shared reviews, it was already identified in the first staff shared review. The observations and reflections coded to the *10) Confidence* (6) in the second student shared review were related to James' ideas about his interaction with Claire (CT) in the clips. Similar to the first shared review, he was able to recognise his own skills 'yeah, I knew it by head' (in Claire, CT's first clip), which also demonstrated the increase in his self-confidence: '[did you think that you could do it?] yeah I did' (James).

6.3.2. **Staff Shared Review**

The second staff shared review was 26 minutes long and took place on a Thursday at lunchtime, one day after the second student shared review. The decision to change the timing of the shared reviews has been taken by the researcher following a conversation with Anne (AHT), where she expressed concerns about keeping staff after their working hours. All staff agreed that this would be suitable, and the researcher suggested they also have their lunch at the same time, as support staff would not have another opportunity to eat before the end of the day.

Table 27. Observations and reflections made by staff in the First and Second Shared Reviews

Staff	**First Shared Review**	**Second Shared Review**
Julie (TA)	34	15
Anne (AHT)	65	30
Martha (TA)	38	30
Claire (CT)	19	29
Total	**156**	**104**

Staff were visibly more relaxed and comfortable with the process, showing notable development in their positive reflection skills and trust in the VIG process. Similar to the second student shared review, the atmosphere was more relaxed, as staff made jokes and laughed frequently with one another, whilst maintaining a positive and encouraging environment. The discussion was more equal than in the first shared review as seen in Table 27. Anne (AHT)'s input did not dominate the conversation as in the first shared review, her contributions being less than half in the second one (30). It is likely that her trust in both staff's reflective abilities and in the VIG process have increased, thus feeling more comfortable to step back. Julie (TA)'s contribution decreased, whilst Claire's (CT) increased, which is likely to be due to the latter's clips being shown in this shared review.

Staff seemed more comfortable with the structure of VIG with a group, often reflecting on one's own clips first without any prompting from the researcher. Overall, fewer prompts and activating questions were needed from the researcher, as the discussion flowed equally and comfortably between staff. They also seemed more confident reflecting on each other's practice, especially encouraging each other in areas of uncertainty. Furthermore, staff showed

an increased interest in students' *observations* and *reflections*, prompting the researcher to share them for each video. Same as in the first staff shared review, four clips were shown, belonging to Martha (TA) and Claire (CT), which were involved in the last filming sessions.

a) Reviewing Draft 1 of the ESDA principles

Draft 1 was introduced at the beginning of the second staff shared review and received positive feedback, staff expressing that it represents a 'spot on' (Anne, AHT) description of their practice. A conversation was held regarding *Principle 2. Give encouraging, but not patronising feedback,* sparked by an observation made by Martha (TA): 'it [the approach] is gonna make me more mindful that we're not patronising our students because I think we probably do'. All staff nodded in agreement to this statement, and shared how one's way of talking can come across as patronising, even though 'it's endearing, you're doing it from a good place to try and be positive' (Claire, CT). For Anne (AHT), this happens at times because of her previous experience: 'sometimes I slip into old primary school ways because I've been a primary school teacher for many years', and for Claire (CT) 'it's natural': 'I call everybody "darling", (…) and that's what I do in my everyday life'. Sometimes, this approach can be prompted by the students themselves: 'Abi does it [talks to Katie like she's a child] an awful lot, doesn't she?' (Julie, TA), and Katie prefers this because 'she doesn't wanna grow up' (Martha, TA).

All staff shared an increased self-awareness of their approach and way of talking to students, which 'actually on reflection it could come across as patronising', demonstrating their increased trust in the process by using terms such as 'reflection', and 'awareness' introduced in the first shared review. Staff shared how 'hard' (Anne, AHT) it is 'to reign it (way of talking) in' (Claire, CT), but according to Anne (AHT), 'it's about how you use a word as well' and the tone this is said in. Furthermore, she shared how:

> *'I don't worry about those terms of endearment so much, for myself, I worry more for the "come on we're going to do this", when someone's 19 and I'm telling them "we're going to do this and you're gonna be happy", I don't always give them the opportunity to say "really miss? do I have to? is this important for us? is this really what we need to be doing?"' ANNE (AHT)*

In response to this concern, Claire (CT) shared how she tries to tackle it in practice: 'I try really hard to remind myself to say: "we're doing this because of your accreditation or whatever", to try to give it a reasoning'. This was followed by an interesting insight from Anne (AHT), whose work is now mostly with students with more profound learning difficulties than those involved in the study: 'it's so much harder with extended because you can't put it into context and they're so used to being done to that the expectation is that they will be, so it's really hard to empower them'.

b) Development of existing themes

As previously discussed, staff were confident reflecting on each other's practice, with 34 references coded to *11) Positive reflection on peer practice*. Furthermore, a development to this theme, noted by the researcher, was staff's ability to encourage each other through the positive reflection on peer practice when concerns were shared about one's own practice. After watching her first clip, Martha (TA)'s initial observation was: 'I sounded patronising to Katie, didn't that sound patronising?'. All other staff responded by shaking their heads and Anne (AHT) asked to watch the clip again, to provide more specific feedback. All three members of staff provided positive reflections on Martha (TA)'s way of interacting with Katie, some examples including: 'You weren't talking to her in any other way than you're talking to us' (Anne, AHT), 'I don't think you sounded patronising at all' (Claire, CT), 'you got her attention, and she was listening to you, taking on board what you were actually saying to her' (Julie, TA), which also led to the development of theme *4) Age appropriateness.* Martha (TA) appeared reassured by this, and concluded that the aspect she considered a flaw in her practice 'it's a positive'.

12) Reflection on the VIG process and moving it further had a further 13 references coded. Julie (TA) shared a conversation she had with Claire (CT) following the first shared review, during which she realised that 'it was nice, and I didn't say it on Friday, but afterwards I thought it's nice for us to see how each other works with the students [all staff nod in agreement]' (Julie, TA). When reflecting on her feelings during her filming, Martha (TA) shared that 'I think I'm very aware that the camera's on me', in regards to her first clip. This led all staff to discuss and share their experiences of being filmed: 'I forgot, I did', 'I got lost in the

conversation' (Anne, AHT), whilst Claire (CT) 'was trying to keep everybody under control', as she had a much busier environment during her filming.

When reflecting on her second clip, Martha (TA) shared another worry: 'my voice sounds really loud though, I don't know whether it's too loud maybe?', which was again handled in a positive and encouraging manner by the other staff, without any prompting or modelling needed from the researcher. This showed an immediate increase in her self-confidence through her reflection on her interaction with the students in the second clip: 'I was quite happy with that, it was normal, there was no patronising, it was just normal, engaging with the students and they were engaging with me, so yeah, happy'. Furthermore, Martha (TA) demonstrated an increase in her positive reflection skills on peer practice, through the contributions made in relation to Claire (CT)'s clips which were subsequently watched.

A few interesting additions were made in relation to *5) Staff self-awareness*, such as Martha (TA)'s reflection on her wellbeing during the filming: 'I felt myself getting cranky and that's not good for the students and your language does change and your tone does change, and you get cross with yourself then'. When the researcher questioned whether she is referring to self-awareness, she stated: 'actually, my self-awareness is pretty good', to which Anne (AHT) jokingly said: 'mine's borderline rubbish', and all staff laughed together.

The theme of *2) Guiding* was also further developed during the second staff shared review, in particular in relation to Claire (CT)'s clips. A similar positive and encouraging approach was taken by the remaining members of staff when Claire (CT) shared concerns regarding her practice. Regarding her first clip she explained that: 'I think if it was another student and not him, I wouldn't give as many verbal prompts, but he was lacking in confidence of how to do it himself'. The other three members of staff positively encouraged Claire (CT), by sharing their views on how she did the best she could given a busy environment with several students involved in different tasks. Martha (TA) made a suggestion of sitting down with James and going through the steps of the task first, and Anne (AHT) explained how difficult it is to find the right balance between the amount of support given and allowing students the chance to experiment, which led onto the development of a new theme discussed below. Another interesting idea added to this theme was put forward by Anne (AHT), regarding students' need

for permission: 'he needs permission to make the decision to go and move the bag, even though he knows what to do he wouldn't have done it because he seeks permission'.

Table 28. References made by staff to the themes developed in the First and Second Shared Review

Theme	First Shared Review	Second Shared Review
1) Giving the chance	5	5
2) Guiding	26	9
3) Giving positive feedback	3	
4) Age appropriateness	16	14
5) Staff self-awareness	4	9
6) Confidence	16	3
7) Tone of voice	3	7
8) Responsibility	16	
9) Open conversations	25	
10) Giving time	4	
11) Positive reflection of peer practice	34	34
12) Reflection on the VIG process	23	13
13) Reflection of own practice	37	18
14) Reflection on past and future practice	30	2
15) Following students' initiatives		6
16) Giving opportunities for real-life experiences		5
17) Balance between scaffolding and experimenting		4

c) New themes

The second staff shared review brought the development of three new themes, all of which represented important insights, which were subsequently added to Draft 2 of ESDA principles (Table 28). The first new theme was *15) Following students' initiatives* (6) which brought together *observations* and *reflections* regarding the aspect of teaching practice through which staff follow students' lead, both in work-related tasks and other informal ones, such as open conversations. An initial observation was made by Claire (CT), who highlighted that despite being engaged in an interaction with Katie, Martha (TA) 'also acknowledged [James], because obviously [James] needs reassurance', during her first clip. This strength in her practice was highlighted again in regards to her second clip by all three members of staff. This occurred in response to Martha (TA)'s insight on how she felt the interaction with the students went: 'I

was quite happy with that, it was normal, there was no patronising, it was just normal, engaging with the students and they were engaging with me, so yeah, happy'. Sensing the modesty or possible lack of confidence in her practice, Anne (AHT) reinforced her skill in following students' initiatives:

> *'when you think about it in a schooly kinda situation, if that was a not so empowering situation, you might've said: "[Abi], I'm not dealing with you at the moment, you can go and sit at the table" [all staff agree] that's what you would've done if you were not going to be empowering, shut her down because that's not where you were in terms of managing it, that's not part of it, do you know what I mean?' ANNE (AHT)*

Both Claire (CT) and Julie (TA) contributed with insights to reinforce this idea: 'you would be directing more, in the sense of exactly what James was saying, put this bag in the or put it there, or rather than saying you know' (Claire, CT), 'you were giving them freedom to choose really, and with [Abi] you can hear her in the background, but you didn't blank her and you carried on and just encouraged her' (Julie, TA). The development of staff's reflective skills, trust in the process, and abilities to encourage one another were notable at this point in the shared review.

A second new theme that was developed was *16) Giving opportunities for real-life experiences* (5), which represented the importance given by staff to provide students with experiences in school that are similar to those they will experiences in their adulthood. This idea represented a significant insight into the school's ethos and approach. An important observation was made by Claire (CT), when explaining the busy environment during her filming, and why a sit-down discussion about the meal, as suggested by Martha (TA), would not have been suitable: 'we want them to be making a simple meal as if it was at home, we want the more home environment'. Another important reference to this theme was an observation made by Anne (AHT), regarding Martha (TA)'s second clip: 'to me that's like people at home or wherever, sharing a task, with one person having a bit more knowledge of what needs to be done'.

The theme of *16) Giving opportunities for real-life experiences* led onto a more in-depth discussion about the difficulty in finding the *16) Balance between scaffolding and experimenting* (4), which was coded as a separate theme. This referred to the difficulty staff encounter when trying to provide students with experiences where they can have a go and

experiment, whist also providing appropriate scaffolding to support their development and self-confidence. This was highlighted by Claire (CT) when reflecting on her own practice regarding the amount of prompting given to James during his cooking task:

> *'it's really hard when you're doing that sort of task, you do need to be able to enable a student to demonstrate knowledge, even if it's knowledge about cheese on toast, and you could let them go and fail,(…) or you could scaffold with the questioning, that's difficult in terms of the age-appropriateness, but it's cognitively where [James] is in terms of his understanding of that particular task, so it's really hard where you draw the line between "okay go and have a bit of an experiment and feel great and come back with something that you can't eat" or "let's put the steps in and okay I know that you're 19 and I know I'm saying this", but you do have to demonstrate some understanding because he's not confident and he's showing that with his body' CLAIRE (CT)*

This was reinforced by Anne (AHT), who agreed with the difficulty of this in practice:

> *'it's a fine line, we're doing that all the time, we're analysing that all the time and sometimes you get it right and sometimes you don't and for James if he got his product, his self-esteem was up'. ANNE (AHT)*

The new themes developed in the second shared review demonstrated staff's deeper understanding of the meaning of self-determination for their students, increased trust in the VIG process and its value, and development of peer relationships through the positive feedback on each other's practice.

6.3.3. **Draft 2 of the ESDA Principles**

Table 29. The themes of the second staff shared review grouped to generate Draft 2 of the ESDA principles

Staff second shared review theme	**New principle**
Giving opportunities for real-life experiences Balance between scaffolding and experimenting	Provide opportunities for real-life experiences
Following students' initiatives	Acknowledge and respond to student initiatives

The first five principles developed as part of Draft 1 remained the same following discussions with students and staff during the second shared reviews. Two new principles were added, as

seen in Table 29, in accordance with the new themes developed during the second staff shared review.

Table 30. References made by students and staff to Draft 2 of the ESDA principles

Principle	**First Shared Review**		**Second Shared Review**	
	Students	**Staff**	**Students**	**Staff**
Provide opportunities for students to do things for themselves: - Give chance to try - Allow for thinking time - Give clues, not answers	40	39	28	23
Give encouraging, but not patronising feedback	27	3	1	
Use age-appropriate language and tone of voice	6	44	4	21
Trust and give responsibility	9	16		
Emphasise personal strengths to increase confidence	4	16	6	3
Provide opportunities for real-life experiences				9
Acknowledge and respond to student initiatives				6

Similar to the first shared review, *Principle 1* received most attention (51) in the second one, which could have also been due to the work-related tasks in the clips shown. Similar contributions were made as in the first shared review, with most to *Principles 3* by staff (21), and fewer contributions for *Principle 5* (3), *Principle 6* (9), and *Principle 7* (6).

6.4. Third cycle

6.4.1. Student Shared Review

The third and final student shared review was 32 minutes long and took place on a different morning, to avoid any reluctancies that might appear from students being taken out of the same lesson every week. Only three students were present at this meeting, James, Micah and Alex, as both Katie and Abi were unwell.

Table 31. Observations and reflections made by students across the three shared reviews

Student	First Shared Review	Second Shared Review	Third Shared Review
Abi	37	36	absent
Alex	24	29	52
James	36	19	63
Katie	22	20	absent
Micah	17	15	50
Total	**136**	**119**	**165**

All three students were equally involved in the discussion, and seemed more comfortable, relaxed, and engaged. They all demonstrated increased confidence in the VIG process and took ownership of the language used in the ESDA principles. All students were involved in the reflection of the clips, as well as frequently sharing examples that related to an aspect of the staff practice discussed. This was a new development in the final shared review, as well as students appearing even more comfortable with the researcher, and being interested in future collaborations. Four clips were shown, one belonging to each member of staff taking part in the study, which have been taken from the second round of filming. The decision to show one clip instead of two was taken by the researcher in order to adhere to the VIG recommendation of having three cycles, and not to overwhelm the students in the final one.

a) Reviewing Draft 2 of the ESDA Principles

The researcher presented each student with a copy of Draft 2, then read and explained each principle. Although students were familiar with the first five principles from the second shared review, the researcher wanted to offer them another opportunity to make any comments or suggestions for amendments. All three students reflected positively on the principles from

Draft 1, making comments such as: 'excellent! really good' (James), 'useful' (Alex), 'more helpful than meets the eye' (Micah). An interesting development was Micah's question 'have you got a clue?', when he was unsure of what the researcher was asking, which showed his familiarity with the language used and discussed during the previous shared reviews. Similarly, when discussing *Principle 4. Trust and give responsibility,* James explained that Anne (AHT) 'she really did [trust them], cause we're 18', showing understanding of the reasons behind the principle.

The students also reflected positively on the two new principles added in Draft 2, sharing stories and impressions from work experience in response to *Principle 6. Provide opportunities for real-life experiences*, and positively commenting, 'that's very important' (Micah) in relation to *Principle 7. Acknowledge and respond to student initiatives.*

b) Development of existing themes

The third shared review showed that students were not only growing in confidence regarding their ability to reflect on staff practice, but also that they were able to transfer that skill to peer practice. James demonstrated this when looking at Anne (AHT)'s third clip, where he observed that '[Abi] was helping me to find the words and that', and then reflected: 'she's really helpful [Abi] is'. Micah followed this with: 'she's really good at organising all sorts of words, and she chooses the words that are there on the table and she choose the words that are the most worthy for her'. Although Abi was not present in the third shared review, it was notable that the students were able to show such a development of their reflective skills.

The *observations* and *reflections* regarding Anne (AHT)'s third clip also brought significant developments to *7) Trust and give responsibility*. This was initiated by an *observation* made by Alex that '[Abi] was leading it [the discussion]', to which both James and Micah replied in agreement. Micah expanded that Anne (AHT) 'just organised the words for us though, but not just that she also literally talks about how you feel about people', and James agreed that 'she's done a really good job'. James showed again his acquirement of the language, through his explanation that this opportunity was good for Abi 'because she gets to do more independent stuff, [Abi] does'. All students described positively their feelings when given trust and

responsibility, such as 'proud of course, and really confident' (Micah), 'really good and excited' (Alex).

Similar to the previous shared review, all students continued to express positive feelings towards the clips and the teaching practice shown, contributions being made to themes *8) Positive thoughts about the clips* (3) and *9) Positive feelings* (4). A few further contributions were made to the development of themes of *2) Tone of voice* (8), and *3) Support with work* (5). A notable reflection was made by James, when discussing the topic of the conversation in Anne (AHT)'s third clip regarding people's opinions when they first meet them compared to those when they get to know them better. He shared his experience of meeting Saul and how 'when he came he was a bit shy, but then I introduced him to people'. This is an interesting reflection to note as it mirrors that discussed in more detail by staff during the first shared review, regarding James' increased confidence since given the responsibility to welcome and support Saul who was new to the school.

Table 32. References made by students to the themes developed across the three shared reviews

Theme	First Shared Review	Second Shared Review	Third Shared Review	Total
1) Working independently	10			10
2) Tone of voice	6	4	8	18
3) Support with work	11	4	5	20
4) Giving time	1	3	1	5
5) Guiding	18	21	4	43
6) Supportive environment	4		1	5
7) Trust and give responsibility	9		21	30
8) Positive thoughts about clips	17	5	3	25
9) Positive feelings	27	1	4	32
10) Confidence		6	3	9
11) Positive relationships with staff			26	26
12) Reflections on the VIG process			35	35

c) New themes

Two new themes were added to students' shared reviews as a result of the discussion had in the final one. The first theme was named *11) Positive relationships with staff*, and was made up of 26 observations and reflections regarding students' way of relating to staff, of developing relationships with them, and positively reflecting on their approach to achieve this. Ten reflections were coded in relation to Martha (TA)'s third clip, as students commented on her approach being 'a bit youth-like', 'more like young age' (Micah), and 'absolutely hilarious' (James). The three students also expressed positive feelings regarding opportunities to have open conversations with staff, as demonstrated by Claire (CT)'s third clip, because 'they're so good, you get to spend more time and talk to them', and 'it is so nice' (James). Furthermore, Micah noted that having open conversations whilst working, as shown in the clip of Alex working on a craft and talking to Claire (CT), 'it might be a bit too complex', to which all agreed.

An important development in the third student shared review was the theme *12) Reflections on the VIG process* (35), which appeared in several forms, including students' feelings towards it, its meaningfulness, and ideas for future collaborations. All students reflected positively on the experience of VIG, 'it was so good' (all agreed), and 'really helpful' to reflect on their staff's practice. Micah inquired about possible collaborations for next year, and all three students suggested that the researcher films them during their work experience at the stables. A notable reflection was made by Micah regarding Martha (TA)'s third clip of animal care in which Alex was involved: 'I don't know if I'm being too critical here, but I don't think it's a good idea to be rubbing your lips there'. The expression of his concern regarding being too critical demonstrated his understanding and familiarity of the positive reflection used in VIG, which was also positively received by Alex.

6.4.2. **Staff Shared Review**

The third and final staff shared review was 40 minutes long and took place on a Friday at lunchtime, following the student shared review earlier in the week. Only three staff were present at this meeting, Julie (TA), Anne (AHT) and Claire (CT), as Martha (TA) was unwell.

Table 33. Observations and reflections made by staff across the three shared reviews

Staff	**First Shared Review**	**Second Shared Review**	**Third Shared Review**
Julie (TA)	34	15	33
Anne (AHT)	65	30	36
Martha (TA)	38	30	absent
Claire (CT)	19	29	42
Total	**156**	**104**	**111**

Staff were most engaged in this third shared review, demonstrating increased confidence and trust in the VIG process and further development of their positive reflection skills. The atmosphere appeared relaxed and comfortable for all, with few prompts or activating questions coming from the researcher. The conversation was most balanced of all staff shared reviews, with 33 references from Julie (TA), 36 from Anne (AHT), and 42 from Claire (CT). Staff also demonstrated increased confidence reflecting positively on peer practice, sharing experiences, and working together on common struggles. The Draft 2 of ESDA principles was frequently used, both in relation to the clips, as well as to reflect on past and future practice. Staff demonstrated an increased familiarity with the language, using the principles as points of references throughout the shared review. Three clips were shown, one belonging to each member of staff, in an order of their choosing.

a) Reviewing Draft 2 of the ESDA principles

At the beginning of the third shared review, staff received a copy of Draft 2 and commented positively on it, having only one suggestion to make. This was made by Anne (AHT) to add 'avoid negative language', because 'I think we do that with children with autism specifically', and led staff onto an in-depth discussion around *Principle 3. Use age-appropriate language and tone of voice.* Claire (CT) clarified that 'doesn't mean not addressing anything we need to, it just means that we consider the vocabulary we use and the word you use' and 'also the

tone' 'because sometimes you can say something positive but the tone makes it sound negative'. Julie (TA) agreed and added that 'you gotta think about what you say and how you say it', and that she has reflected on and used other staff's practice to help her interactions with the students: 'I know I've picked up on things that Anne (AHT) said or Claire (CT) said with some of the students, you know, I'm thinking that works with certain students'. Staff then discussed in detail how this principle looks in practice when working with certain students, and how their approach should be adapted to suit each individual's needs.

b) Development of existing themes

The third staff shared review brought significant developments to the theme of *9) Open conversations,* which represented one of the main themes of this shared review (24). Staff recognised the importance of providing opportunities for students to have open, unstructured conversations in the first shared review, thus they all engaged in them with the students for their second filming. Claire (CT)'s third clip showed a good example of *Principle 7. Acknowledging and following students' initiatives,* through a conversation with Alex that 'went around on this complete tangent', where she 'tried to acknowledge what he was saying, (…) but also to get him to open his thought process a little'. Anne (AHT) commented positively on Claire (CT)'s third clip: 'I think it is nice because you're actually sitting there with that Christmas tree decoration in front of you and that's just a vehicle for having what is an age-appropriate discussion'. Staff shared insights into how such open conversations are possible because the students are 'open' because they have 'the opportunity to discuss those issues', which 'it's nice because that's the way they learn to be adults' (Anne, AHT).

The open conversation in Anne (AHT)'s third clip, showed connections with the theme of *8) Responsibility* through *14) Reflections on past and future practice.* Anne (AHT) who engaged in open conversations with students both times she was filmed, shared insights into how the reflections on her first conversation led to changing the approach in the second one: 'if you remember the first one, there was nothing on the table, so I just thought that was too scary, so that's why the post-it notes came in'. Both Claire (CT) and Julie (TA) agreed this was effective for the students and provided positive reflections on peer practice:

> *'I like that, because knowing the students as I do, I think it was really nice because if you haven't had the post-its there to help, I know particularly*

> *[James] would've really struggled to think of anything and the fact that you had those there as a visual aid and a prompt, it was really good.' CLAIRE (CT)*

> *'it's good, they were all focused because they weren't all looking at an empty table, they were "oh there's something here let's have a look, what are we gonna do?", and already they're started to think.' JULIE (TA)*

Furthermore, when Anne (AHT) was being modest or too 'self-critical' (Claire, CT) regarding her own practice, Claire (CT) chose to highlight that:

> *'I think you're doing yourself a bit of a disservice if you're thinking it's just about the props, I think the way you spoke to them, and the way you communicated and you gave them, I actually think the correct amount of time to answer. And you managed [Abi] really well to enable those two to answer because actually we all know how it could all descend and actually that you got that much without it going into chaos.' CLAIRE (CT)*

Another change made by Anne (AHT) in her second filming was to give Abi a role of responsibility in the conversation as she 'knew right from the beginning that she needed to have a role in that group', which was effective as she 'was being a bit of a teacher'. The other two members of staff reflected positively on this decision because 'you [Anne, AHT] managed [Abi] really well because she needs to be having something otherwise she'll be shouting out' (Claire, CT), and Abi ' seemed to be listening to what you were asking her to do' (Julie, TA).

Staff also reflected on the theme of *4) Age appropriateness* in relation to having open conversations with students, such as Anne (AHT)'s observation about Julie (TA)'s third clip: 'you could've been talking to anybody there, they could've been 25, 14, it could've been us', and 'it wasn't you telling them what fear might be, you didn't elevate yourself in any way so you're having a very equal conversation'. Julie (TA) seemed unsure at first about her approach, but peer comments led to an increase in self-confidence, and a recognition that 'I'm learning how to have conversation more with these students because of the age and things like that, and I think it's quite nice'.

The examples of open conversations watched in all three clips also led staff to reflect on their future practice (theme *14) Reflection on past and future practice)*. The discussion around Julie (TA)'s third clip led staff to reflect on future staffing arrangements:

> *'Thinking about staffing, we need people to work down here who are talkers, as well as listeners, but talkers, who enjoy talking, because I think it would be really difficult for the students if we had people who work here who are not prepared to talk on that level with students like that, on that level' ANNE (AHT)*

To which Claire (CT) added:

> *'I definitely agree, and it has to be people that can talk on the level, not talk at, talk to, because there's a big difference isn't it?' CLAIRE (CT)*

Another theme that showed a significant development in the third staff shared review was the theme of *5) Staff self-awareness* (13). References were made to staff being aware when making mistakes or interacting with a student in a way they are not pleased with, but having the recognition that 'we're just human beings, and we're teachers, we're educators' (Anne, AHT). All three members of staff have wider prior experience working in mainstream and primary schools, so working in a Post-16 specialist setting involves increased self-awareness because 'every day you are learning, every day is a learning curve' (Julie, TA). Anne (AHT) also explained how it involved 'being reflective in what you do and what you say to yourself, (…) it's checking your language and stuff like that, I'm doing it all the time, I need to'.

Staff also shared struggles regarding the theme *1) Giving the chance*, and recognised the importance of self-awareness 'because as a teacher the hardest thing I find is not doing it for them, I find it so hard to step back and I almost feel like I physically step back to check myself to let them get on with it'. Anne (AHT) explained that this is because 'as teachers we're so used to being so heavily involved and so heavily guiding and directing', but 'that's the learning for us as it is for them, isn't it? we step back for our learning, so that we are learning how to enable them, it's as hard for us as it is for them'.

Table 34. References made by staff to the themes developed across the three shared reviews

Theme	First Shared Review	Second Shared Review	Third Shared Review	Total
1) Giving the chance	5	5	8	18
2) Guiding	26	9	5	40
3) Giving positive feedback	3		6	9
4) Age appropriateness	16	14	3	33
5) Staff self-awareness	4	9	13	26
6) Confidence	16	3		19
7) Tone of voice	3	7	5	15
8) Responsibility	16		9	25
9) Open conversations	25		24	49
10) Giving time	4		2	6
11) Positive reflection of peer practice	34	34	26	94
12) Reflection on the VIG process and moving it further	23	13	4	40
13) Reflection of own practice	37	18	30	85
14) Reflection on past and future practice	30	2	24	56
15) Following students' initiatives		6	1	7
16) Giving opportunities for real-life experiences		5		5
17) Balance between scaffolding and experimenting		4		4
18) Positive relationships			11	11

c) New themes

The third and final staff shared review brought only one new theme, which coincided with a new theme that appeared in the final student shared review: *18) Positive relationships*, with students in this case. This was sparked by an insight provided by Julie (TA) regarding students' willingness to engage in open conversations:

> *'they're quite relaxed about it, they're quite open and relaxed and they feel that they can talk about it and do you know what I mean, they're not judged and things like that, they can say openly how they feel and just talk in general and just feel quite comfortable doing it.' JULIE (TA)*

Claire (CT) highlighted that this is valuable because it contributes to strengthening relationships because 'it means that they will come to us if they're having issues', because 'the basis of us really, is having that relationship and I think that's what's really important'. Anne

(AHT) agreed with this and reinforced it: 'that's the most important thing about that particular activity, that was the important learning'.

Another important idea added to this theme was the value of staff making themselves relatable to students, in order to promote the development of positive relationships. Claire (CT) explained the importance of showing students that teachers are human, 'showing them that we're like them, that we have fears, we make mistakes and I think it's important for them to realise that for their self-esteem'. Furthermore, it has value for students' future adult lives as 'it's important they have that here in a safe environment because they are going to need to be able to make some form of independent choices in order to develop in life'. Julie (TA) highlighted that this holds importance not only for the students but also for the staff: 'every day that I'm here I'm learning that it is okay to make mistakes, whether you're a student or an adult', and Claire (CT) chooses to be open about her mistakes to encourage the ability to relate. Claire (CT) summarised this idea at the end of the shared review:

> *'I think that's actually at the core at what we do here, in the sense that we know how we want to try and develop the students, we know what opportunities we want to give them and in order to do that we have to model it ourselves, and if we want them to realise that it's okay to make independent choices, it's okay to make mistakes, it's okay to not always be right, then actually we need to show that'. CLAIRE (CT)*

To which Julie (TA) added its importance for staff as well as for the students:

> *'I think it makes us and them better people, we all learning from it and I think we can all be better people for it, I think the fact that we give them independence, we give them the change to try things, to make mistakes, I think it's all positive and it's okay, you know.' JULIE (TA)*

6.4.3. **Draft 3 of the ESDA Principles**

Table 35. The themes of the third student and staff shared reviews grouped to generate Draft 3 of the ESDA principles

Student third shared review theme	**Staff third shared review theme**	**New principle**
		3. Use positive, age-appropriate language and tone of voice
	Open conversations	8. Encourage open and informal conversations
Positive relationships with staff	Positive relationships with students	9. Make yourself relatable to foster closer relationships
	Staff self-awareness	10. Be aware of your own practice and reflect on it

The seven principles developed as part of Draft 2, remained the same following discussions with students and staff during the second shared review, with a minor addition to *Principle 3. Use age-appropriate language and tone of voice*, as seen in Table 35. Three new principles were added, as seen in the table below. *Principle 9. Make yourself relatable to foster closer relationships*, was added due to the development of a new and important theme in both student and staff shared reviews, whereas *Principle 8. Encourage open and informal conversations,* and *Principle 10. Be aware of your own practice and reflect on it,* were added as a result of significant developments of initial themes in previous shared reviews.

Table 36. References made by students and staff to Draft 3 of the ESDA Principles

Principle	First Shared Review		Second Shared Review		Third Shared Review		Total	
	Std.	Stf.	Std.	Stf.	Std.	Stf.	Std.	Stf.
1. Provide opportunities for students to do things for themselves: a. Give chance to try b. Allow for thinking time c. Give clues, not answers	40	39	28	23	10	28	78	90
							168	
2. Give encouraging, but not patronising feedback	27	3	1		4	6	32	9
							41	
3. Use age-appropriate language and tone of voice	6	44	4	21	8	32	18	97
							115	
4. Trust and give responsibility	9	16			21	9	30	25
							55	
5. Emphasise personal strengths to increase confidence	4	16	6	3	4		14	19
							33	
6. Provide opportunities for real-life experiences				9				9
							9	
7. Acknowledge and respond to student initiatives				6		1		7
							7	
8. Encourage open and informal conversations		25				24		49
							49	
9. Make yourself relatable to foster closer relationships					26	11	26	11
							37	
10. Be aware of your own practice and reflect on it		4		9		13		26
							26	

Table 36 shows a summary of all the references coded for each of the ten principles in Draft 3. In agreement with each shared review, *Principle 1* has the highest number of references coded (168), followed by *Principle 3* (115), most of which come from staff (97), which is representative of the discussions held. An interesting similarity to note is that the contributions made for *Principle 4,* 30 from students and 25 from staff, and *Principle 5,* 14 from students and 19 from staff, are fairly equally distributed between the two participant groups.

6.5. Development of ESDA principles through discussion and implementation

The aim of this stage in the data collection was to refine the ESDA principles through practical implementation and feedback from the wider staff team during site meetings. The first staff meeting attended by the researcher occurred a few days after the third cycle. Difficulties encountered due to the research context, such as staff changes at the school, various events that took priority, and communication delays, meant that the second staff meeting was held three months later. The next steps for implementation set during the second meeting were put on hold due to the Covid-19 pandemic, but a third meeting was held virtually with three of the staff members involved. This provided an opportunity for staff to reflect on the overall process of the collaboration, the impact on their practice and relationship with the students, and to consider ways to continue the implementation albeit differently than initially planned.

6.5.1. **First Staff Meeting**

Context

A few days after the end of the third cycle, the researcher attended a staff meeting for all those working in the Post-16 site of the school. The researcher gave a summary of the running of the three cycles and presented Draft 3 of the ESDA principles.

Feedback on principles

Draft 3 of the ESDA principles was positively received by the staff team at the Post-16 site. Anne (AHT) shared how the overall experience was 'a very good exercise for both staff and students', and the principles will serve as 'a reminder of best practice, so then it's embedded and becomes best practice'. Claire (CT) added that they represented their 'ethos'. Staff agreed they would like to use them as their 'guiding principles' (Anne, AHT), and to find a way to measure and receive feedback on their implementation. Claire (CT) explained to the other staff that 'the students were the ones that came up with many of the principles', as the researcher spoke to them first, thus 'the ideas came from them'.

Next steps

Staff agreed that the ESDA principles should be visible around the school, showing pride in the work and demonstrating its importance. Martha (TA) expressed that the principles 'should be based in every classroom, and every room' and Julie (TA) explained how this would remind her of what she did in the videos and would encourage her 'to reflect on' her practice consistently and work towards implementing the principles. One staff member present at this meeting, but whom was not involved in the prior phase, expressed that it would be useful to see how the principles translate into practice. The researcher suggested using some of the clips to provide examples of interactions where staff demonstrated the principles. All staff agreed this could be used as a means of staff training and also provide a good opportunity to share practice.

6.5.2. **Second Staff Meeting**

Context

The second staff meeting took places almost three months after the first. Various events and changes at the school led to delays and barriers to communication. During this time, several members of staff have been transferred to the Post-16 from other parts of the school, who were not familiar with the work done to develop the ESDA principles. However, all staff were familiar with the rationale and aims of the study as they have been involved in the questionnaires conducted in Phase 2.

Next steps

The first staff meeting concluded with a desire to display the principles across the Post-16 site and make them visible, thus in the second meeting practical details were discussed. Anne (AHT) suggested that some professional-looking posters should be created to incorporate the principles, in which she believed the school should invest in. She explained that this would demonstrate to both the staff and students involved that their contributions were valued and taken seriously. The idea of adding students' illustrations to the posters was also discussed, which would be a way of recognising their contribution in creating them. The researcher agreed and encouraged the suggestions made, and also brought forward the idea of using the draft principles at first in their current format, to see whether any changes should be made,

before creating the professional posters. Staff agreed this is the best way in moving forward and decided to enlarge Draft 3 onto A3 paper, laminate the copies, and display them all over the school. Staff agreed to implement the principles in this manner for the last two weeks of the spring term and meet with the researcher after the holiday to discuss their feedback.

Another idea that was put forward for further development was to create a simplified version of the principles, using the school's own picture communication system, for the students with more extensive needs. Staff were very passionate for this work to be transferred to these students, which highlighted its value and pride they held. The researcher was to contact the school's communication team to discuss whether this would be possible.

While discussing the principles and the collaborative work, Martha (TA) and Claire (CT) commented on the positive impact the research has had on their students' behaviour. They have been noticing an increase in their self-confidence, and in their ability to have open conversations. Furthermore, they often speak about 'the importance of having their voices heard' (Claire, CT), which is one of the most important aspects of the study.

6.5.3. **Third Staff Meeting**

Context

Following the discussion held during the second staff meeting, the researcher gave the staff two weeks to implement Draft 3, with the aim of meeting after another two weeks of holiday. During this time, the researcher got in touch with the school's communication team to begin the work on a pictographic symbol version of Draft 3, using the school's own communication system. Soon after, this work and all future plans had to be put on hold due to the worldwide Covid-19 pandemic which meant that the school was closed until the end of the school year. Due to the uncertainty surrounding the running and functioning of schools, a decision was made to put on hold any future in person data collection, and instead hold a virtual group video call with the four members of staff involved. The aims of this third staff meeting included following up on implementation as discussed during the second meeting, planning possible further steps, and gaining staff's overall views of being involved in the research study. The latter was meant to give staff the opportunity to reflect on their experiences, and for the time

being, provide a means of closure for the collaborative work. Staff's advice was also sought regarding how to best provide the same opportunity for the students involved. Three members of staff took part in the third meeting and the main ideas discussed are detailed below.

Next steps

To start the meeting the researcher provided staff with a brief summary of the work they engaged in over the previous months up to the second staff meeting. The staff were then reminded of what was discussed during that meeting and encouraged to share what happened in practice in the weeks that followed.

Claire (CT) explained that due to the uncertain and changing situation of the running of the school, the principles were never displayed as discussed. She then mentioned a discussion held with Anne (AHT) about displaying them as posters, and also using them 'as the basis for new staff' and as 'our staff induction' (Claire, CT). They believed this would be valuable to do with any staff joining the Post-16 site, in order 'to give them a very clear understanding of our ethos and how we work, how we expect staff to work with the students to enable them' (Claire, CT). Furthermore, Claire (CT) explained the value this work has because 'what came from all this was exactly how we wanted to present how we work to anyone who walks through the door and works with our students'. Martha (TA) added that despite the current climate being unsettling, 'we can still promote what [the researcher] has put in place, but it's going to be in a different way because the teaching is different'.

The three members of staff expressed their passion to continue to work on developing a symbol version to be used with the students with extensive needs. The researcher updated them on starting the work with the communication team, and Claire (CT) suggested that there are members of staff at the Post-16 site who have vast experience in using the school's communication system and working with students with extensive needs, that could help in developing this version.

Staff were all in agreement and very passionate about moving forward with the implementation of the principles. Martha (TA) explained how she is 'quite passionate about

the way these principles have been set up and I found it a wonderful thing you have done', as it has 'opened up the way I look at myself and the way I am with the students'. Claire (CT) explained that she is very keen to move to implementation because 'the principles and this work is actually too important to put on hold', despite the current climate. She also added that the new way of working in small groups ('bubbles') with the students would 'work really well together with the principles because voice and independence and developing themselves is actually exactly what we're going to be working towards'.

Another way staff decided they would want to implement the principles was by linking them to students' personal learning targets. This suggestion came from Martha (TA), which Claire (CT) found very useful as she was currently working with the students on setting new ones, and was struggling to move them away from only focusing on academic areas.

Staff were also very keen for the work to be shared with parents/carers via the newsletter, with staff working at the other sites of the school, and the governing board (Appendix 9). Claire (CT) explained how if the principles became a whole-school approach, they 'wouldn't have such a difficult job when they come up to us, because actually they would already have those skills and they already have that self-confidence and self-esteem'. She explained that is it often very difficult for staff at the Post-16 site 'to try to develop their independence and give them a voice, because they had such firm structures before' (Claire, CT). This was an interesting observation as it was one that stemmed the initial ideas for the research, before Claire (CT) was even working for the school. Furthermore, to further emphasise this, staff expressed a willingness to include some of the key words in the principles to the school's 'vision and mission statement' that is displayed on the website.

The researcher asked for staff's advice regarding getting in contact with the students and providing a way of closure for the study. Due to difficulties regarding access to technology, staff advised it would be best to provide students with a written summary and a certificate to thank them for their participation (Appendix 9).

Feedback on the study

Overall the three members of staff found the collaborative research study a helpful and positive learning experience both for them and their students. For Julie (TA) 'it was encouraging' as 'so many positives have come out of it', as she was able to see how other staff worked and overall being 'a real positive because I'd never done anything like that before'. The opportunity to share practice was valuable for the staff as they often work in different rooms with different students, and as Julie (TA) said they 'all want the same thing, but we all work in very different ways', and she would 'definitely do it again'.

Claire (CT) explained that she 'really enjoyed it', although 'it was nerve-racking at first because it's never nice to be videoed', but it 'was such a positive process'. She emphasised how valuable it was to have the students as involved as they were, and to be able to 'hear their voices', and she believes 'it would have not been as beneficial to us and help us develop our practice as much', if this focused only on staff's reflections.

For Martha (TA) being able to get feedback and share practice was also valuable, as well as being able to look at ways practice can be changed, as she is 'constantly looking for improvement on way things can be delivered'.

The researcher prompted staff to discuss the usefulness of video as a tool for reflection by inquiring if the outcomes of the study would have been the same without it. All staff were in agreement that they would have not been able to reflect and have the same discussions without the details provided through the use of video. For Julie (TA), it was more than just the way she was speaking to the students, it was about 'seeing what you were doing and what the students were doing (…) it's about the body language'. She explained that although it was 'nerve-racking having the video there', she was able to quickly shift the focus to 'being with the students and do what work you do (…) and that took over'. Claire (CT) agreed with these ideas, and added that it is valuable especially in situations where students 'might say something but their body language says something different', so by being able to watch the videos back they were able to analyse that more thoroughly. Moreover, she explained that 'without video you wouldn't notice those things [details of the interaction]' and the study

would have not been the same without the video, as 'you cannot do it any other way' (Claire, CT).

All staff agreed that equally involving the students and staff has been very beneficial to all, and the overall outcomes would have not been the same without the former's 'integral' input. Claire (CT) believes that without the students' involvement staff would have been 'making assumptions over what we think they think and how we think'. Moreover, 'it would have not been as successful without the students' involvement' and 'some of the conversations wouldn't have happened' if their voices were not considered.

When asked what they would have liked to be done differently in the development of the study, staff said that it would have been worth exploring a way of bringing staff and students together, so students can give their feedback on practice directly rather than through the researcher. Claire (CT) believed this would have helped the students' 'confidence in knowing they can tell us directly'. Staff explained that this is needed for some students more than others, as Abi and James seem confident enough to provide feedback to staff regularly, as a result of their involvement in the study.

Impact on practice

Staff explained how being involved in the study has impacted the overall practice of the Post-16 site as well as theirs as individuals. Claire (CT) and Julie (TA) come from a background of teaching much younger children, so the experience has encouraged them to think about the way they interact with the students, how they support and guide them. For Claire (CT) the change in mindset began 'before even doing the video, from having the conversation with you about what you want to do, it made me start to think about how I approach situations'. She explained that although her practice is not perfect, she is not more aware of it, as 'it [the experience] makes me think about it' and it has 'changed my practice to make me stand back a bit more and help promote them and their views'. Martha (TA) was also in agreement with this and expressed how despite working with the Post-16 students for three years she was still 'jumping in because she wanted a finished product'. All staff agreed that this is a communality of the teaching profession and a mindset that they would like to change. For Julie (TA) 'it's been a massive learning curve', because 'you forget they are young adults and they are

independent, and they can do things for themselves', so being able to see her practice on video has helped 'realise you can step back, they can make mistakes, they can have a go'.

Impact on students and relationships

Martha (TA) shared that the study has impacted the interactions at the Post-16 site, as it gave 'students a voice and a self-esteem to challenge us as adults, because they are adults as well'. Claire (CT) added that the overall experience 'helped us as a staff and helped the students and was a really positive thing to be involved in'. Moreover, 'students loved it, they loved being able to talk to us about it' (Claire, CT).

Julie (TA) explained that the impact the research has had on her relationships with the students is through the change in perspective, 'in trying to be more positive and remembering that they are young people and talk to them, not at them', and 'learning that we're equals in a lot of ways'.

The overall atmosphere at the Post-16 site is 'better because we're all a bit more relaxed', as staff have seen that they can step back, and 'sit and have conversations with them [students], just talk about things that are nothing to do with work or anything else'. Claire (CT) explained how this has 'really helped to open up and develop relationships', as students feel more comfortable now to come and speak to them when issues arise. For Claire (CT) in particular, she did not use 'to be the person they would go to necessarily, because I was the teacher and I just taught', and now she has noticed that they 'come and sit and have a chat with me about what they've been doing and open up more'. This idea of having more open conversations with the students was thoroughly discussed during the three cycles and its impact can already be noticed, as 'it brings a different relationship completely, it puts down barriers' (Julie, TA).

Martha (TA) talked about the difference she has seen in the students' communication skills, as a 'massive increase in social interaction'. This is noticeable particularly for James who used to be very quiet and did not use to express his views, 'so something is definitely working' (Martha, TA).

The idea of allowing students to make mistakes and encouraging them to be comfortable to do so by openly discussing staff's own mistakes also came up frequently during the three cycles. Claire (CT) shared how James 'loves telling me if I've done something wrong' because 'I verbalise it [own mistakes] more now'. She explained how she would have found this not very respectful in the past, but she now realises 'it's just a sign of actually acknowledging that you can communicate with someone as an equal, which is what they need to be able to do at their age'. This way of being with the students 'in turn will give them the confidence and give them the role models of saying it's okay to have strengths or weaknesses, and it's okay to ask for help and it's okay to verbalize it' (Claire, CT). She believes that this is their ethos, their 'way of being as a team and the team as the students and staff, not just staff and that's how we develop and work hard to do' (Claire, CT).

For Julie (TA) personally, promoting students' opportunities to try and make mistakes has made her 'less afraid to ask for help', and she feels she is 'growing as a person and learning more'. Furthermore, she is 'getting more confident in myself that it's okay, I can ask that question and I think a lot of that has to do with the support', which is due to the supportive and relaxed atmosphere of the setting.

Martha (TA) said she has 'seen a lot of positive feedback with the main students' following the collaborative study, which fuels her passion to extend this work to the rest. For Julie (TA), the work so far has given students 'a bigger voice' and ability to express themselves, and by carrying the work forward, they will continue to grow in confidence. Martha (TA) agreed and wanted this to go even further for the students, beyond the schools' walls and into their life as part of the community, where they can feel 'they have a voice as well'.

Staff have also noticed developments in students' levels of self-confidence, especially in speaking out about their opinions about 'you did this, or actually this helped me when you did this or that didn't help me'. Martha (TA) agreed that it encouraged conversations with the students 'about our work in practice' and overall it was 'a boost' (Julie, TA). Similarly, for Julie (TA), it was nice to see 'how the students engaged and how much they did enjoy doing it and how it brought a lot of them out of their shells'.

6.6. Chapter conclusions

The collaboration between the researcher and the group of staff and students from the Post-16 site of the school concluded with the development of ten principles that form the Enhancing Self-Determination Approach (Table 37).

Table 37. The Enhancing Self-Determination Approach (ESDA) – 10 Principles

1. Provide opportunities for students to do things for themselves:
    a. Give chance to try and make mistakes
    b. Allow for thinking time
    c. Give clues, not answers
2. Give encouraging, but not patronising, feedback
3. Use positive, age-appropriate language and tone of voice
4. Trust and give responsibility as young adults
5. Emphasise personal strengths to increase confidence
6. Provide opportunities for real-life experiences
7. Acknowledge and respond to student initiatives
8. Encourage open and informal conversations
9. Make yourself relatable to foster closer relationships
10. Be aware of your own practice and reflect on it

The participants were involved in three cycles of VIG, all including one student and one staff shared review each, during which a number of clips demonstrating best teaching practice around enhancing students' self-determination were shown and reviewed. All clips were selected by the researcher from longer videos of each member of staff engaging with one or more students in an activity related to developing their *independent living skills*, which was determined from the data conducted in Phase 1 and Phase 2.

7. CHAPTER SEVEN

DISCUSSION

7.1. Chapter Introduction

The present chapter aims to bring together the findings of the empirical research study in relation to the areas of literature and theoretical framework discussed in previous chapters. The chapter is structured in two main parts.

The first part discusses the process of the present research inquiry which culminated with the development of the ESDA principles. It addresses the first three aims of the research (see Section 1.4.1):

a. To collaboratively develop an approach to teaching practice to enhance the self-determination of students with autism
b. To demonstrate how a school's stakeholders can collaborate to empirical research and be co-creators of knowledge
c. To investigate the potential of video and the Video Interaction Guidance framework as methodological tools in developing an approach to teaching practice (Kennedy, Landor, and Todd, 2011)

The second part of Chapter Seven takes a closer look at the ESDA principles as the outcome of the research inquiry, in addressing the final research aim:

d. To analyse an emergent, practice-based approach (ESDA) in light of Self-Determination Theory (SDT; Deci and Ryan, 1985)

Thus, the ESDA principles are analysed through the lens of SDT (Deci and Ryan, 1985), with a particular focus on the Basic Psychological Needs Theory (BPNT). The ESDA principles are reviewed in how they provide the framework for creating an environment supportive of the three basic psychological needs: competence, relatedness, and autonomy.

7.2. Reflections on the process of the research inquiry

The following sections provide a closer look at the process of the research inquiry, from the initial *Identification* in conversations with teaching staff through to the development of the ESDA principles. The process of designing and delivering the *Collaboration* in Phase 3 and the outcomes it brought for the participants are as valuable as the outcome of the ESDA principles, as highlighted by Fletcher-Watson et al. (2019).

7.2.1. **The research inquiry**

The present research inquiry investigated what teaching staff can do to enhance the self-determination of students with autism in a special school setting. The relevant literature was reviewed (Chapter Two and Chapter Three) and a multi-phase participatory empirical study was conducted. The study had a mixed methods design and an action research methodology, during which a range of methods were employed, developed from emerging data, and in line with stakeholders' views. The study culminated with the development of the ten ESDA principles, in collaboration with the staff and students at the school. The paragraphs below discuss the most significant decisions taken in the research inquiry process which culminated with the ESDA principles, and their impact on the stakeholders involved.

7.2.2. **An approach to teaching practice**

The decision to focus on the development of an *approach* represents a significant one for the research inquiry, and one that began during *Identification* (Chapter 1) and was shaped and confirmed until *Collaboration* (Phase 3). The following paragraphs draw upon the development of this research decision, as well as the advantages and disadvantages of its impact.

The rationale for the research arose from staff's awareness of the need for development in the way they interacted with the students in the Post-16 setting, and to achieve consistency in their approach. Before beginning a research inquiry looking to develop an approach to teaching students with autism, it was essential to take into consideration the needs of this cohort (Section 2.4). Prompt dependence and generalisation were areas of difficulty highlighted by staff early on, from *Identification*, and are identified as areas in need of

attention when looking at the development of self-determination through the literature discussed in Section 2.4.5. Adult prompting is commonly used in interventions for individuals with autism (Sam and Hume, 2019) and careful consideration should be given to the reduction of prompting following skill acquisition to ensure generalisation and decrease the likelihood of prompt-dependence. This challenge was recognised by Sarah (DHT) in Phase 1:

> *'Some young people with autism can be very prompt dependent, so it's the challenge of school to actually develop independence, to actually develop a sense of agency and ownership over their own lives, and again independence skills have to be taught directly and generalised over a wide range of contexts, so that students can, as far as possible, understand that they can be independent.' SARAH (DHT)*

Anne (AHT) confirmed the need for the research during the interview conducted in Phase 1, where she expressed her desire to 'move staff towards a model that is reflective and that it's not about right and wrong and it's about learning new approaches'. This came from a need to learn new ways of working, to be able to grow with the students and the environments they interact with:

> *'It hasn't been like that before because we didn't have social media and IT, really in the last 10 years curriculum across the board needed to be completely changed and it needed to be informed by young people but it hasn't been, here or anywhere…the way they are learning History, Geography, any subject like that, why are we still going through all the lakes, villages and all that, we've got to think of a different way of getting young people into that and using the medium they are used to'. ANNE (AHT)*

The need for the study was further confirmed through the findings of the survey conducted in Phase 2, which highlighted the need for a consistent approach to teaching, not only in the new Post-16 setting, but across the school. Staff made recommendations for improving the existing teaching practice, including increased 'opportunities to team teach', 'sharing best practice', and 'develop training and discussion time to ensure a shared understanding'. Moreover, staff highlighted the need to place students at the centre of their teaching practice by putting 'themselves in the shoes of each child they work with' and 'listening to the needs of the pupils' (anonymous quotations from the questionnaires in Phase 2).

The systematic review *(Information)* of evidence-based research focusing on enhancing self-determination for young people with autism and/or learning disabilities highlighted that the

approach needed in the school also reflected a scarcity in this area of research. Although there is increasing evidence that instructional models, or interventions can increase the self-determination of students with autism and/or learning disabilities, they were not suited in meeting the needs of the school and its stakeholders. This was due to the overall instructional and structured ways to enhance self-determination and their implementations over a limited time. They did not address the need in the school to develop their teaching practice and achieve consistency in their approach. The findings of the systematic review however brought forth a recognition that focusing on self-determination as an educational outcome should begin earlier and be continuous (see Section 3.4.2). The role of teaching staff in the development of students' self-determination is also given little attention in the studies included in the review, however it is recognised as essential in the success of interventions (Wehmeyer et al., 2000).

Therefore, the decision to develop an *approach* rather than an *intervention* was informed by the data collected in the empirical study and the gaps in self-determination research. Phase 1 and Phase 2 confirmed the need for the empirical study, and the ESDA principles were developed collaboratively in Phase 3. The development of an approach to teaching practice in which those impacted had the opportunity to contribute, meant that this was tailored to their needs and addressed what they most valued. This however can also be seen as a disadvantage, in the generalisability of the ESDA principles. A closer analysis of the ESDA principles is provided in the second half of this chapter (Section 7.3).

7.2.3. **The development of the collaboration**

Rationale for the collaboration

The close collaboration between the researcher and the teaching staff, students, and parents/carers groups throughout the empirical study, played a key role in the present research inquiry. This stemmed from the move towards seeing educators as reflective practitioners and addressing a need for development in autism educational research.

Values of the collaboration

The present collaboration was value orientated in that it generated knowledge that addressed a significant issue for the stakeholders and their community. The process of the research inquiry developed with its collaborators, as they expanded their knowledge and abilities (as discussed in Section 4.5.1). The *emancipatory* purposes of the action research meant the creation of a space for empowerment, where both teaching staff and students were encouraged to reflect on teaching practice with the aim of developing it to suit their needs. Stakeholders were involved from the earliest stages of research *(Identification)* and had shared ownership not only of the outcomes of the research, but also of the process of the inquiry, through its *emergent* approach.

The belief that anyone can act in a self-determined manner and express their agency if given the right tools, was at the foundation of this collaboration. This translated into methodological considerations and decisions aimed at including participants from all stakeholder groups. The collaboration was also based on values of trust, respect, cooperation, and appreciation, which are drawn from the practice of VIG (Section 5.16.4).

Implementing the values

Establishing a collaborative relationship based on trust and respect, should mean that all involved have access to information and understand the process of the research inquiry and its aims. This was implemented through a thorough process of gaining access and seeking consent. The researcher was motivated to communicate the purposes and process of the research to reach all stakeholders, and to be flexible in adapting the process to be inclusive. This information was not delivered independently, but rather with the researcher present, who delivered verbal presentations during staff meetings before each phase of the research began. An open communication channel was established from the beginning, teaching staff having the ability to contact the researcher for further questions or clarifications.

A similar approach was taken with gaining assent from the students in the Post-16 setting, providing both presentations and open discussions, as well as written materials, for the students themselves as well as their parents/carers. Staff were invited to be involved during the students' presentations, thus a prior understanding of the stage of research was essential.

Although the researcher had experience working with the students and was familiar with their communication preferences, it was valuable to have staff present to support with questions and clarifications. This also contributed to showing that it was an equal collaboration, and teaching staff and students were joined together with the researcher in achieving a common goal.

Even though all measures were taken to communicate the information in an appropriate manner for all students involved, taking into consideration differences in social communication and interaction (Section 2.4.1), it is important to note that this does not demonstrate informed consent, as students' understanding and retention were not assessed. An open discussion took place at the end of each presentation to encourage students to show their understanding, but it would have been detrimental to the collaborative relationship to formally assess this knowledge.

Another important methodological decision in gaining access was to have informed consent from the parents/carers of the students that volunteered to take part in the study. This decision was not without challenges as in one instance, a student volunteered but parent/carer consent was not provided due to safeguarding concerns regarding the video recording. After a conversation with the parent/carer, the researcher suggested that the student is involved in Phase 3 but situated outside of the filming frame and only audio recorded, and consent was gained. Although this involved additional work and a minor delay, it was valuable that the research process allowed for flexibility for the bigger goal of involving all those that volunteered to do so.

Although all efforts were made to involve as many participants from all stakeholder groups as possible, making the data collection tools accessible to a range of needs, not all participants could be reached. This was particularly the challenge in Phase 2, where the questionnaire designed for students in collaboration with teaching staff and communication leads, was not appropriate for all, as it required a basic level of literacy. Although teaching staff supported the students to access the questionnaire, some acknowledged that the concepts discussed did not match students' level of comprehension, hence it was not appropriate to pursue their responses. Similarly, parents/carers with English as an Additional Language might have not

been able to access the questionnaire used in Phase 2, which due to resource limitations was not explored in detail.

The impact of the collaboration

The collaboration between the researcher and the school's stakeholders brought both expected and unexpected outcomes. Action research that is participatory, and reflective practice have both been proven to play a role in skill development (see Sections 4.5.1 and 6.5). All teaching staff involved in Phase 3 agreed that their involvement with the research was a positive and helpful learning experience (Section 6.5.3). Having opportunities to share practice and reflect on students' insights have helped teaching staff develop their self-awareness and understanding of their approach to teaching. Claire (CT) explained how the collaboration would have not been as effective and impacted practice as much without hearing students' voices. Without student input, staff might have made 'assumptions over what we think they think and how we think' and some conversations might have not taken place without the drivers from their insights (Claire, CT).

The need for sharing practice and reflection were highlighted in both Phase 1 and Phase 2, which supported the initial need for the study and the decision to use the framework and principles of VIG. In her plans for developing the teaching practice in the Post-16 site, Anne (AHT) mentioned her desire to move 'people towards a model that is reflective (…) and it's about learning new approaches', and Robert (AHT) agreed this is an area that needs addressing in staff training. The responses in the teaching staff questionnaire highlighted that this was an area in need of development noticed more widely by teaching staff, with five responses mentioning the importance of shared practice for professional development. The collaboration to the research, the use of the action research methodology and VIG which created a space for empowerment, contributed to staff's professional learning and development, which is in agreement with current literature (Brennan and King, 2022).

Although the developments in teaching practice and staff self-awareness were expected as part of the collaboration, this also had an impact on their students and their relationships with teaching staff. Providing students with the opportunity to share their views on teaching practice has led to an increase in confidence and an openness towards teaching staff. As

Martha (TA) explains: it gave 'students a voice and self-esteem to challenge us as adults, because they are adults as well'. As a result, relationships improved, as 'we're all a bit more relaxed' (Martha, TA) and it has 'really helped to open up and develop relationships' as students feel more comfortable to go to staff when issues arise. Claire (CT) also noted that students' perspective of her position changed, and she is no longer only a teacher, but someone students feel comfortable to 'sit and have chat with'. The importance of having open, informal conversations was discussed in depth during Phase 3 (see Chapter Six) which translated into practice following the *Collaboration*. According to Julie (TA) this 'brings a different relationship completely, it puts down barriers'. Furthermore, being involved in the study has helped Julie (TA) to 'be more positive' and learn that staff and students are 'equals in a lot of ways'. Similarly, Claire (CT) explained how James now tells her 'when she's done something wrong', which she would have found disrespectful in the past, but now sees it as way of communicating as equals, which can support the development of confidence.

Teaching staff also noted developments in students' communication skills and an increase in their initiations for social interaction, as a result of the collaboration. Julie (TA) explained how the collaboration has given them a 'bigger voice' and ability to express themselves and they've also shared 'a lot of positive feedback about the experience' (Martha, TA). The collaboration also helped increase students' confidence to initiate discussions about teaching practice, about what they found helpful and what could be improved, and overall 'brought a lot of them out of their shells' (Julie, TA). This unexpected impact on relationships and interactions in the school demonstrates the value of the collaborative process of the empirical study.

7.2.4. **Video as a reflective and methodological tool**

An action research methodology was chosen for the empirical study due to its emergent and iterative process of inquiry that aims to bring solutions to real problems and improve practice through a participatory approach. As Reason and Bradbury (2007, p. 4) explain, action research brings together 'action and reflection, theory and practice, in participation with others'.

The need to develop reflection within current teaching practice was confirmed through the data collected in Phase 1, particularly when discussing the areas for development. Anne (AHT)

shared how she would like to address the way teaching staff receive feedback, by shifting towards a reflective culture, that is about learning new approaches rather than what is right and wrong. This is with the aim of empowering teaching staff by having them reflect on their practice, particularly on their interactions with the students and the effects they can have, instead of receiving direct feedback. Anne (AHT) recognises that this shift in teaching practice and culture will not happen overnight, as:

> *'it takes time to empower people and sometimes it takes you not saying anything, you don't have to keep lecturing them about empowerment, because while you keep talking about it, you're disempowering them, it's a tight rope we're walking'. ANNE (AHT)*

This shift away from receiving feedback in the traditional way and a move towards reflection and shared practice were also mentioned in the staff questionnaires in Phase 2. Video was used to serve a dual purpose in the empirical study, being both a reflection and a methodological tool. As a tool for reflection, video was used as part of the three VIG cycles in the collaboration in Phase 3. For the teaching staff, video was used in the traditional approach of VIG with a group to facilitate reflections on one's own practice, as well as sharing practice with peers. However, a few adaptations were implemented by the researcher to meet the aims of the study. Firstly, the groups had a joint helping question, that was in line with the study's aims and research questions: *what are the existing strengths of teaching practice that are promoting students' expression of self-determination?* This was also to support the development of the ESDA principles which was the overall aim of the collaboration. Albeit meeting separately with the researcher, both the teaching staff and students were working towards a common goal, thus choosing separate helping questions for the two groups, or even individual ones for each member of staff would have deflected from this. Secondly, the researcher took the videos and edited the short clips used during the six shared reviews, which would typically be done by the participants in a VIG with a group intervention. Given the joint helping question and the aims of the study, as well as to allow the data collection to run in a timely manner, it seemed more appropriate for the researcher to take and edit the videos, as would be done in a typical VIG intervention with a dyad.

All teaching staff shared that the collaboration would have not been as effective without the use of video as a tool for reflection. Julie (TA) explained how they would have not been able

to analyse the details of the interaction as closely through traditional in-action observation and their discussions during the meetings would not have been as meaningful. She goes on to emphasise how the video allowed her to not only reflect on her practice, but also on how the students reacted to it, verbally and through their body language. Claire (CT) agreed with this view and added that video reflection is particularly helpful in situations where students 'might say something but their body language says something different'. This links back to the initial need for the study *(Identification)*, to support students to share their authentic views/thoughts/opinions rather than say what they believe adults want to hear. Even though teaching staff agreed that 'it was nerve-racking at first because it's never nice to be videoed' (Claire, CT), this was far outweighed by its benefits and outcomes, as Claire (CT) explained 'you cannot do it any other way'.

Video was also used as a tool for reflection for students, but in a way that is not widely used in VIG. During the three shared reviews, students were encouraged to reflect on the strengths of the teaching practice, focusing on what went well in the interaction, and their thoughts and feelings during it. The researcher used a range of prompts to facilitate the discussion and encouraged the students to reflect on the clips. It was essential for the study's aims and the ethos by which it was driven, that students were actively involved in the reflection on teaching practice and implicitly in the development of the ESDA principles.

The choice of using video as a tool for reflection did not come without challenges. As Claire (CT) previously explained, participants were aware of the presence of the camera, even though teaching staff and students were used to video-recording as a means of evidencing student progress. While teaching staff recognised this feeling of 'uncomfortableness', students did not bring it up during their shared reviews, which was likely due to the group's interest in film making and drama.

Video was also used as a methodological tool in Phase 3 (*Collaboration*). The ESDA principles were put together by the researcher, using participants' language, and were reviewed with the groups at the beginning of each following meeting. This approach was chosen by the researcher to ensure that the ESDA principles are an accurate and authentic representation of participants' voices. The shared reviews took place in consecutive weeks, which meant that

the researcher transcribed and coded the recordings over a few days with significant efforts to achieve this. Even though this methodological choice required substantial resources, its effectiveness was demonstrated when reviewing the early drafts of the ESDA principles. Both teaching staff and students were in agreement that the ESDA principles were an accurate depiction of previous conversations and encompassed authentically how they strived to work.

7.2.5. **The use of Video Interaction Guidance**

The collaboration with the two groups of teaching staff and students in Phase 3 of the empirical study involved elements of Video Interaction Guidance (VIG). VIG is an intervention based on values of respect, empowerment, trust, hope, respect, compassion, and appreciation (Kennedy, Landor and Todd, 2011). These were embedded by the researcher not only in the collaboration in Phase 3, but also throughout all interactions with stakeholders beginning in *Identification*. Furthermore, the VIG values align with those of action research and reflective practice, as well as with researcher's motivation to gather and represent participants' voices. The structure for delivering VIG was followed as recommended, with three shared review meetings taking place for each group, analysing between two to six video clips. Teaching staff agreed with the researcher's decision to meet separately with the two groups to avoid power bias. However, Claire (CT) suggested that an opportunity to have a shared review together toward the end would have been beneficial in giving students the 'confidence in knowing they can tell us directly', although this was achieved regardless, as previously discussed in Section 6.5.3.

As a VIG practitioner, the researcher also portrayed the *Principles of Attuned Interaction and Guidance* (Appendix 6). These were implemented not only during the shared reviews, but throughout all interactions with stakeholders, and were particularly beneficial in the interviews and observations in Phase 1. The first three principles: *Being attentive*, *Encouraging initiatives*, and *Receiving initiatives* were essential in the development of collaborative relationships. The phased structure of the study allowed for the collaborative relationships to be developed over time which was maximised in Phase 3. The researcher was consistently aiming to 'Give time and space' *(Being attentive)* particularly for the students, as well as being receptive to initiatives by 'Showing that you have heard' and 'Receiving with body language and words' *(Receiving initiatives).* Another way of implementing the principle of *Receiving*

initiatives was through repeating/using the other's words or phrases. This was used by the researcher both during the shared reviews with the two groups, as well as when drafting the ESDA principles. As a trained VIG practitioner, the researcher understands the value this brings when developing collaborative and attuned relationships, whilst also contributing to developing a shared ownership of the research and the ESDA principles implicitly. This was reflected in participants' positive feedback to the ESDA principles, which were 'exactly how we wanted to present how we work to anyone who walks through the door and works with our students' (Claire, CT).

Participants' reflections on the VIG process were captured not only during the third staff meeting as previously discussed, but also throughout the three cycles in the theme 12) *Reflections on the VIG process and moving it further*. For teaching staff, this theme was initiated in the first shared review, without any prompting from the researcher. Anne (AHT) described it as a 'useful tool' to spot better-than usual interactions which can be difficult in the fast-paced real world: 'that's why clips like this are good because I can say: "that's the model, that's what we're trying to aspire towards"' (Anne, AHT). This also prompted staff to discuss ideas for further developments following the collaboration, including using video as a tool for reflection in assessment and training. In the second shared review, staff reflected more on the filming aspect of VIG, how they felt aware of the camera at first, but later 'got lost in the conversation' (Anne, AHT). For students, this theme arose only in the final shared review, and included reflections on participating in Phase 3 and ideas for future collaborations with the researcher. All students agreed it was a positive and beneficial experience. Micah's reflection in the last shared review sharing his concern about being 'too critical' demonstrates his understanding of the VIG's focus on reflection in strengths.

7.2.6. **Conclusions for the reflections on the research inquiry**

The multi-phase mixed methods empirical study conducted in this thesis had an *emergent, participatory,* and *emancipatory* approach. It was driven by a motivation to establish a collaboration with those directly impacted by its outcomes, by placing their voices and experiences at the centre of the research inquiry, and ensuring throughout that its purposes align with their needs.

The focus thus became developing *teaching practice*, not changing students' behaviours, as demonstrated in the majority of the empirical evidence presented in Chapter Two and Chapter Three. The ESDA principles created provided an *approach,* not an *intervention*, as they were aimed to become embedded in the whole-school teaching practice, as a model of best practice, or as Claire (CT) puts it: 'how we wanted to present how we work to anyone who walks through the door and works with our students'.

The collaboration and the opportunity to share practice led to an increase in staff's confidence, self-awareness, and laid the foundations for closer working relationships and a more reflective practice. Students' communication skills developed, their confidence also increasing, as well as their initiations for social interaction. The role of video was essential in the success of the collaboration, in which the process was as important as the outcomes. The values of VIG and the focus on the strengths of the teaching practice, led to improved relationships, more frequent and meaningful interactions between staff and students, and 'put down barriers' (Julie, TA). These outcomes demonstrate that actively involving young people with autism in the process of research can impact their confidence, communication, and improve relationships with staff. The process in which the research inquiry was conducted thus provides a model of research driven, aligned, and centred on participants' authentic experiences, needs, and expectations.

7.3. Reflections on the ESDA principles

The ten principles of Enhancing Self-Determination Approach (ESDA) were developed in Phase 3 *(Collaboration)* of the present empirical study. The principles arose from positive reflection on existing teaching practice, through the use of video and the framework of Video Interaction Guidance (VIG).

The ESDA principles arose from current teaching practice, from participants' lived experiences, and from a desire to develop a uniform and consistent approach to teaching students with autism to prepare them for life after school. The following paragraphs consider how the ESDA principles contribute to the development of an environment supportive of the basic psychological needs, within the framework of Causal Agency Theory, that fosters well-being and the development of self-determination. This is in line with the ecological framework of self-determination, through which is conceptualised as 'the product of both the individual and the environment' (Abery and Stancliffe, 2003, p. 26).

According to Shogren et al. (2015, p. 258), Causal Agency Theory is proposed to:

> *'explain how people become self-determined, that is how they define the actions and beliefs necessary to engage in self-caused, autonomous action that addresses basic psychological needs. Causal Agency Theory represents the 'layers' of human agency that fall in between the drive to meet basic psychological needs and biological needs and the agentic self.'*

Thus, in Causal Agency Theory, the basic psychological needs for autonomy, competence and relatedness, are at the foundation of becoming self-determined. Meeting the basic psychological needs facilitates the development of *autonomous motivation* which leads to *causal agency* and *self-determination.* Shogren et al. (2019) looked at the relations between the constructs emerging from SDT (Deci and Ryan, 1985) and Causal Agency Theory for students with disabilities. Their findings suggest that addressing the basic psychological needs and promoting agentic engagement in the classroom relates to self-determination and has the potential to influence outcomes. However, further research is needed to determine the pattern of correlations, which will also come with the development of self-determination outcomes measures. Thus, it is valuable to investigate how an approach embedded in practice

(ESDA) can support in meeting the basic psychological needs of autonomy, competence, and relatedness.

In SDT, needs are defined as 'nutrients that are essential for growth' (Ryan and Deci, 2017, p. 10). Elements of social environments can support or thwart the satisfaction of the basic psychological needs, and thus impact motivation, self-determination, and well-being. Individuals cannot thrive through the satisfaction of one need alone, but rather environments should be supportive of all three basic psychological needs. Environments are characterised in SDT in terms of the extent to which they are:

> *'(1) autonomy supportive (versus demanding and controlling)*
> *(2) effectance supporting (versus overly challenging, inconsistent, or otherwise discouraging)*
> *(3) relationally supportive (versus impersonal or rejecting)'*
> *(Ryan and Deci, 2017, p. 12)*

The following paragraphs look at how the ESDA principles contribute to creating an autonomy, effectance, and relationally supportive environment for students with autism in a special school context.

The ESDA principles, developed collaboratively with teaching staff and students from existing teaching practice, outline what the former can do to support the development of students' self-determination. The collaborative nature of the research, the values driving it, and the aims of the ESDA principles, meant that the approach created was a holistic one that focused on overall teaching practice. This includes opportunities provided to students, approach to teaching and learning, and attitudes towards interaction, with an overall emphasis on developing relationships and reflective practice. The ESDA principles are designed to be implemented together for a consistent approach to teaching practice that enhances self-determination. Therefore, either directly or indirectly all ten principles can contribute to the satisfaction of the basic psychological needs for autonomy, competence, and relatedness. The following paragraphs focus on each of the three basic psychological needs and the ESDA principles that can most contribute to creating a supportive environment.

7.3.1. **An autonomy-supportive environment**

As discussed in Section 2.7.1, *autonomy* in SDT refers to the need of being the source of one's own behaviour or the need to self-regulate one's experiences and actions (Ryan and Deci, 2017). Autonomous behaviour is associated with feeling volitional, congruent, and integrated, and is in agreement with one's authentic interests and values.

The basic psychological need for *autonomy* as conceptualised in SDT was one of the drivers of the empirical study, as previously described in Chapter One *(Identification)*. Teaching staff were motivated to have a consistent approach to teaching practice that encouraged students to engage in behaviour that is volitional, in agreement with their interests and preferences, and involves minimal adult prompting. Thus, in the development of the ESDA principles, the teaching staff were motivated to address the need for autonomy. However, as explained in Section 2.4, the specific needs of students with autism should be taken into consideration when looking to support the development of self-determination through the creation of an autonomy-supportive environment.

As previously discussed, difficulties in the areas of social communication and interaction, the presence of restrictive repetitive behaviours and interests, and differences in sensory processing, can lead to an overreliance on adult prompting for children and young people with autism. The differences alone do not cause this overreliance, but rather the adult intervention to support individuals to overcome them (Hume et al., 2009; Sam and Hume, 2019). The challenges of overreliance on adult prompting were highlighted by Anne (AHT) in her interview in Phase 1, when looking at decision-making:

> *'Our young people are very well cared for and looked after by their families, but that's part of that same cycle of denying access to decision-making and so the more a young person accesses a decision-making for themselves, where they can determine their outcomes, the more likely they are to have the confidence to say: 'nah, I don't like it'. In life it's a human right to say no, and I think absolutely it should have a huge impact on their life' ANNE (AHT)*

Anne (AHT) emphasises in the paragraph above that in order for her students to be able to engage in decision-making that is in line with one's authentic interest and values, they should be provided with *opportunities* to practice this skill. Viewing both the occurrence and non-

occurrence of behaviour as expressions of self-determination is part of the ecological framework of constructing self-determination (Wehmeyer, 2003).

To this, Robert (AHT) adds that a change should also be made in *attitudes* towards decision-making, from the adults to support the students in the process, and from the students themselves to be aware that they have such opportunities and capabilities:

> *'it's even more important because then the danger is decisions are made for these young people that don't need to be made for them, they should at least have a voice even if somebody's supporting them through that and unless they know that they've got an input then they won't know, so unless we're giving them those abilities, or capabilities, then they'll never know.' ROBERT (AHT)*

Robert's (AHT) thoughts are in agreement with the first assumption of the ecological framework of self-determination that: 'All persons have a desire for and a potential to be self-determined' (Abery and Stancliffe, 2003). The skills of making choices and decisions were also viewed as extremely valuable/important to be taught both at school and at home by the majority of teaching staff and parents/carers in Phase 2 of the study. When asked about their abilities to make choices regarding different areas of life, the majority of students agreed with the statements. While most students (80%) agreed they can make choices about their friendships, around 30% agreed this happens sometimes in relation to their work, and almost a quarter disagreed with this happening in relation to their clothes. Furthermore, the majority of students agreed with statements that they are learning about making choices at school and that staff are helping them in this area. On the other hand, less than a quarter of teaching staff and parents/carers agreed that the skills of making choices and decisions are taught extremely well as part of the current curriculum (Section 5.11.1).

However, being able to make choices and decisions in agreement with one's own interests and preferences, is developed not only through the teaching of the skills and opportunities to practice them, but also through developing an increased knowledge and awareness of the sense of self. When asked about the relevance of teaching self-awareness and self-knowledge, the majority of teaching staff and almost half of parents/carers rated it as extremely relevant/important, but less than half of both groups saw it as extremely well addressed in the school curriculum. When asked to rate their self-awareness and self-knowledge through

two questions regarding knowing their strengths and 'what they need to work on', almost 80% of students agreed with the former and 60% with the latter. Sarah (DHT) explained in her interview in Phase 1 that being able to make choices and decisions are interlinked, and it is the school's responsibility to create an environment where students can practice these skills and understand they have the ability to do so.

As previously discussed in Section 2.7.1, an autonomy-supportive educational environment is one that includes opportunities for students to choose, self-direct and self-regulate their learning in a way that is meaningful and based on their strengths, interests, and curiosity (Zager and Wehmeyer, 2019). Furthermore, in such environments, student choice, voice, and ownership of learning are maximised, as well as engagement and participation. This can involve staff making learning materials easily accessible for students, providing options for recruiting interest, making learning meaningful and offering students various means to evidence their learning. According to Ryan and Deci (2017, p. 354), the highest quality learning and achievement occurs when 'students' interest and engagement in learning are supported, rather than when educators rely on extrinsic incentives and controls'.

Autonomy-supportive teachers are focused on students' points of view, initiatives, and choices (Ryan and Deci, 2017). From the perspective of SDT, 'teachers who support students' needs begin by understanding and relating to the students' perspectives', which involves 'opportunities to take initiatives in their learning and to seek out information that is relevant to their interests or assignments', choices, options, and encouraging students to take responsibility (Ryan and Deci, 2017, p. 366).

Considering the above descriptions of an autonomy-supportive environment and autonomy-supportive teaching, all ten ESDA principles contribute to the satisfaction of the basic psychological need for autonomy. However, the following paragraphs look at four of these principles in more detail and their role in providing an approach to teaching practice that addresses students' need for autonomy. These four principles contribute to creating an autonomy-supportive environment through providing *opportunities* for students to express their self-determination and through a positive change in *attitudes* of teaching staff to support students to develop their abilities and awareness.

Principle 1. Provide opportunities for students to do things for themselves:

a. Give change to try

b. Allow for thinking time

c. Give clues, not answers

The themes that led to the creation of Principle 1 were the first to arise in the observations and reflections made in both the first student shared review and the first staff shared review. These themes included *1) Working independently, 3) Support with work* (students)*, 1) Giving the chance, 2) Guiding, and 10) Giving time* (staff).

An autonomy-supportive educational environment is one in which students are encouraged to self-direct their learning in a way that is meaningful and in agreement with their interests and preferences. Reeve and Jang (2006, p. 216) identified that autonomy-supportive teachers created time for independent work and offered 'progress-enabling hints when the student seemed stuck'. Julie (TA) demonstrated this in her clips with James, where she was giving him 'the chance to have a go at working it out without giving him too much information'. The students had a reflective discussion on this approach, all agreeing that they can learn more when teaching staff 'are not giving you the answers but they're helping you' (Katie). They also agreed they prefer receiving 'clues' and guiding that help them, and, as summarised by Abi, from receiving answers they 'would learn nothing, if you don't do it for yourself'.

Although teaching staff agreed that this approach to supporting students represents a strength of their teaching practice which they would like to implement consistently, they also recognise the challenges in stepping back, and giving students opportunities to try for themselves. Anne (AHT) explains that this is hard to do because 'as teachers we're so used to being so heavily involved and so heavily guiding and directing', which can be linked back to early ideas in *Identification* and *Exploration* around prompt-dependence. Furthermore, Anne (AHT) emphasises that increasing staff's self-awareness in this area of their practice represents learning for them as professionals, as much as it does for the students: 'we step back for our learning how to enable them, it's hard for us as it is for them'.

An early study conducted on the relationship between autonomy-supportive teaching styles and intrinsic motivation, showed students perceived themselves as more competent, had higher self-esteem and were more intrinsically motivated compared to students exposed to controlling teaching styles (Deci et al., 1981). During the first student shared review (Section 6.2.1), the increase in James' self-confidence was noticeable, as a result of his own and his peers' observations and reflections. James was able to recognise that Julie (TA) was 'giving clues' and he 'almost did it [maths task] independently', which led him to state: 'I was doing really well'. This increase in James' confidence was also observed by teaching staff following the *Collaboration*, as discussed in the Third Staff Meeting (Section 6.5.3).

Principle 6. Provide opportunities for real-life experiences:

An autonomy-supportive educational environment provides students with opportunities to engage in learning that is meaningful and purposeful which can lead to an increase in intrinsic motivation, perceived competence and autonomy (Zager and Wehmeyer, 2019; Skinner et al., 2012). This is in line with the school vision which states that it aims to enable students 'to lead meaningful and enjoyable lives and to optimise lifelong opportunities' (school website).

The themes contributing to the development of this principle mainly arose in the second staff shared review which prompted a reflection on the school vision and the importance of providing students with opportunities for real-life experiences. When reflecting on clips from Claire's (CT) filming which captured students cooking a simple meal, teaching staff engaged in a conversation about the importance of creating a 'more home environment' (Martha, TA). The different approaches to introducing the task were discussed and all agreed that for best practice, an approach similar to that of a real-life experience is most appropriate.

Teaching staff also discussed the importance of finding the balance between scaffolding and experimenting when teaching life skills such as cooking. All agreed that it is valuable for students to have the space and opportunity to experiment and try for themselves (linking back to *Principle 1*), but staff should also be aware and take into consideration the impact this can have on student's confidence and self-esteem: 'it's really hard when you're doing that sort of task, you do need to be able to enable a student to demonstrate knowledge (…) and you could let them go and fail (…) or you could scaffold' (Claire, CT).

As previously discussed, almost all teaching staff and parents/carers viewed *independent living skills* as an extremely important or important area of the school curriculum in Phase 2, however nearly half stated that this is moderately to not well at all addressed. This confirmed the findings of the interviews conducted with teaching staff and parents/carers in Phase 1 (Section 5.6). For Elizabeth (P) 'life skills are just as important as qualifications' and for Barbara (P) they are 'the main thing (…) so he doesn't need anybody'. Opportunities to practice such skills should be provided outside of the classroom environment as well. For Anne (AHT), it is valuable that students are aware and have opportunities to engage in activities that 'can have an impact on the community so that they can see they can make a difference'. Furthermore, for Greta (HT), there is value in the school working with the local community in a way that benefits the students in the long-term:

> *'getting the local communities ready, there is an element of training that needs to happen with the local community, or the communities they are going to be working in, so it's not just about getting the pupils ready, it's the communities and the jobs ready and how do we support businesses to understand what it is to employ our learners and how they adapt their environments to support our learners' GRETA (HT)*

The ESDA principles contribute to creating an autonomy-supportive environment not only through the *opportunities* provided to students *(Principle 1 and Principle 6)*, but also through a positive change in *attitudes* for both staff and students. One such change in *attitudes* involves focusing on students' strengths with the aim of increasing confidence. This already exists and has been highlighted as one of the strengths of teaching practice during the shared reviews, but including it in the ESDA principles supports staff to develop a more uniform and consistent approach to teaching.

Principle 5. Emphasise strengths to increase confidence

Research has found that autonomy-supportive teachers structured learning around students' strengths and praised signs of improvement and mastery (Reeve, 2002; Reeve and Jang, 2006).

In the first staff shared review, participants reflected on the importance of promoting students' confidence through the approach to teaching, opportunities, and through developing close relationships. An example of best practice in this area was noted in Julie's

(TA) clip and how she supported James with the maths time-related tasks, as summarised below:

> *'he would've felt great, he would've felt like "I've achieved something, like I know what I'm doing", he's very aware of his learning difficulties though, and he would have probably thought: I worked that out with lots of help, because he has low self-esteem. But he would have felt a lot better from that exchange, than had you not said: "you've worked that out". It was that little bit at the end that made him feel like "yeah, I've achieved something", cause he does lack in confidence, doesn't he?' ANNE (AHT)*

This is reinforced by Claire (CT) who adds that 'all it takes is something like that [best practice in Julie's (TA) clip]' to help with a student's lack of confidence. The students also reflected on how it feels to be supported in this way, as Micah summarised: 'it feels like they're there'.

In order for teaching staff to become aware and understand each student's strengths, emphasis should be placed on listening to students' voices, being open to receiving their questions, curiosity, and suggestions, as summarised in the following ESDA principle.

Principle 7. Acknowledge and respond to student initiatives

In an autonomy-supportive environment, active listening, encouraging student initiatives and conversations create opportunities for students to 'align their inner motivational resources with their ongoing classroom activity' (Reeve and Jang, 2006). Two of the six *Principles of Attuned Interactions and Guidance in VIG* (Appendix 6), focus on encouraging and receiving initiatives respectively. Client initiatives are an essential element in VIG, and practitioners are trained to encourage and receive them in a way that empowers and gives clients ownership of change. The way initiatives are encouraged and received contributes to creating attuned interactions and to strengthening relationships.

The researcher applied the six *Principles of Attuned Interactions and Guidance* (Appendix 6) in all shared reviews and the transfer of knowledge regarding initiatives was notable in the second staff shared review. The discussion focused on clips from Martha's (TA) first filming and her way of managing interactions with multiple students. Even though she was focused on interacting with one student, Martha (TA) showed best practice in receiving initiatives from other students, which Anne (AHT) described as empowering:

> *'when you think about it in a schooly kinda situation, if that was a not so empowering situation, you might've said: "[Abi], I'm not dealing with you at the moment, you can go and sit at the table" [all staff agree] that's what you would've done if you were not going to be empowering, shut her down because that's not where you were in terms of managing it, that's not part of it, do you know what I mean?' ANNE (AHT)*

All staff contributed with reflections on this approach which demonstrated the development of their reflective skills and their increasing trust in the VIG process and in video as a tool for reflection. This in turn led to an increase in Martha's (TA) confidence who stated: 'I was quite happy with that, it was normal, there was no patronising, it was just normal, engaging with the students and they were engaging with me, so yeah, happy'.

Conclusions

To conclude, the four ESDA principles outlined above contribute to creating an autonomy-supportive environment that can satisfy students' basic psychological need for autonomy, and to the development of their self-determination. This is achieved by providing students with opportunities to do things for themselves *(Principle 1)* and to access real-life experiences *(Principle 6)* through which they can engage in meaningful learning and autonomous behaviour that is in agreement with their authentic self. Furthermore, the ESDA principles outline the attitudes towards teaching practice that contribute towards creating an autonomy-supportive environment: an emphasis on students' strengths *(Principle 5)* and an awareness and responsiveness to students' initiatives *(Principle 7).* These principles also contribute to creating an environment that is supportive of the basic psychological need for competence, also described as an effectance-supportive environment.

7.3.2. **An effectance-supportive environment**

In SDT, *competence* refers to a feeling of effectance and mastery, a sense of confidence in interacting with the environment (Ryan and Deci, 2017). It is manifested through an inherent striving and curiosity, but is readily thwarted in environments in which negative feedback is pervasive and in which challenges are too difficult. Engaging in opportunities to exercise, expand, and express one's capacities and skills contributes to the satisfaction of the need for competence (Ryan and Deci, 2017).

According to Ryan and Deci (2017, p. 95), 'competence is not only functionally important but also experientially significant to the self'. In an effectance-supportive environment, teaching practices encourage students to believe they are capable and competent (Zager and Wehmeyer, 2019). This does not involve a focus on skills acquisition, but rather on one's perception of oneself as competent. Optimally challenging learning based on students' interests, positive feedback, structure, and collaboration can contribute to creating an effectance-supportive environment. It is also important that teaching staff provide students with the appropriate resources and feedback to promote feelings of efficacy, as students engage with learning which they can understand and master (Niemiec and Ryan, 2009).

Studies have shown that engaging hard-to-reach students in meaningful learning and in activities outside of the classroom, can lead to an increased intrinsic motivation, perceived competence, and autonomy (Skinner et al., 2012; Ruiz-Gallardo, Verde and Valdés, 2013). Similarly, Hardré and Reeve (2003) found that students' perceptions of autonomy-supportive teaching were linked to their perceived competence and intention to stay in school.

The specific needs and areas of difficulty of students with autism (Section 2.4) should be taken into consideration when looking at competence supports. Difficulties in the area of social communication, executive function and prompt-dependency, can impact one's understanding and perception of self-competence. These should be firstly addressed through changing the attitudes of teaching staff and their perceptions of students' competence. As Hamm and Reeve (2002) found, teachers' actions had a more significant impact than their words on students' self-determination and perceived competence.

When looking at the opportunities provided to students to discuss their own education and development in Phase 2, most staff (61%) stated this was moderately well addressed, whereas around 40% of parents/carers responded such opportunities were provided either always or most of the time. In the case of student involvement in setting the EHC Plan targets, most staff stated this was 'a little' (46%), whereas parents/carers' responses were more mixed. Students' involvement in the EHC Plan meetings was reported to be even less, with most staff (43%) reporting this to be 'not at all', parents/carers' responses being again more dispersed across

the scale. Robert (AHT) explained in his interview in Phase 1 that this was a challenge the school was working to address:

> *'We could do more, I guess you argue that the preparation is we worked with the students about their learning goals and they ended up in their EHCP, so I guess it was there, but actually there's probably more we could be doing with them and raising the profile of it, the career adviser from Year Nine onwards is meeting with them and talking to them about their future goals, and there's input in that, but I could see that more generally, if you asked a student what their EHCP is and what their goals are you probably wouldn't get a very detailed answer, which is a shame, because is theirs.' ROBERT (AHT)*

The four ESDA principles discussed within the context of an autonomy-supportive environment can also contribute to an effectance-supportive one. This is achieved through the opportunities provided for students to try things for themselves *(Principle 1)* and to have real-life experiences *(Principle 6)*. In order for these opportunities to contribute to the satisfaction of students' need for competence, tasks should be optimally challenging according to each individual's needs, and appropriate resources and support should be provided to encourage feelings of efficacy. Furthermore, attitudes of focusing on students' strengths *(Principle 5)* and acknowledging and responding to initiatives *(Principle 6)* can support students to feel competent. To these, another three ESDA principles are added, which are described in the paragraphs below:

Principle 2. Give encouraging, but not patronising feedback

Providing students with positive and encouraging feedback contributes to increasing feelings of competence. This is a practice used widely and frequently across the school and was evidenced in all videos recorded in Phase 3, and displayed by all members of teaching staff involved. The use of positive and encouraging language is part of the school ethos and the overall teaching approach, which is likely the reason why it represented only a small theme in the shared reviews. This represents another way of addressing the *attitudes* of teaching staff, and while this may not represent a significant change, all agreed that it should be included in the ESDA principles for consistency purposes.

When reflecting on the feelings they had during the clips shared in Phase 3, all students agreed on having positive emotions. The researcher prompted them to reflect on their feelings during

the interactions, the support provided by the teaching staff, the way their initiatives were received, and their existing relationships. The most commonly used adjectives to describe these feelings were 'happy', 'excited', and 'supported', as summarised by Abi's quotation: 'they felt happy they got someone there supporting them'.

Teaching staff also discussed the importance of providing students with encouraging feedback and the impact this has on their self-confidence. Martha (TA) reflected on Julie's (TA) approach to supporting James with a maths time-related task, and described it as a positive approach, as she praised him by saying: 'you've worked that out'. In this context, even though James received support from Julie (TA) with the academic task, her feedback contributed to increasing his confidence and feeling of competence.

Principle 3. Use age-appropriate language and tone of voice

In an effectance-supportive environment, students are given feedback that contributes to them feeling capable and competent. To enhance its impact, this feedback should be provided in a manner that is age-appropriate, both in language and tone of voice. The two main themes that contributed to the development of this principle also represented significant points of discussion during the shared reviews: *4) Age appropriateness* and *7) Tone of voice*.

Teaching staff discussed the challenges in finding the balance between interacting with the students age-appropriately as young people, but also in a way that meets their communication needs. This included looking at the language used, reflecting on one's attitudes during the interaction, the way tasks are introduced and how they are made meaningful, all with the overall aim to empower. Teaching staff should take into consideration not only the differences in social communication and interaction of students with autism, but also their additional needs, such as learning disabilities, which are common amongst students in the school.

In the first and final shared review, teaching staff reflected on the strengths of their practice in this area. Anne (AHT) viewed Julie's (TA) approach to supporting James 'age-appropriate, more sort of teenager', through her explanation that the content of the task will be revisited later with the class teacher. Anne (AHT) also highlighted that challenges can appear when 'you

have to lead someone to understand a concept', and when that takes priority over having an age-appropriate interaction. This re-emphasises the importance of reflection and self-awareness for the teaching staff as indicated in *Principle 10. Be aware of your own practice and reflect on it*. This challenge was also highlighted by Sarah (DHT) in Phase 1, as teachers are focused on moving students from one assessment point to the next, which she described as 'a culture which we're almost forced to participate in because of the school league tables and the agenda accreditation'. Sarah (DHT) added later on in her interview that in order to create an environment that is optimally challenging for each student, 'teachers need to be empowered to take risks, and not be frightened of things going wrong'.

Both Julie (TA) and Anne (AHT) displayed examples of best practice when having open conversations with their students, through using age-appropriate language, topics of conversation, while also providing them with real-life experiences. Anne (AHT) explains her approach to the group conversation in her first filming:

> *'that's the kind of conversation they need to have now, that's age-appropriate, it may not be skills-appropriate, but they've got to experience it, even if it feels uncomfortable, and even if it feels like "where am I, where's my direction, where's my scaffolding?", actually in the world, in life, they're gonna find themselves like [Katie], going for dinner with her cousins waiting for someone to ask her a question. So, what I did there, I purposefully didn't do the props, didn't do anything, I just wanted to say: this is what 19-year-olds might do.' Anne (AHT)*

While Anne (AHT) made a conscious choice to provide the students with an age-appropriate experience, Julie (TA) was not feeling confident in her open conversation on the topic of fears, with Abi and Alex, which was prompted by a newspaper article. Positive reflections from peers helped increase Julie's (TA) confidence and her overall perspective of her practice shifted to being more positive, to recognise that she is learning with the students, while also enjoying such interactions.

Using age-appropriate language and tone of voice was an important point of discussion for the teaching staff, and whilst they all agreed a shift in *attitude* in this area was needed, challenges are likely to arise due to the culture of the current teaching practice. In order to increase students' feelings of competence and capability, a change in *attitude* is needed not

only in the way teaching staff interact with the students, but also in trusting them and giving them age-appropriate responsibilities as outlined by the following principle.

Principle 4. Trust and give responsibility as young adults

Trusting and giving age-appropriate responsibility to young people can contribute to increasing their perceived competence and capability. In the staff shared reviews, the observations and reflections that led to the themes constructing this principle were closely linked to those of *Principle 3. Use age-appropriate language and tone of voice*. The discussions focused around providing students with opportunities to be trusted to take responsibilities for activities appropriate for young adults, including outside the curriculum and out-of-school hours.

One example arose during Anne's (AHT) second clip, during which students suggested organising an after-school or weekend event, and the former explaining they would be responsible for running it. Students shared their excitement towards having such an opportunity, sharing they felt 'really good' (Alex), finding it 'kinda overwhelming but at the same time calm because you have that, they trust you with the place' (Abi).

Anne (AHT) expressed her motivation to increase opportunities for students to be trusted and to take responsibility in her interview in Phase 1, where she used the example of allowing students access in and out of the Post-16 site: 'I want them to be trusted that they won't fob their way out unless they have to, because that for me is a step towards college, we have to trust them'. Greta (HT) also addressed the importance of allowing students to take responsibility, in this case in the area of self-regulation. She explained how both teaching staff and parents/carers often 'step in too quickly, because we don't want anybody to be in pain' and that 'takes away the responsibility from them [students] for fixing the problem' and 'we create a dependency'.

Conclusions

To summarise, the ESDA principles contribute to creating an effectance-supportive environment that fosters the development of self-determination. This is achieved through the

attitudes of staff that are aimed at increasing students' feelings of competence: through encouraging feedback *(Principle 2)*, and age-appropriate language and tone of voice *(Principle 3)*. To these, age-appropriate opportunities, through which students can experiences feelings of trust and responsibility *(Principle 4)* are added.

7.3.3. **A relatedness-supportive environment**

The basic psychological need for *relatedness* refers to feelings of belongingness, of being socially connected, of caring and being cared for by others (Ryan and Deci, 2017). Relatedness is about feeling significant and connected to others, and also about contributing and giving to others. Satisfying the need for relatedness facilitates internalisation, as people are likely to take on the values and practices of individuals they feel connected to (Niemiec and Ryan, 2009).

Niemiec and Ryan (2009, p. 139) explain that relatedness in the classroom is 'deeply associated with a student feeling that the teacher genuinely likes, respects, and values him or her'. When such behaviours are displayed, students are more likely to 'exhibit identified and integrated regulation for the arduous tasks involved in learning', whereas those that feel disconnected are more likely to respond to external contingencies and controls (Niemiec and Ryan, 2009, pp. 139-40).

Strategies for supporting relatedness include 'conveying warmth, caring, and respect to students' (Niemiec and Ryan, 2009, p. 141). In an unpublished study conducted by Ryan, Weinstein and Schultz (Ryan and Deci, 2017), children who received a weekly child-centred play session with an adult increased their enthusiasm and school-related attitudes.

According to Zager and Wehmeyer (2019), an environment that is supportive of the need for *autonomy* through recognising students' strengths, emphasising interest and volitional action, as well as *effectance-supportive*, through promoting feelings of competence and capability, is likely to also lead to a feeling of belongingness. When looking at the opportunities provided to discuss students' aspirations, needs, and support (as outlined in the *2015 SEND Code of Practice: 0 to 25 years*), most staff (46%) stated that this was moderately well addressed in the current curriculum, whereas a large percentage of parents/carers (39%) were not sure.

The development of the ESDA principles showed that staff were motivated to have such relatedness-supportive discussions with the students, and were able to recognise the value and impact they can have.

Thus, the seven ESDA principles discussed in the above paragraphs also contribute to creating a relatedness-supportive environment. Of particular importance to note in this context are *Principle 2. Give encouraging, but not patronising feedback*, and *Principle 5. Emphasise strengths to increase confidence*. The emphasis on having a positive, yet age appropriate approach to interacting with the students, while focusing on individual strengths, contributes to conveying respect and care for the students. Similarly, *Principle 7. Acknowledge and respond to student initiatives*, provides relatedness supports as identified by Haerens et al (2013). To these, the final three ESDA principles are added, which contribute most to meeting students' need for relatedness, and are described in the following paragraphs.

In the context of both competence and relatedness supports for students with autism, it is important to acknowledge their differences particularly in the area of social competence. Differences in social communication and interaction have been identified since Kanner (1943), but this is not to say there is a deficit in the motivation to experience human relationships (see Section 2.4.1). A recent systematic review conducted by Cresswell, Hinch, and Cage (2019) showed that most adolescents with autism had a desire to form friendships and experienced loneliness when that was not met. It is also essential to bear in mind the *double empathy problem*, a theory which acknowledges the challenges in understanding one another between an autistic and a non-autistic individual (Milton, 2012). It is a double problem, as is experienced by both partners in the interaction and not located in one individual. The remaining ESDA principles contribute to creating a relatedness-supportive environment.

Principle 8. Encourage open and informal conversations

The observations and reflections coded to the themes that created this principle, arose in relation to providing students with real-life experiences to support the development of their social skills, with the aims of preparing them for life after school and fostering closer relationships with teaching staff.

Anne (AHT) provided examples of open and informal conversations in both filmings, although her approach to framing them was different. In the first filming, no resources were used as Anne (AHT) was cautious of being patronising. All staff agreed that while this was a valuable, age-appropriate experience for the students, it also put 'huge pressure' on them as 'that's their area of difficulty is conversation' (Julie, TA). In the second open conversation, Anne (AHT) changed her approach by using post-it prompts and giving Abi a distinct role in leading the conversation.

Anne's (AHT) initial example of having an open conversation prompted Julie (TA) and Claire (CT) to do the same for their second filmings. Anne (AHT) highlighted how during Claire's (CT) clips, even though the activity was to make Christmas decorations, it was 'a vehicle for having what is an age-appropriate discussion'. Such opportunities provide students with a way 'to learn to be adults' (Anne, AHT). They, in turn, also recognised the value in having open conversations with teaching staff, which are 'so good, you get to spend time and talk to them' (James).

The opportunities provided for students to have open and informal conversations with teaching staff bring relatedness supports in that they allow the two parties to develop their relationships, foster a sense of caring and belongingness. The *opportunity* alone is not sufficient, and should be accompanied by an *attitude* that both voices are valuable in the communication. One way to emphasise the feelings of belongingness, caring and significance to others, is through an increased understanding of the communication partner, which is supported by the following principle.

Principle 9. Make yourself relatable to foster closer relationships

The themes that created this principle focused on the best practice around *attitudes* in engaging students in open conversations and the impact these can have both on relationships and on student development. Julie (TA) explains how students feel relaxed and comfortable engaging in open conversations with teaching staff:

> *'they're quite open and relaxed and they feel that they can talk about it and do you know what I mean, they're not judged and things like that, they can*

say openly how they feel and just talk in general and just feel quite comfortable doing it.' JULIE (TA)

Claire (CT) added that such conversations contribute to strengthening relationships and 'it means that they will come to us if they're having issues', and Anne (AHT) agreed that it represented the 'important learning' in that activity.

Teaching staff also identified that in order to support the development of relationships, promote open conversations and encourage a sense of belongingness, they should work on making themselves relatable to students: 'showing them that we're like them, that we have fears, we make mistakes and I think it's important for them to realise that for their self-esteem' (Claire, CT). This also contributes to breaking down barriers to support students to understand their position as young adults. Teaching staff also agreed that it is important for them to show students that it is normal to make mistakes and to get things wrong. Julie (TA) explained how this has also impacted her: 'I think it makes us and them better people, we are all learning from it, and I think we can all be better people for it'. In order for teaching staff to develop the reflective skills to make themselves relatable to their students, an increased awareness and understanding of one's own practice is needed, as highlighted in the last ESDA principle.

Principle 10. Be aware of your own practice and reflect on it

Both teaching staff and students involved in Phase 3 embraced the principles and process of VIG, and as a result developed their reflective skills. The researcher explained the ethos of the intervention of focusing on positive reflection on the strengths of the teaching practice, and the staff needed little modelling or prompting to engage in this. All members of teaching staff involved appeared comfortable and confident providing positive reflections on peer practice, with a consistent number of around 30 references being coded to this theme in each shared review. This played a significant role in developing confidence, as staff were often more self-critical of their own practice. In instances where this occurred, positive peer reflections supported the individual to recognise their own strengths and the successes of the interaction. One such example occurred in the second shared review when Martha (TA) shared that she came across as patronising in her interaction with Katie. The group asked to watch the clip again and the other members of staff provided positive reflections on Martha's (TA) practice:

‘you weren’t talking to her in any other way than you were talking to us’ (Anne, AHT) and ‘you got her attention, she was listening to you’ (Claire, CT). A similar approach was taken later on in the same shared review when Martha (TA) said her voice sounded really loud. The positive reflections from peers encouraged Martha (TA) to increase in confidence and state: ‘I was quite happy with that, it was normal, there was no patronising, engaging with the students and they were engaging with me, so yeah, happy.’

Teaching staff also used the experience of taking part in VIG to reflect on past and future practice and discuss how the skills can be applied further to develop the wider team. They recognised the value in using video as a tool for reflection: ‘this [pointing to laptop] is gonna help’ (Martha, TA), as ‘it’s nice to have the feedback and see what you’re doing and what you can possibly improve on’ (Julie, TA). Anne (AHT) also recognised the importance of reflection on practice, which is valuable for the development of teaching staff. Due to the fast-paced nature of the school environment, it is often difficult to have the time to reflect in action, ‘that’s why clips like these are good’ (Anne, AHT).

Conclusions

To conclude, all ten ESDA principles contribute to creating a relatedness-supportive environment in which students’ self-determination can develop. In this context, it is important to note the focus on opportunities for open and informal conversations between staff and students *(Principle 8)* which represented a significant point of discussion in Phase 3. Such opportunities do not only contribute to creating a relatedness-supportive environment, but also provide students with opportunities to develop their social and communication skills. The last two principles focus on staff’s *attitudes* and self-awareness, by making themselves relatable *(Principle 9)* and consistently engaging in reflection on practice *(Principle 10).*

7.4. Chapter conclusions

The present empirical study followed a mixed methods research design, an *emergent, participatory* and *emancipatory* methodology, and concluded with the final draft of the ten ESDA principles. This was to address an existing need to develop teaching practice to enhance the self-determination of students with autism and prepare them for life after school. The processes of developing the *collaboration* with stakeholders, and involving them in the

research inquiry as co-creators of knowledge, were carefully constructed to be inclusive and capture the authentic voices of all who wanted to be involved. This brought both expected and unexpected benefits, for both the staff and students, and their relationships.

The ESDA principles were developed from the existing strengths of the teaching practice, from participants' lived experiences, through reflection on own and others' actions, thoughts, and feelings. This process was framed and guided by VIG, the use of video as a reflection and methodological tool, and in close collaboration with staff and students. The ten ESDA principles contribute to creating an *autonomy, effectance,* and *relatedness* supportive environment. This means that the *attitudes* and *opportunities* outlined by the ESDA principles contribute to the satisfaction of the basic psychological needs, which are at the foundation of the development of self-determination. The study thus brings a number of contributions to both practice and theory, as well as contributing to address scarcities in empirical research, which are addressed in the following chapter.

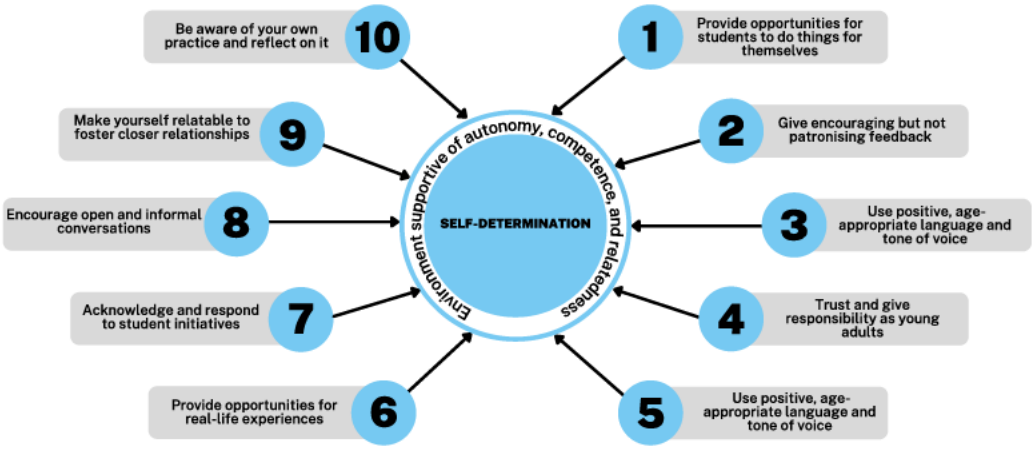

Figure 6. ESDA principles constructing an environment supportive of the basic psychological needs for autonomy, competence, and relatedness

8. CHAPTER EIGHT – CONCLUSIONS

The research inquiry presented in this thesis arose from a need to develop teaching practice in an all-age autism specialist school in England, UK, to enhance students' self-determination and prepare them for life after school. A mixed methods empirical study was conducted, structured in three phases, and following an action research methodology which was *emergent, participatory,* and *emancipatory*. Collaborating with the school stakeholders (staff, students, and parents/carers) was central to the empirical study, and drove the development of data collection tools and decisions on the research process. This final chapter brings together the conclusions of the research inquiry. Firstly, the research questions and aims are revisited in light of the data collected and the outcomes of the empirical study. Secondly, the main contributions to literature, methodology, theory, and practice are summarised. Lastly, the limitations of the empirical study are outlined, and suggestions are made for future research, concluding with final reflections.

8.1. Re-visiting the research questions and aims

One of the main aims of the research inquiry and the empirical study was to address the need in the school, that of developing an approach to teaching practice to enhance the self-determination of students with autism. To this, further three aims have been added which could be described as *participatory, methodological* and *theoretical,* as seen below:

a. To collaboratively develop an approach to teaching practice to enhance the self-determination of students with autism
b. To demonstrate how a school's stakeholders can collaborate to empirical research and be co-creators of knowledge
c. To investigate the potential of video and the Video Interaction Guidance framework as methodological tools in developing an approach to teaching practice (Kennedy, Landor, and Todd, 2011)
d. To analyse an emergent, practice-based approach (ESDA) in light of Self-Determination Theory (Deci and Ryan, 1985)

The four aims have been shaped into the following research questions:

1. How can teaching practice enhance the self-determination of students with autism in a specialist school in England, UK?
2. How can an equal partnership with a school's stakeholders be established through a participatory and emancipatory methodology?
3. Are video and the Video Interaction Guidance framework useful methodological tools in developing an approach to teaching practice (Kennedy, Landor, and Todd, 2011)?
4. How does the approach relate to the satisfaction and frustration of basic psychological needs in Self-Determination Theory (Deci and Ryan, 1985)?

The ESDA principles, developed collaboratively by the researcher and the school's stakeholders, represented a key outcome of the present research inquiry. The ESDA principles were created to address an existing need in the school, one which represented a priority for all stakeholders, that of enhancing students' self-determination. This was with the aim of preparing them for life after school, encouraging them to express their authentic views, thoughts and feelings, and decreasing reliance and influence of adult prompting. The ESDA principles were developed to answer the first research question of: *how can teaching practice enhance the self-determination of students with autism in a specialist school in England, UK?*

The decision to focus on an *approach* and on *teaching practice,* instead of an *intervention* targeting *student behaviour*, were driven by stakeholders' needs and priorities. It arose from an awareness of staff to develop their practice to learn new ways of working, 'to grow with the students', and to achieve consistency in their approach (Section 7.2.2). This need was further confirmed by the systematic review of relevant literature, which showed a scarcity in empirical evidence of this kind (Section 3.4.4).

The ten ESDA principles were developed in collaboration with staff and students in the Post-16 setting, through reflection on the existing strengths of the teaching practice, the VIG framework and the *Principles of Attuned Interaction and Guidance* (Kennedy, Landor, and Todd, 2011). They were thus embedded in practice, informed by participants' lived experiences, and shaped through reflection and discussion based on values of respect, trust, and empowerment. The ESDA principles outlined the *opportunities* that staff strive to provide

in order to support the development of students' self-determination, and the *attitudes* to engage with the students in achieving this. Although the ESDA principles were developed for teaching practice, students' voices were placed at the centre, and drove staff's discussions, and implicitly the shaping of the principles. The reviewing of the ESDA principles ensured that the language used was reflective of participants' voices, met needs and expectations, and embodied their ethos.

The process of the collaboration that led to the development of the ESDA principles was another key outcome of the empirical study, the researcher striving to establish an equal and trusting partnership with stakeholders. This was achieved by placing their lived experiences at the centre of the research inquiry, allowing them to guide the process and research decisions, and striving to capture all voices that wanted to take part. According to Fletcher-Watson et al. (2019), *participation* itself can be a goal, and matter as much as the outcomes of the research. This was reflected throughout the research inquiry, from the initial need highlighted by staff *(Identification),* through the confirmation that this need was aligned with all stakeholders' priorities for development *(Exploration* and *Investigation),* to the ESDA principles generated by reflection on the strengths of the teaching practice. Through this process, the researcher aimed to provide a model: *b. To demonstrate how a school's stakeholders can collaborate to empirical research and be co-creators of knowledge.*

The researcher was guided by the belief that anyone can act in a self-determined manner and collaborate to the research, if given the right tools. Thus, efforts were made throughout to ensure the data collection tools used and the information provided to gain informed consent, were inclusive, which motivated the *emergent* approach of the empirical study. The researcher employed different tools to inform the data collection process, through reviewing the literature, piloting, consultations, and using emerging data as a methodological tool. This emergent approach also allowed for the gradual development of relationships, through the mixed methods used, leading to the collaborative development of the ESDA principles in Phase 3. Flexibility was also essential in this process, as it allowed more participants to be included and have their voices heard. The collaboration was motivated to provide an example of how educational research can embody the values of 'nothing about us without us'. This led to the process of the research inquiry being a complex one, as evidenced in Chapter Four and

Chapter Five, but one from which important insights and reflections have been drawn that demonstrate the value in this direction of research.

The empirical study presented in this thesis was innovative not only in the way it established the *collaboration* with stakeholders, but also in its use of video and the VIG framework, values, and principles. VIG is an evidence-based intervention aimed at improving relationships and communication, which is also increasingly used for teaching staff development. While in the present empirical study the use of VIG contributed to improving relationships between staff and students, and supported the development of skills for the practitioners, its main scope was a methodological one. The study thus brings initial evidence that video and the VIG framework, values, and principles are valuable methodological tools for autism educational research. They were firstly used as methodological tools for the staff and students to identify the strengths of the teaching practice that were enhancing students' self-determination. Secondly, they were used by the researcher in the analysis of the data, through the coding of transcripts that generated the drafts of the ESDA principles. Participants recognised the value of these methodological tools which were essential in the success of the collaboration, and brought unexpected outcomes on students' confidence, self-awareness, and openness in their interactions with staff.

The analysis of the ESDA principles through the lens of the *basic psychological needs* from SDT demonstrated that the *attitudes* and *opportunities* they outlined are supportive of satisfying the needs for *autonomy, competence,* and *relatedness,* thus creating an environment appropriate for the development of self-determination.

8.2. Contributions

The present empirical study brings a number of contributions to areas of relevant literature, methodology, theory, and practice, which are outlined in the following sections.

8.2.1. **Literature**

Autism educational research

The empirical study brings valuable contributions to autism research. Autism is a life-long neurodevelopmental condition, thus early intervention is essential to ensure the best possible outcomes in developmental functioning. This translates into empirical research which is often focused on younger children. In 2009, Parsons et al., found that 'only 10 per cent of articles [on educational interventions] focused on the needs of post primary-aged children and young people' (p. 116). A more recent systematic review, showed a recent increase in autism research conducted with 15-18-year-olds, however research with those aged 19-22 remained at around only 5% (Hume et al., 2021). The empirical study contributes to the increasing need for research looking at improving the quality of life of young people with autism. Participants, however, are not 'subjects of the research', but *collaborators* in the process and co-creators of knowledge. This addresses another scarcity in autism research, that of *meaningful involvement* of those directly impacted by outcomes of the research. According to Milton and Bracher (2013, p. 61) the exclusion of participants with autism from 'meaningful involvement in social scientific research is both ethically and epistemologically problematic, and constitutes a significant barrier to impact'. The present empirical study did not only involve participants with autism, but placed their voices at the centre and allowed them to drive and shape the research process. The observations conducted in Phase 1 laid the foundation for the development of the trusting and collaborative relationships between the researcher and the students. This data, along with the data gathered through the interviews with staff and parents/carers, and the insights from consultations with expert professionals, shaped the questionnaire used in Phase 2. Considerable resources and attention were given to this process to ensure that the data collection tool was accessible to a wide range of students, giving them the opportunity to have their voices heard. Phase 3 provides a model collaboration which placed students' voices at the centre. The clips of teaching practice were first reviewed with the students, the main ideas discussed being brought by the researcher to

the staff meetings. This methodology also contributed to a new direction in autism educational research, to move away from experimental designs, and conduct research that is closer to practice and practitioners, facilitating thus the transfer of knowledge. The empirical study not only involved the close collaboration with students, but also with the staff and their parents/carers. Furthermore, the study was conducted in the 'real-world' and not in a controlled environment. This was in line with the construction of self-determination from an ecological perspective, meaning that it is a product of the interaction of the individual with the different elements of the environment.

Self-determination research

The research inquiry also contributes to self-determination literature, through both the systematic review conducted in Chapter Three, and the ESDA principle developed in the empirical study. The systematic review brought together existing evidence regarding interventions/programmes targeting the self-determination of young people aged 15-25, with autism and/or learning disabilities. The gaps highlighted by this review demonstrated the need for the empirical study, which brings initial evidence to a number of them. Firstly, the study contributes to the evidence base through its location in England, UK, as most studies included in the systematic review were based in the US. Its emergent approach and the construction of self-determination from an ecological perspective, meant that the legislative context was taken into consideration, by looking at the *SEND Code of Practice: 0 to 25 years*. The involvement of stakeholders in developing the ESDA principles is another significant contribution to this area of literature. Only one study included in the systematic review evaluated an intervention in which a teacher was involved in the development stage, and none included the young people themselves. The ethos that participants' input and views are just as important as the researcher's guided the empirical study, which brings a new perspective in self-determination research. The outcomes brought by the collaboration to create the ESDA principles demonstrate the value of conducting participatory research.

The development of an *approach* to teaching practice to enhance self-determination, in which this is constructed from an ecological perspective is also a valuable contribution to self-determination research. The ESDA principles are innovative not only in their development through collaboration and the use of video and VIG, but also in their focus and scope. Unlike

the majority of self-determination interventions/programmes, the ESDA principles are not aimed at changing students' behaviour, but rather at changing the way teaching staff interact with them and how they adapt the environment to suit these purposes. Through this, another gap in self-determination literature is explored, that of investigating the role of the teacher in supporting students' self-determination in the school context. Thus, the ESDA principles outline the *attitudes* of staff and the *opportunities* they should provide in the environment to enhance students' self-determination. As highlighted by the discussions in Phase 3, the *attitudes* and *opportunities* outlined in the ESDA principles already existed in teaching practice, the use of video and VIG framework supporting staff and students to identify them.

The ESDA principles were embedded in the teaching practice of a specialist school for students with autism, thus they were designed to meet the needs of this cohort. This is another important contribution to empirical self-determination research, as highlighted in Chapter Three, there is little evidence for studies targeting the self-determination of individuals with autism. The *attitudes* outlined by the ESDA principles arose from the areas of difficulty for the students, such as social communication and interaction, but also as they were impacted by the environment, such as prompt dependency and challenges expressing own views.

8.2.2. **Methodology**

As discussed in the previous sections, the collaboration that developed throughout the empirical study which had an *emergent, participatory,* and *emancipatory* methodology, brought valuable contributions to both self-determination and autism educational research. The values that the collaboration was founded on and the way these were implemented in practice also contribute to the development of methodologies and methods of data collection. The present research inquiry was grounded in the belief that research should be driven by the needs and priorities of those directly impacted by its outcomes, and that they should be actively involved in the process of the research and co-creators of knowledge. The researcher thus engaged in a methodology that was developed alongside the participants, and subjected to continuous reflection and confirmation that it aligned with their needs. The belief that all can contribute and have a voice motivated the careful development and significant resource dedicated to the data collection tools used. The *process* of developing the collaboration was as important as its tangible outcome in the ESDA principles.

The alignment between the process of the research inquiry and participants' needs is evidenced from its first step *(Identification)* when the researcher took the challenges faced by teaching staff and formulated the *prima facie* question. Relevant literature was consulted and critically reviewed *(Inquiry* and *Information)* to identify how the research question can be addressed. The *Exploration* and *Investigation* confirmed the need for the empirical study, shaped the data collection tools, and established the foundations of the collaborative relationships. Throughout these steps it was essential that all stakeholders had the opportunity to contribute and impact the development of the ESDA principles. The two studies looking at self-determination for participants with autism included in the systematic review (Hagner et al., 2016; Oswald et al., 2018) demonstrated the value of involving young people's families in training and support with the interventions evaluated. The present empirical study took this a step further by having parents/carers contribute to the development of the ESDA principles and become co-creators of knowledge. Collaboration and consistency are particularly important for children and young people with autism, the empirical study contributing to demonstrating their value.

The methodology was *emancipatory* not only through the careful development of inclusive data collection tools, but also through the way it used an existing intervention to suit a methodological purpose and place students' voices at the centre. VIG is most often used for adults to reflect on their interactions with children and young people in their lives, with the aim of improving relationships and communication. Some practitioners have used VIG with groups of children/young people to support the development of relationships, however there is no empirical evidence to evaluate its impact. In the present empirical study, the use of VIG with the students was unique in that they were guided to reflect on the strengths of the teaching practice, as well as their thoughts and feelings during the interaction. Giving students the opportunity to analyse teaching practice provided a unique perspective for them, thus guidance and encouragement were need particularly in the first shared review. What is important to note from these methodological choices is the impact they had on the students, staff, and on their relationships. As previously discussed in Section 7.2.3, the collaboration brought both expected and unexpected outcomes. Action research, reflective practice and VIG are all linked to teaching staff's professional learning and development. All teaching staff involved in the empirical study agreed that it was an insightful learning experience, which has

provided them opportunities to share practice, improve their self-awareness and reflective skills. In engaging the students as collaborators and co-creators of the research, the researcher provided them with an opportunity to manifest their self-determination, to share their authentic voices and not 'say what the adults wanted to hear', the need from which the research inquiry came from. The students were thus given the opportunity to share their views to improve teaching practice. For most this was a unique experience of being able to help the staff, instead of being helped. The experience of collaborating to the research thus had an immediate impact on their confidence, communication, and attitudes, one which was not taken into consideration when designing the study. Staff reported how the collaboration gave 'students a voice' (Martha, TA), bringing 'a different relationship completely' and putting down barriers (Julie, TA). Students' communications skills improved and their initiations for social interaction increased. Furthermore, students felt comfortable and empowered to initiate conversations with staff about teaching practice, what they found helpful and what could be improved. It can thus be argued that students' self-determination increased as a result of the collaboration, which was not measured quantitatively due to the impact of the Covid-19 pandemic.

8.2.3. **Theory**

The ESDA principles developed in the present research inquiry arose from the strengths of the existing teaching practice in the school, from stakeholders' lived experiences and from a desire to establish a uniform approach. The analysis of the principles through the lens of the satisfaction and frustration of the *basic psychological needs* demonstrated that they are designed to create an environment that is supportive of them. SDT conceptualises them as 'nutrients that are essential for growth', which impact the development of self-determination, motivation, and overall well-being (Ryan and Deci, 2017, p. 10). In Causal Agency Theory they are at the foundation of becoming self-determined (Shogren et al., 2015). Thus, from a theoretical perspective, the *attitudes* and *opportunities* outlined by the ESDA principles should establish an environment supportive of the development of self-determination.

The analysis of the ESDA principles in relation to the satisfaction of the *basic psychological needs* for *autonomy, competence,* and *relatedness* contributes to the development of self-determination theories. Research investigating the relationship between the *basic*

psychological needs and self-determination for students with disabilities is in its very incipient stages (Shogren et al., 2019). This research inquiry demonstrates that the concepts of *autonomy, competence* and *relatedness* are relevant in the development of self-determination for students with autism. It is essential to note that the ESDA principles were developed from existing practice, and not generated from literature or theory. The finding that they contribute to creating an environment that fosters the satisfaction of the *basic psychological needs* is a crucial one, demonstrating that the concept is a relevant one for young people with autism in a school context. The present research inquiry thus brings not only research and practice together, but also with theory, a relationship which requires further investigation.

8.2.4. **Practice**

The research inquiry brought contributions to the practice in the school, and generated significant insights for the wider teaching practice for students with autism. The ESDA principles developed met the initial need identified and answered the first research question: *How can teaching practice enhance the self-determination of students with autism in a specialist school in England, UK?* The ESDA principles outlined the *attitudes* and *opportunities* that staff should provide to support the development of students' self-determination, and provided them with the uniformity and consistency in approach sought. The reviewing of the drafts of the principles demonstrated that they were reflective of best practice that all stakeholders wanted to work towards, or as Claire (CT) explained: 'what came from all this was exactly how we wanted to present how we work to anyone who walks through the door and works with our students'.

The process of developing the ESDA principles through the use of video and the VIG framework, and the discussions generated, provide valuable insights for teaching practice for young people with autism. A significant point of discussion was focused on treating the young people age-appropriately, which can be a challenge due to individuals' level of need and the structured school context. Staff shared the difficulties that can arise when trying to balance interacting with the students in an age-appropriate manner that meets their communication needs. However, all agreed that this is valuable in enhancing students' self-determination, the videos shared during the *Collaboration* demonstrating the immediate impact this can have on

the students and their relationships with the teaching staff. Similarly, alongside *attitudes* of interacting with the students in an age-appropriate, positive, strength-based manner, *opportunities* should also be provided for students to express their self-determination.

The analysis of the ESDA principles in relation to the *basic psychological needs* demonstrates that they are aimed at creating an environment to support their satisfaction. As the *basic psychological needs* are innate and unique, there is an indication that the scope of the ESDA principles goes beyond students with autism, however this needs further exploration. The ESDA principles are also aligned with the statutory guidance outlined in the *2015 SEND Code of Practice.* The *attitudes* reflect the focus on young people 'having choice, control, and freedom over their lives and the support they have', while the opportunities are in agreement with the direction to support students 'to participate in discussions about their aspirations, their needs' (Department for Education, p. 122, 144).

The need for reflection in practice was highlighted in the interviews conducted with staff in Phase 1 and confirmed by the data gathered through questionnaires in Phase 2. This was with the purposes of sharing practice, of empowering staff, and provide opportunities to evaluate effectiveness of strategies. The discussions in Phase 3 also included the value of using reflection in practice, which generated *Principle 10. Be aware of your own practice and reflect on it*. The conversations in the third follow-up meeting demonstrated the value of reflection and the use of video, as Claire (CT) put it: 'the study would have not been the same without the video'. For Julie (TA) the use of video has helped her 'realise you can step back, they can make mistakes, they can have a go', and all staff agreed that they would like to embed this in their practice moving forward.

8.3. Limitations and suggestions for future research

Even though the present research inquiry brought valuable contributions to literature, methodology, theory, and teaching practice, it has a number of limitations which can also inform future research.

The empirical study was a small scale one, having been conducted in one school in England, UK. Although participants collaborated to the research and were co-creators of knowledge, due to resources and capacity the numbers remained low. The research inquiry placed significant focus on the *process* of developing and establishing the collaboration with stakeholders, allowing their needs and priorities to inform research decisions. Whilst this brings important contributions to literature and methodology, it can also be seen as narrowing its scope for generalisability. Participants' priorities for development, their lived experiences, the English educational legislative context, the context of the school, its curriculum, and the interactions between stakeholders, all contributed to shaping the ESDA principles. Its scope for creating an environment supporting the satisfaction of the innate *basic psychological needs* for *autonomy, competence, and relatedness* indicates that they could be used beyond the context in which they were developed. Future research should investigate the impact of the ESDA principles for other student groups, such as those with autism and moderate to severe learning difficulties, as the students in the other class in the Post-16 setting.

Another important limitation to note is the lack of 'post' data from the students themselves due to the restrictions imposed by the Covid-19 pandemic. It would have been valuable to see whether the involvement of students in the *Collaboration* impacted their scores on the self-determination outcome measures, and whether these would have changed again after the implementation of the ESDA principles. However, the most significant gap is that in gathering students' thoughts on the experience of *Collaboration*, which was not pursued due to staff's recommendations. The impact for the students was thus only collected through staff's perspectives, which takes away from the ethos and motivation driving the inquiry. Future research should investigate the experiences of young people with autism of collaborating to research, to inform the development of the process moving forward.

It is also important to note that whilst the study had an *emergent* approach motivated by values of collaboration and placing participants' needs at the centre, purposes which were served, it also generated vast amounts of data. This data, due to resources and timescale of data collection, meant that in-depth analysis of the findings was not undertaken. Further research should look more closely at the different factors contributing to perceptions and understandings of self-determination, its related skills, and how this is shaped by legislation.

It is also important to acknowledge that the systematic review includes literature published only before 2019, due to the emergent process of the research inquiry, which meant the empirical study was informed by its findings. The searches detailed in Appendix 1a were re-run in 2020 when the data from Phase 3 was analysed, and again in 2022 before the submission of this thesis. Only one additional study that met the inclusion criteria was identified: Bellon-Harn and Manachaiah's (2021) evaluation of the satisfaction and impact of a digital programme aimed to facilitate the self-determination of students with autism. Further research is needed to identify the impact of the programme on students' self-determination, but evaluative data was positive, most reviewers identifying video as its best feature. These searches also showed that literature on self-determination for young people with autism is continuing to expand, attention being given to the contributing factors (Cheak-Zamora et al., 2020), and the influence of autism severity and depression (White, Smith, and Brewe, 2022). One study conducted in the UK was also identified, conducted by Lei and Russell (2021) which looked at how autistic students shape their experiences at university through self-determination.

8.4. Final reflections and conclusions

The present research inquiry was initiated to address an existing challenge in a special school for students with autism: enhancing students' self-determination in a way that allows the expression of their authentic voices and prepares them for life after school. The researcher was motivated to involve those directly impacted by the outcomes of the research as active collaborators and co-creators of knowledge throughout the research inquiry. This meant that the entire process, from identifying and confirming the need for the research, through to the data collected and the tools used, to the final outcome of the ESDA principles, was developed, shaped, and reviewed alongside the participants. Although this required significant resources and brought several limitations discussed above, its benefits for the participants, particularly for the students, far outweighed its drawbacks. The empirical study demonstrated that the process of involving individuals with autism as collaborators to research alone brings benefits to confidence, communication, and self-esteem, as well as to relationships and interactions. These areas are of particular importance for individuals with autism, thus future research

should further investigate the impact of the process of participatory research. The outcome of the Enhancing Self-Determination Approach principles, and their development through collaboration and from existing teaching practice brings valuable contributions, however its potential requires future investigation. All in all, the present research inquiry achieved its aim of addressing the need for development in the school, the impact of the collaboration being acknowledged in the school even over two years after the completion of the data collection. A recent conversation with Anne (AHT) and Claire (CT) showed that the insights gained through the research helped inform the development of the new curriculum. This collaboration has been made possible by the researcher's position of former member of staff at the school, which has not been taken for granted, but rather developed and harnessed throughout the research inquiry. The relationships with the school's stakeholders have been at the centre of the success of this collaboration, as they allowed for their authentic voices to be expressed and reflected in the writing of this thesis. Even though the school and the world faced unprecedented and challenging times, the value of this work for the school and its stakeholders was not diminished, representing only a stepping stone in the development of their practice and in that of collaborative research in autism.

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APPENDICES

Appendix 1 – Systematic Literature Review (Information)

Appendix 1a - Database searches for the systematic literature review on the effectiveness of interventions aimed at promoting the self-determination of young people with intellectual disabilities and/or autism

Search Number	Date of latest search	Database	Search terms used	Field Searched	Results found	Limiters	Combined searches
1	06/12/18	EBSCO	SD AND A	TI, SU	26	Y, PR	OR = 204 Duplicates removed automatically by database = 146 Name given: EBSCO 146
2	06/12/18	EBSCO	SD AND I	TI, SU	19	Y, PR	
3	06/12/18	EBSCO	SD AND L	TI, SU	107	Y, PR	
4	06/12/18	EBSCO	SD AND D	TI, SU	35	Y, PR	
5	06/12/18	EBSCO	SD AND M	TI, SU	63	Y, PR	
6	06/12/18	PsychInfo	SD AND A	TI (MSH), KW (MSH)	31	Y, E	OR = 229 Name given: PsychInfo 1, 2 and 3
7	06/12/18	PsychInfo	SD AND I	TI (MSH), KW (MSH)	81	Y, E	
8	06/12/18	PsychInfo	SD AND L	TI (MSH), KW (MSH)	68	Y, E	
9	06/12/18	PsychInfo	SD AND D	TI (MSH), KW (MSH)	60	Y, E	
10	06/12/18	PsychInfo	SD AND M	TI (MSH), KW (MSH)	74	Y, E	
11	06/12/18	MedLine	SD AND A	TI (MSH), KW (MSH)	2	Y, E	OR = 50

Search Number	Date of latest search	Database	Search terms used	Field Searched	Results found	Limiters	Combined searches
12	06/12/18	MedLine	SD AND I	TI (MSH), KW (MSH)	37	Y, E	Name given: Medline 50
13	06/12/18	MedLine	SD AND L	TI (MSH), KW (MSH)	6	Y, E	
14	06/12/18	MedLine	SD AND D	TI (MSH), KW (MSH)	15	Y, E	
15	06/12/18	MedLine	SD AND M	TI (MSH), KW (MSH)	10	Y, E	
16	06/12/18	ProQuest	SD AND A	TI, SH	18	Y, E, PR	OR = 147 Duplicates removed automatically by database = 144 Name given: ProQuest 144
17	06/12/18	ProQuest	SD AND I	TI, SH	28	Y, E, PR	
18	06/12/18	ProQuest	SD AND L	TI, SH	46	Y, E, PR	
19	06/12/18	ProQuest	SD AND D	TI, SH	14	Y, E, PR	
20	06/12/18	ProQuest	SD AND M	TI, SH	67	Y, E, PR	
21	07/12/18	Web of Science	SD AND A	TI, TS (TI, AB, KW)	17	Y, E, Article	OR = 211 Name given: Web of Science 211
22	07/12/18	Web of Science	SD AND I	TI, TS (TI, AB, KW)	86	Y, E, Article	
23	07/12/18	Web of Science	SD AND L	TI, TS (TI, AB, KW)	128	Y, E, Article	
24	07/12/18	Web of Science	SD AND D	TI, TS (TI, AB, KW)	45	Y, E, Article	
25	07/12/18	Web of Science	SD AND M	TI, TS (TI, AB, KW)	110	Y, E, Article	
self-determination OR self-determination =SD autis* OR autism spectrum disorder* OR Asperger* OR pervasive* =A				developmental* disab* OR developmental* impair*=D			January 1985 – December 2018 = Y English = E

Search Number	Date of latest search	Database	Search terms used	Field Searched	Results found	Limiters	Combined searches
intellectual* disab* OR intellectual* impair* OR intellectual function*=I learning disab* OR learning disorder* or learning difficult*=L				mental* retard* OR mental* handicap* OR mental* impair* =M adolescen* OR teen* OR juvenile* OR young people OR young adult* =P2			Peer reviewed = PR
SU = Subjects TI = Title MSH = Map term to subject heading				KW= Keyword AB = abstract SH = Subject heading			TS=Topic

Appendix 1b – Steps taken in the selection process for the systematic literature review on the effectiveness of interventions aimed at promoting the self-determination of young people with intellectual disabilities and/or autism

B.1. Screening

The remaining 399 articles were screened by title and abstract to determine if they met the inclusion criteria. The majority of studies (315) did not evaluate a self-determination intervention, so were thus removed manually. All relevant theoretical papers and empirical studies looking at perspective on self-determination by different stakeholders were kept for references, but were not included in this review.

54 articles appeared to meet all the inclusion criteria. The full text of further 16 articles was screened, as the title and abstract were not detailed enough to determine whether they met the inclusion criteria. Further six articles have been included. The diagram below provides further details about the reasons for excluding a total of 339 articles.

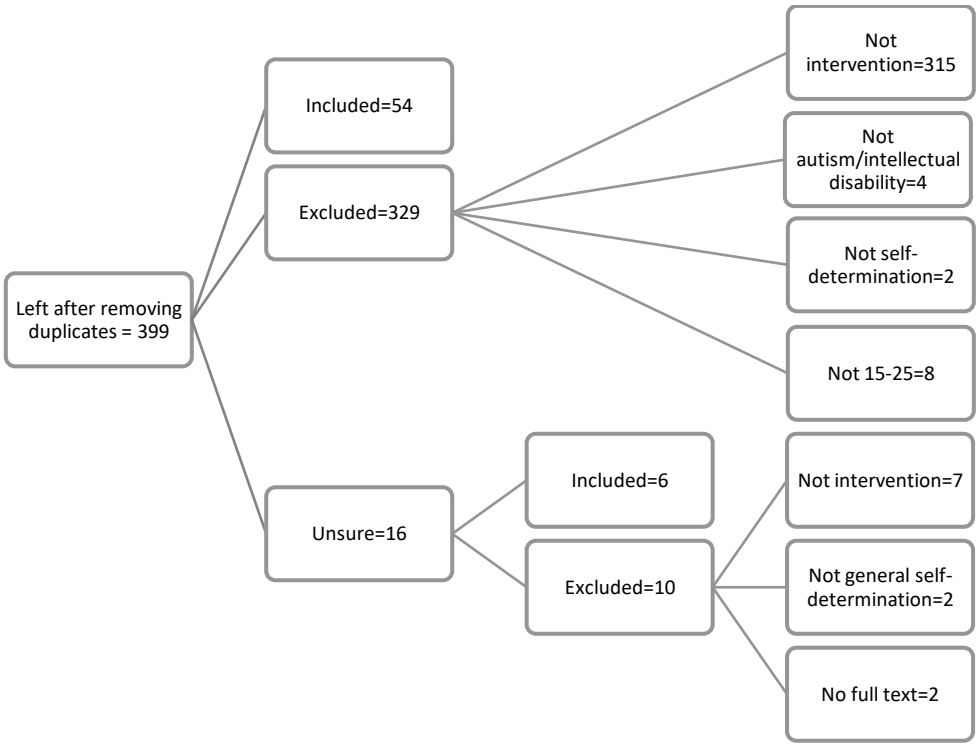


Figure B.1. Articles included following title and abstract screening

B.2. Eligibility

Although the searches have been conducted for peer-reviewed journal articles, 14 dissertations and thesis had been included until this stage, but were subsequently removed to include only articles published in peer-reviewed journals. For seven of the articles, access to the full text was not granted by the University of Birmingham Library, thus they were not included in the final systematic review. The full text of the remaining 39 articles was screened and further 11 have been excluded for reasons recorded in the diagram below – giving 28 articles included.

Figure B.2. Articles included following full text screening

B.3. Further identification

At the end of the computerised search, the following three journals have been selected for hand searching, as they included at least three of the articles included at this stage. The following journals have been hand searched for articles published between 2013-2018 (Fowler et al., 2007, Wood et al., 2005): Career Development and Transition for Exceptional Individuals, Career Development for Exceptional Individuals, and Journal of Special Education. Three further articles were identified by title, but their abstracts determined that they did not meet the inclusion criteria. Therefore, no further articles were included.

The articles included in the aforementioned systematic literature reviews of self-determination interventions (Algozzine et al., 2001; Chambers et al., 2007; Fowler et al., 2007; Konrad et al., 2007; Malian and Nevin, 2002; Wood et al., 2005) were consulted to identify any further studies that might have been omitted by the electronic and hand searches. The titles and abstracts of 8 articles demonstrated that they met the inclusion criteria, but after screening the full text, only one has been included in the final review (Held, Thoma, and Thomas 2004). Therefore, following the further identification stage, a total number of 29 articles was included.

B.4. Inclusion

The full text and reference lists of the 29 articles were read, which led to a further three articles to be excluded, two for not evaluating interventions, and one being a duplicate. At this stage, several studies remained included that did not measuring overall self-determination, but only individual skills or aspects, thus a further seven studies have been excluded. Two further articles were included after consulting the most recent meta-analysis on self-determination interventions (Burke et al., 2020), leading to total of 21 articles included in the final reporting in this systematic review.

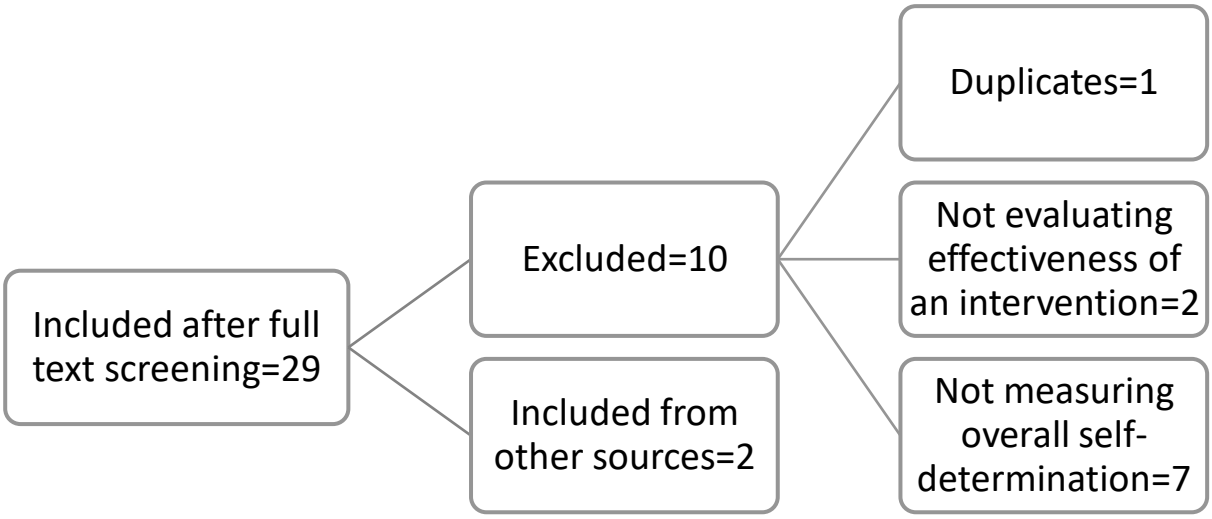


Figure B.3. Articles included and excluded during the inclusion stage

Appendix 1c - Geographical location of the 21 studies included in the systematic literature review on the effectiveness of interventions aimed at promoting the self-determination of young people with intellectual disabilities and/or autism

Of the 21 studies included in the review, all but one were conducted in the US. Three studies mentioned they were conducted in Midwestern US, a further five in each Kansas, Missouri, and Texas, two for Rhode Island, Arkansas, Nebraska, Oklahoma, and one in New Hampshire and Maine. Figure 3.5. shows a representation of these studies (11) on a map of the US, including only states directly mentioned in the text of the published articles. This is an interesting finding worth further exploration, but unfortunately none of the systematic reviews previously identified (Section 3.2.) make references regarding the location of the studies included.

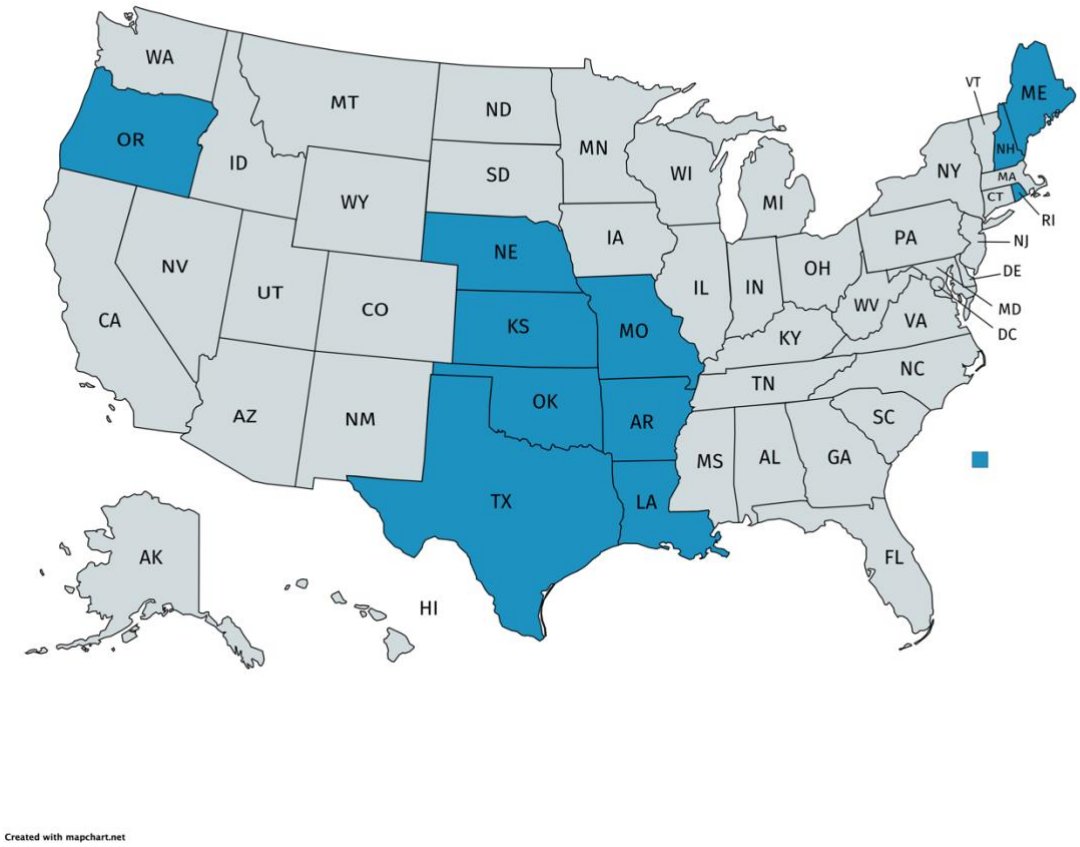


Figure C.1. The states mentioned in the 21 studies included in the systematic review

Appendix 1d - Interventions targeting self-determination identified in the systematic literature review on the effectiveness of interventions aimed at promoting the self-determination of young people with intellectual disabilities and/or autism

The Self-Determined Learning Model of Instruction (SDLMI)

The development of the most commonly encountered intervention in this review is based on the need that "students need to learn to *advocate* for their own needs and interests by taking action *to change circumstances* that pose obstacles to their pursuits" (Wehmeyer et al., 2000, p. 441). It is a teaching model based on theory in self-determination, designed to be used by educators or others trained in its use "to organise instruction and supports to enhance self-regulated goal setting and attainment of students with or without disabilities" (Shogren et al., 2018a, p. 167). The SDLMI differs from self-determination curricula in that it does not aim to delivered standardised content, but rather to shape educators' instruction to be student-directed rather than teacher-directed. The implementation of the SDLMI can be individualised to meet specific needs and learning goals, and used with students with a wide range of needs. It is designed to be used repeatedly throughout the school year.

The implementation of the model consists of three phases, each of which presents the student with a problem: set a goal (Phase 1), take action (Phase 2), and adjust the goal or plan (Phase 3) (Lee et al., 2008). The student solves each problem by asking a series of four Student Questions per phase, which are linked to teacher objectives, and which the students learn and modify to reach their goals. The questions differ in each phase but follow the same steps in the problem-solving sequence: "(a) identify the problem, (b) identify potential solutions to the problem, (c) identify barriers to solving the problem, and (d) identify consequences of each solution" (Lee et al., 2008, p. 95). Throughout the SDLMI process "the student is the primary agent for choices, decisions, and actions", and educators can use various Educational Supports to enable self-direct learning (Wehmeyer et al., 2000, p. 441).

Wehmeyer (2000) explains that the SDLMI should not be seen as a curriculum, but rather that it provides a process that teachers can adapt to their own preferences and strengths. Furthermore, the suggestions made in relation to instructional strategies are only suggestions, and teachers should use their skills to adapt to their own strengths and to meet students' needs.

Whose Future Is It Anyway (WFA)

This student-directed transition planning process from secondary education to adult life emphasises the young person's preferences, interests, and needs (Lee et al., 2011). It was used to be developed without training by teachers and has an extensive coach's manual. Students are the ones that choose their WFA coach (Wehmeyer et al., 2011a). WFA consists of six sections and 36 sessions introducing the concept of transition and transition planning and enabling to self-direct learning related to the following areas:

> *"(a) having self-awareness and disability awareness,*
>
> *(b) decision making about transition-related outcomes,*
>
> *(c) identifying and securing community resources to support transition services,*
>
> *(d) writing and evaluating goals and objectives,*

(e) communicating effectively in small groups, and

(f) developing skills to become an effective team member, leader, or self-advocate" (Lee et al., 2011, p. 107)

WFA is designed to be delivered over the course of a full academic year. The aim is for students to learn how to be involved in their transition process and/or IEP meetings (Lee et al., 2011). The materials are student directed and written for students to use, and the level of support needed to complete the activities varies from 1:1 support to independent work (Wehmeyer et al., 2011a). Through the WFA process, students are introduced to four primary transition outcome areas (with associated activities): employment, community living, post-secondary education, and recreation and leisure.

The Next S.T.E.P. Curriculum

This self-determination curriculum was designed to teach skills needed for successful participation in the transition planning process (Zhang, 2001). It consists of 19 lessons targeting the following skills:

(a) self-evaluation of important skills needed for the transition;

(b) choosing goals and activities in four important transition areas, including personal life, education and training, jobs, and living on your own;

(c) taking charge of their personal transition planning meeting; and

(d) following through on choices and keeping track of progress" (Zhang, 2001, p. 123).

The Next S.T.E.P. Curriculum includes videos and print materials for students, teachers, and family members to help motivate students to engage in transition planning.

The Acquiring Career, Coping, Executive control, and Social Skills Program (ACCESS)

This was developed building on the Adult Social Knowledge (ASK) Program curriculum and stakeholder feedback in an attempt to address the need for transition services for young adults with autism (Oswald et al., 2018). This was achieved through a "participatory design model for community health", involving young adults with autism and their caregivers who participated in the ASK Program in a focus group.

The ACCESS Program consists of 19 weekly lessons, structured in three modules: (1) Stress and Anxiety Coping Skills, (2) Self-determination Skills, and (3) Adaptive and Social Skills. The lessons are run in a group that involves reviewing last week's topic and homework, presentation and group discussion, role play, and small group activities to enhance practical understanding and generalization of skills (Oswald et al., 2018). Each participant selects a *Social Coach* (parent or close relative) that attends a concurrent group that covers the same topic and receives psychoeducation on how to facilitate participant's use and generalization of skills. Furthermore, participants and Social Coaches engage in weekly homework assignments to reinforce skill-building and to promote an equitable relationship, as well as a structured vocational activity (paid or volunteer) for at least 3hrs/week (Oswald et al., 2018).

A transition planning approach

This approach evaluated by Hagner et al. (2012) was designed to empower students with autism and their families, to educate them about the transition process, and help them connect with existing community resources on transition readiness. It consists of a sequence of three components. The first involves group training sessions for families regarding person-centred planning, networking, and adult services, and followed a curriculum called *Specific Planning Encourages Creative Solutions (SPECS).* This was adapted to the specific contexts of the states in which it was run. This is followed by *person-centred planning* involving the student and their family in the planning process of a transition plan. The planning facilitators support the students and the family to select a *planning group* of family and/or community members, and support the former to maximise participation in the meeting. The last component is to provide follow-up assistance in implementing the initial plan, such as career exploration or participating in IEP meetings to support the students and their families.

Wehmeyer explains that "the success of the model *(SDLMI)*, like other models is dependent upon the person implementing it" (Wehmeyer, 2000, p. 451). Therefore, it is valuable to be aware of who designs and implements the interventions. Out of the 21 studies included, only one involved stakeholders in the development of the intervention: Oswald et al. (2018), one of the two studies that included only participants with autism. Furthermore, the article provides details regarding this development through a participatory design, in which the young adults with autism and their caregivers were partners in the research design and development. Their thoughts were gathered through a focus group and directly impacted the characteristics of the ACCESS Program, described in previous paragraphs. Aside from Sheppard and Unsworth's (2011) Educational Residential Unit (ERU) program developed in a setting designed for this purpose (not clearly explained how), it can be inferred that the remaining interventions used in the other 19 studies were designed by researchers. However, this is not clearly stated in any of the papers, so this inference should be treated as only a conclusion drawn by the researcher.

Appendix 2 – Application for Ethical Review

Appendix 2a– Application for Ethical Review ERN_18-0815

UNIVERSITY OF BIRMINGHAM APPLICATION FOR ETHICAL REVIEW	*OFFICE USE ONLY:* Application No: Date Received:

1. TITLE OF PROJECT

Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special

2. THIS PROJECT IS:

University of Birmingham Staff Research project ☐
University of Birmingham Postgraduate Research (PGR) Student project ☒
Other ☐ (Please specify):

3. INVESTIGATORS

a) PLEASE GIVE DETAILS OF THE PRINCIPAL INVESTIGATORS OR SUPERVISORS (FOR PGR STUDENT PROJECTS)

Name: Title / first name / family name	Dr Despina Papoudi
Highest qualification & position held:	Lecturer in Autism
School/Department	School of Education
Telephone:	[redacted]
Email address:	

PLEASE GIVE DETAILS OF ANY CO-INVESTIGATORS OR CO-SUPERVISORS (FOR PGR STUDENT PROJECTS)

Name: Title / first name / family name	Professor Graeme Douglas
Highest qualification & position held:	Head of the Department of Disability Inclusion and Special Needs
School/Department	School of Education
Telephone:	[redacted]
Email address:	

b) In the case of PGR student projects, please give details of the student

Name of student:	Andreea Laura Cristescu	Student No:	[redacted]
Course of study:	PhD in Education	Email address:	
Principal supervisor:	Despina Papoudi		

4. ESTIMATED START OF PROJECT Date: 01/11/18

5. ESTIMATED END OF PROJECT Date: 20/07/19

5. FUNDING

List the funding sources (including internal sources) and give the status of each source.

Funding Body	*Approved/Pending /To be submitted*
School of Education Studentship	Approved

If you are requesting a quick turnaround on your application, please explain the reasons below (including funding-related deadlines). You should be aware that whilst effort will be made in cases of genuine urgency, it will not always be possible for the Ethics Committees to meet such requests.

I am fully funded through the School of Education Studentship for 3 years without the possibility of extension for the funding, thus a quick turnaround on my application is essential in meeting this deadline.

6. SUMMARY OF PROJECT

Describe the purpose, background rationale for the proposed project, as well as the hypotheses/research questions to be examined and expected outcomes. This description should be in everyday language that is free from jargon. Please explain any technical terms or discipline-specific phrases.

Purpose of the study
The purpose of the study is to investigate the potential of using video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education.

Background of the study
The increasing use of video as a tool for intervention over the last decades has demonstrated its potential for developing a range of skills with different target groups. In the area of autism research especially, the use of video has proven effective especially when used with instructional purposes, but research is also growing regarding its use as a tool for reflection. The use of video in Video Interaction Guidance is one such example, where videos taken of the interaction between parent and child are used by practitioners to empower parents in their relationships with their children. Thus, by looking back at moments of positive practice selected by practitioners, the parents are encouraged to recognise their own strengths and thus improve their self-confidence. Similar uses of video have been employed in school environments, mainly with the aim of empowering teaching staff, and helping them seek moments of positive interaction with the students.

Rationale of the study
However, research involving the young people themselves, and especially that which uses video as a tool for reflection is very limited. Most research regarding young people enrolled in Post-16 special education focuses on equipping them with skills for functional independence. Thus, there is a need to explore their perspectives especially in the context of transitioning to adulthood, when their network of support will be much different than those provided throughout their education years. Moreover, the potential for using video as a tool of empowerment and expression of sense of self for the young people needs exploring. Furthermore, I intend to explore the potential of video as a tool of reflection on practice for teaching staff, with aim of promoting the students' self-determination.

Research questions
Through this study, I intend to answer the following research questions:

1. Can the use of video as a tool for reflection for students with autism in Post-16 Special Education promote their self-determination?
2. Can the use of video as a tool for reflection on professional practice promote the self-determination of students with autism in Post-16 Special Education?
3. How can the Post-16 curriculum promote the self-determination of students with autism?

Outcomes

- Provide a model of how video can be used in promoting the self-determination of students with autism in Post-16 Special Education
- Provide a model of the approach that can be applied in different settings
- Provide suggestions for the Post-16 curriculum regarding the encouraging of the students' self-determination.

7. CONDUCT OF PROJECT

Please give a description of the research methodology that will be used

Research Design:
My study will involve a participatory action research design, as it arises as the most relevant in meeting my study's aims and outcomes. This will be structured in **three phases** involving different tools of data collection, all of which are outlined below. The first two phases involve gathering data from a school about the different perspectives in relation to teaching and development of self-determination to young people with autism. The third phase will explore the use of video as a tool to promote the self-determination to young people with autism.

The purpose of Phase 1 is to provide exploratory information regarding the current school curriculum and how this addresses students' needs for self-determination. The data gathered will be analysed and used to inform, shape and define the questionnaires used in Phase 2, thus this latter phase will be subject to change in accordance with the data provided in the previous one. The data collected in Phases 1 and 2 will be used to shape and define the approach used in Phase 3, the design of which is likely to change according to the data analysed. This ethics form provides information regarding all three phases in order to demonstrate the aims and desired outcomes of the entire study, but **ethical approval is sought only for Phase 1**. Further amendments and finalised data collection tools for Phases 2 and 3 will be submitted after the gathering and analysis of data from Phase 1.

The case study:
All data will be collected from an all-age specialist school for students on the autism spectrum, marked as Outstanding through the latest Ofsted inspection and considered to provide one of the best curriculums and communication tools for children with autism in Birmingham. The researcher has previously worked there as a teaching assistant for 3 years (until July 2018) and is currently a Co-opted school governor (since July 2018). The school has been chosen as the researcher became aware of the need for further developing the Post-16 curriculum whilst a member of staff at the school, which prompted the need for an action research design. The school will provide a model and a case study for developing the approach, with the intention of generating a set of principles that can be transferred to other similar settings.

Phase 1 – Consultation / exploratory study:
The initial phase will focus on gathering information regarding the importance of promoting self-determination within the school environment. This will be gathered through **10 semi-structured interviews** with 5 senior members of staff involved in the development of the Post-16 curriculum, and 5 parents/carers of students currently enrolled at the school regarding their knowledge of self-determination, the importance of its composing skills, the current statutory guidance on self-determination, and the areas of the curriculum aimed at preparing students for adulthood.

Participatory action research involves addressing an existing issue in order to improve practice within a setting, thus the researcher should be familiar with these and make sure the research is suiting the purposes of the design. Although the researcher has prior experience in the setting, **semi-structured observations** will be used to inform the questionnaires used in Phase 2 and the development of the approach in Phase 3. The observations will take place in the Post-16 setting of the school, with the main curriculum class of 15 students, 2 teachers, and 3 teaching assistants. The observations will take place for the whole duration of a school day, every day for 2 weeks. An observation schedule will be used to record the data.

In order to gain an in-depth understanding of the current curriculum and its development in relation to the statuatory guidance, existing documents should also be consulted. Thus, the researcher will seek permission from the head teacher to conduct a **document interrogation** of the existing public documents regarding the Post-16 curriculum, and school development plan regarding the Post-16 setting, and other related documentation considered relevant and provided for analysis by the school's head teacher.

Phase 1 has an exploratory purpose, aimed to gather information regarding staff and parents' knowledge of the term self-determination and its composing skills, the current statutory guidance, how these are currently addressed through the curriculum, and opinions on the current Post-16 curriculum. This data will be analysed and used to shape the questionnaires used in Phase 2. The reasoning behind this choice of having two phases before developing the approach, has been informed through reviewing the literature, and discussing with experienced supervisors in the field, which have highlighted that participants might not be familiar with the terms used by the researcher. This is due to the fact that self-determination is mainly used in American literature and education, and only slowly and recently gaining attention in the U.K. Thus, phase 1 will inform the terms used in phase 2. Moreover, phase 1 will also inform phase 3 by highlighting the areas of the current school curriculum that need addressing in relation to meeting the targets of the statutory guidance and the promotion of self-determination. The latter part of the interview which addresses the Post-16 curriculum in particular will also gather data that will be used to inform the approach developed in phase 3 that targets this specific curriculum, with the aim of addressing the issues highlighted by staff and parents. Moreover, phase 1 is intended to ensure that the research questions and desired outcomes are aimed at meeting the needs of the settings, as initially identified by staff and parents. Further information regarding this will be provided through phase 2, where students' opinions will also be sought.

Planned Phase 2 – Wider consultation survey of the school:
Based on the data collected in Phase 1, **questionnaires** will be developed and will be conducted with staff, students and their parents/carers**.** The questionnaires will be processed using SPSS. The data collected in Phase 2, along with data provided by Phase 1, will be used to inform and shape the principles driving the approach which will be developed and applied during the next phase.

Planned Phase 3 – Design, implementation and evaluation of the video supported teaching approaches:
The methodology of this phase will be informed by the analysis of the data collected in Phases 1 and 2. Amendments and finalised data collection tools will be submitted for ethical approval prior to beginning the data collection for Phase 3. This will likely involve 15mins video-recordings of 4 staff and 10 students, one video for each student in each of 4 different areas of the curriculum: employability skills, leisure, independent living skills, and community outreach. The videos will be observed using an observation sheet in relation to an initial set of principles of the approach developed by the researcher on the basis of existing literature. From these videos, 2 short clips (less than 1min) demonstrating positive practice and some of the principles, will be selected and shown to staff and students separately. On the basis of their observations, as well as data collected during Phases 1 and 2, the principles of the approach will be shaped and finalised.

8. DOES THE PROJECT INVOLVE PARTICIPATION OF PEOPLE OTHER THAN THE RESEARCHERS AND SUPERVISORS?

Yes ☒ No ☐

Note: 'Participation' includes both active participation (such as when participants take part in an interview) and cases where participants take part in the study without their knowledge and consent at the time (for example, in crowd behaviour research).

If you have answered NO please go to Section 18. If you have answered YES to this question please complete all the following sections.

9. PARTICIPANTS AS THE SUBJECTS OF THE RESEARCH

Describe the number of participants and important characteristics (such as age, gender, location, affiliation, level of fitness, intellectual ability etc.). Specify any inclusion/exclusion criteria to be used.

The study is undertaking an action research design, which will emerge and be define in relation to the data collected and analysed through the three phases. The data collected in Phase 1 will help finalise the questionnaires used in Phase 2. However, if the data highlights that questionnaires are not the most suitable method for Phase 2, the design of this phase will change along with the participant groups. Further amendments and finalised questionnaires will be sent prior to beginning the data collection for Phase 2.

Phase 1:
Semi-structured interviews:
5 senior members of staff involved in the development of the Post-16 curriculum
5 parents of students currently enrolled in the specialist school

Semi-structured observations:
15 students enrolled in the Post-16 curriculum, in the 'main' curriculum class
2 teachers
5 teaching assistants

Details to follow for planned Phase 2 and 3 through request for amendments process. Current plan:

Planned Phase 2:
Questionnaires:

- 80 members of the teaching staff permanently employed at the specialist school
- 80 parents/carers whose children are enrolled at specialist school
- 60 students enrolled at the specialist school, inclusion criteria:

Planned Phase 3:

- 4 members of staff
- 10 students (over 16 years)

For phase 1, the sample size of 10 participants to be interviewed using a semi-structured schedule is large enough for meeting the purposes of an exploratory phase, and the data gathered will be analysed qualitatively. Phase 2 will be used to build upon the information gathered in phase 1, which will involve all parents, staff and students in the school. Thus, the sample sizes for phase 2 are not exact, they will be determined by how many participants will return the questionnaires. The participation of the staff and students in phase 3 is also voluntary and the sample sizes provided only represent a maximum amount of expected positive replies of participants wanting to be involved in the study. The numbers represent the actual numbers of staff and students in the particular Post-16 class the approach will be developed in. For a case study design the sample seizes of 10 students and 4 members of staff should be enough to draw valid conclusion related to the effectiveness of the approach. Moreover, the key purpose of this research is provide rich and credible evidence of the potential of the approach being explored, and this is done by focussing upon a small selection of cases. Some theoretical generalisation will be possible, but it is acknowledged that statistical generalisation would require further research.

10. RECRUITMENT

Please state clearly how the participants will be identified, approached and recruited. Include any relationship between the investigator(s) and participant(s) (e.g. instructor-student).

Note: Attach a copy of any poster(s), advertisement(s) or letter(s) to be used for recruitment.

Phase 1:

Participants will be selected from the special school setting in which the researcher worked as a teaching assistant until the end of the previous school year and is currently a Co-opted school governor. Both staff and students are aware of the researchers' position, and parents/carers will be informed through the consent form.

All participants will be selected on a voluntary basis. Firstly, approval will be sought from the gatekeeper, the school's head teacher, who will review the interview and observation schedules.

Semi-structured interviews:

After consent is given by the head teacher to carry out the study, the researcher will approach the 5 senior members of staff involved in the development of the Post-16 curriculum via email, providing them with an information sheet and consent form.

Following an initial meeting with the school's headteacher, in which full support for the study has been expressed, it has been suggested that the school will send out a letter to all parents of students in the Post-16 curriculum. This will include information about the researcher, the study, its outcomes and participant contribution. The school will be formatting this in accordance with their guidelines, but using information from the Research Information Sheet provided by the researcher. Parents will be asked to contact the researcher via email to express their interest in taking part in the study. If more than 5 parents will express an interest in taking part, the researcher will adapt accordingly and inform the ethics committee. This is a pilot study and a small sample is adequate for the purpose of a small scale qualitative analysis. All interviews will be conducted within the school setting.

Inclusion criteria:
Be a parent/carer of a student enrolled in the Post-16 setting at the school
Can communicate in English
Be willing to voluntarily take part in an audio-recorded interview
Sign the consent form

Semi-structured observations:

The researcher will provide the students in the 'main' curriculum Post-16 class with a brief verbal presentation of the study and its purposes, and ask to express their interest. The students that have expressed an interest will be provided with information sheets (for both them and their parents) as well as consent forms for both.

11. CONSENT

a) Describe the process that the investigator(s) will be using to obtain valid consent. If consent is not to be obtained explain why**.** If the participants are minors or for other reasons are not competent to consent, describe the proposed alternate source of consent, including any permission / information letter to be provided to the person(s) providing the consent.

Phase 1:

Initial consent will be asked from the school's head teacher. Initial informal discussion suggest that the head teacher and staff are very positive about being involved.

Semi-structured interviews:
The 5 senior members of staff and 5 parents will be provided with information sheets and consent forms prior to the interview.

Semi-structured observations:
Both students and their parents will be provided with information sheets and consent forms prior to the beginning of their observations. Students will need both their own and parental consent prior to the observations. Staff will also be provided with information sheets and consent forms.

The student consent forms have been written using prior knowledge of the students' level of understanding. Students are able to provide consent form because this group of students can read and write in English and they are currently attending pre-GSCE level classes. Moreover, the researcher will seek approval from the Post-16 Assistant Head Teacher, who is most experienced in working with the participant group, to ensure they are suitable to achieve informed consent. Furthermore, the consent forms will be signed in school, with knowledgeable staff who will be able to answer students' questions. Staff will have prior information about the study following an initial meeting with the researcher, and having read the information sheet and signed their consent forms.

Details to follow for planned Phase 2 and 3 through request for amendments process.

Note: Attach a copy of the Participant Information Sheet (if applicable), the Consent Form (if applicable), the content of any telephone script (if applicable) and any other material that will be used in the consent process.

c) Will the participants be deceived in any way about the purpose of the study?
Yes ☐ **No x**☒

If yes, please describe the nature and extent of the deception involved. Include how and when the deception will be revealed, and who will administer this feedback.

12. PARTICIPANT FEEDBACK

Explain what feedback/ information will be provided to the participants after participation in the research. (For example, a more complete description of the purpose of the research, or access to the results of the research).

At the end of the study a presentation will be given to all the students enrolled in the Post-16 setting to present the study's findings. One more presentation will be available for all staff, and another for all students interested to present findings and make recommendations.

13. PARTICIPANT WITHDRAWAL

a) Describe how the participants will be informed of their right to withdraw from the project.

Participants' right of withdrawal will be included in the Consent form. Participants will be able to withdraw from the study without being asked to provide a reason before 30th December 2018, when the data analysis for Phase 1 will be completed.

b) Explain any consequences for the participant of withdrawing from the study and indicate what will be done with the participant's data if they withdraw.

All data collected from participants that have decided to withdraw from the study will be destroyed in accordance with the University of Birmingham guidelines

14. COMPENSATION

Will participants receive compensation for participation?

i) Financial

Yes ☐ **No** ☒

ii) Non-financial

Yes ☐ **No** ☒

If **Yes** to **either** i) or ii) above, please provide details.

N/A

If participants choose to withdraw, how will you deal with compensation?

N/A

15. CONFIDENTIALITY

a) Will all participants be anonymous?
Yes ☐ **No** ☒

b) Will all data be treated as confidential?
Yes ☒ **No** ☐

Note: Participants' identity/data will be confidential if an assigned ID code or number is used, but it will not be anonymous. Anonymous data cannot be traced back to an individual participant.

Describe the procedures to be used to ensure anonymity of participants and/or confidentiality of data both during the conduct of the research and in the release of its findings.

No personal data that could identify the participants (name, address) will be collected or stored. The name and location of the school will not be recorded or including in the presentation of the study.

In order to ensure confidentiality, all participants will be given pseudonyms not related to their real names, from the start of the data collection process, and only the researcher will be aware of their identity. Therefore, participants will not be anonymous but their data will be kept confidential in accordance with the GDPR 2018 regulations.
Video and audio-recorded data will not be shared outside of the participant group involved in the study.

All data will be stored using the University of Birmingham's the Birmingham Environment for Academic Research (BEAR) storage, by the end of each day of data collection, and can only be accessed by the researcher and 2 supervisors. This collection of IT services has been put in place following and in agreement with the GDPR 2018 requirements. The data will also be backed-up on an encrypted external hard-drive, at the end of each day of data collection/transcription, and kept in a locked filing cabinet in the participant's home.

Participants will be informed of the data collected, its storage, and access before beginning the first phase of the data collection, and reminded at each stage and method of data collection through the research information sheets and consent form. This is in accordance with the GDPR 2018 requirements of ensuring data protection by design, thus taking into consideration data protection measures and informing participants at the design phase.

If participant anonymity or confidentiality is not appropriate to this research project, explain, providing details of how all participants will be advised of the fact that data will not be anonymous or confidential.

16. STORAGE, ACCESS AND DISPOSAL OF DATA

Describe what research data will be stored, where, for what period of time, the measures that will be put in place to ensure security of the data, who will have access to the data, and the method and timing of disposal of the data.

All data will be stored using the University of Birmingham's BEAR storage, by the end of each day of data collection, and can only be accessed by the researcher and 2 supervisors. The data will also be backed-up on an encrypted external hard-drive, at the end of each day of data collection/transcription, and kept in a locked filing cabinet in the participant's home. Field notes will be kept separately in a locked cabinet in the University of Birmingham, where the researcher spends most of the working day.

Following the thesis publication, a subset of the data that underpins the paper will be transferred to the UoB Research Data Archive (RDA), and will be kept for at least 10 years in accordance with the University of Birmingham regulations.

17. **OTHER APPROVALS REQUIRED?** e.g. Criminal Records Bureau (CRB) checks or NHS R&D approvals.

☐ YES ☒ NO ☐ NOT APPLICABLE

If yes, please specify.

If needed, the researcher has an on-going online subscription to the Disclosure and Barring Service, which has been previously checked by the school, and can be checked again if a need arises.

18. **SIGNIFICANCE/BENEFITS**

Outline the potential significance and/or benefits of the research

This study aims to address both a need within the community of interest, a local specialist school for students with autism, and a gap in research regarding environmental approaches to promote self-determination within educational settings. Within the school setting, the study aims to improve teaching practice through the reflection on existing strengths, to provide students with a platform to express their needs and aspirations, whilst helping them increase their self-determination and improve the likelihood of positive outcome in adulthood. The study will also generate a set of guidelines and recommendations for the whole school, with the aim of integrating the approach generated through the study within the whole school curriculum. I also intend to publish at least one paper describing the approach and its outcomes from the study, as well as deliver presentations to several conferences throughout its development.

19. **RISKS**

a) Outline any potential risks to **INDIVIDUALS**, including research staff, research participants, other individuals not involved in the research and the measures that will be taken to minimise any risks and the procedures to be adopted in the event of mishap

Phases 1 and 2: The interviews will be conducted by the researcher within the school building, and the questionnaires will be completed remotely, so no risks are apparent at this stage. Head teacher will be aware of the implementation of the project and the presence of the researcher on the school site on each day of her data collection. Her supervisors will also be informed of her data collection schedule. **Phase 3:** The researcher will ensure that other staff members are present, or close by, when working with the students, and never on a one-to-one basis.

b) Outline any potential risks to **THE ENVIRONMENT and/or SOCIETY** and the measures that will be taken to minimise any risks and the procedures to be adopted in the event of mishap.

N/A

20. ARE THERE ANY OTHER ETHICAL ISSUES RAISED BY THE RESEARCH?

Yes ☐ **No** ☒

If yes, please specify

None

21. EXPERT REVIEWER/OPINION

You may be asked to nominate an expert reviewer for certain types of project, including those of an interventional nature or those involving significant risks. If you anticipate that this may apply to your work and you would like to nominate an expert reviewer at this stage, please provide details below.

Name N/A
Contact details (including email address)
Brief explanation of reasons for nominating and/or nominee's suitability

22. CHECKLIST

Please mark if the study involves any of the following:

- Vulnerable groups, such as children and young people aged under 18 years, those with learning disability, or cognitive impairments ☒
- Research that induces or results in or causes anxiety, stress, pain or physical discomfort, or poses a risk of harm to participants (which is more than is expected from everyday life) ☐
- Risk to the personal safety of the researcher ☐

- Deception or research that is conducted without full and informed consent of the participants at time study is carried out ☐
- Administration of a chemical agent or vaccines or other substances (including vitamins or food substances) to human participants. ☐
- Production and/or use of genetically modified plants or microbes ☐
- Results that may have an adverse impact on the environment or food safety ☐
- Results that may be used to develop chemical or biological weapons ☐

Please check that the following documents are attached to your application.

	ATTACHED	**NOT APPLICABLE**
Recruitment advertisement	☐	☒
Participant information sheet	☒	☐
Consent form	☒	☐
Questionnaire	☐	☒
Interview Schedule	☒	☐

23. DECLARATION BY APPLICANTS

I submit this application on the basis that the information it contains is confidential and will be used by the University of Birmingham for the purposes of ethical review and monitoring of the research project described herein, and to satisfy reporting requirements to regulatory bodies. The information will not be used for any other purpose without my prior consent.

I declare that:

- The information in this form together with any accompanying information is complete and correct to the best of my knowledge and belief and I take full responsibility for it.
- I undertake to abide by University Code of Practice for Research (http://www.as.bham.ac.uk/legislation/docs/COP_Research.pdf) alongside any other relevant professional bodies' codes of conduct and/or ethical guidelines.
- I will report any changes affecting the ethical aspects of the project to the University of Birmingham Research Ethics Officer.
- I will report any adverse or unforeseen events which occur to the relevant Ethics Committee via the University of Birmingham Research Ethics Officer.

Name of principal investigator/project	Despina Papoudi, PhD
Date:	9 October 2018

Please now save your completed form, print a copy for your records, and then email a copy to the Research Ethics Officer, at aer-ethics@contacts.bham.ac.uk. As noted above, please do not submit a paper copy.

Appendix 2b – Application for Ethical Review ERN_18-0815 - Request for amendments

UNIVERSITY OF BIRMINGHAM **APPLICATION FOR ETHICAL REVIEW -** **REQUEST FOR AMENDMENTS**	*OFFICE USE ONLY:* Application No: Date Received:

1. **TITLE OF PROJECT**

Investigating the effectiveness of video as a tool for intervention and reflection to promote the independence of students with autism in Post-16 special education

2. **APPROVAL DETAILS**

What is the Ethical Review Number (ERN) for the project?

ERN_18-0815

3. **THIS PROJECT IS:**

University of Birmingham Staff Research project ☐
University of Birmingham Postgraduate Research (PGR) student project ☒
Other ☐ (Please specify):

4. **INVESTIGATORS**

d) PLEASE GIVE DETAILS OF THE PRINCIPAL INVESTIGATORS OR SUPERVISORS (FOR PGR STUDENT PROJECTS)

Name: Title / first name / family name	Dr Despina Papoudi
Highest qualification & position held:	Lecturer in Autism
School/Department	School of Education
Telephone:	[redacted]
Email address:	[redacted]

e) PLEASE GIVE DETAILS OF ANY CO-INVESTIGATORS OR CO-SUPERVISORS (FOR PGR STUDENT PROJECTS)

Name: Title / first name / family name	Professor Graeme Douglas
Highest qualification & position held:	Head of the Department of Disability Inclusion and Special Needs
School/Department	School of Education
Telephone:	[redacted]
Email address:	[redacted]

f) In the case of PGR student projects, please give details of the student

Name of student:	Laura Cristescu	Student No:	
Course of study:	PhD in Education		
Principal supervisor:	Despina Papoudi		

5. **ESTIMATED START OF PROJECT** Date: 10/12/18

ESTIMATED END OF PROJECT Date: 19/07/19

6. **ORIGINAL APPLICATION FOR ETHICAL REVIEW AND ANY SUBSEQUENT APPROVED AMENDMENTS:**

Please complete the table below for the original application and any subsequent amendments submitted

Title and reference number of application or amendment	**Key points of application and/or changes made by amendment (include: aims of study, participant details, how participants were recruited and methodology)**	**Ethical considerations arising from these key points (e.g. gaining consent, risks to participants and/or researcher, points raised by Ethical Review Committee during review)**	**How were the ethical considerations addressed? (e.g. consent form, participant information, adhering to relevant procedures/clearance required)**
Investigating the effectiveness of video as a tool for intervention and reflection to promote the independence of students with autism in Post-16 special education ERN_18-0815	**The information provided below is from the original application:** **Aims of the study:** Provide a model of how video can be used in promoting the self-determination of students with autism in Post-16 Special Education Provide a model of the approach that can be applied in different settings Provide suggestions for the Post-16 curriculum regarding the encouraging of the students' self-determination **Methodology:** My study will involve a participatory action research design, as it arises as the most	Gaining consent Confidentiality Data storage	**Consent**: The student consent forms have been written using prior knowledge of the students' level of understanding. Students are able to provide consent form because this group of students can read and write in English and they are currently attending pre-GSCE level classes. Moreover, the researcher will seek approval from the Post-16 Assistant Head Teacher, who is most experienced in working with the participant group, to ensure they are suitable to achieve informed consent. **Confidentiality**: In order to ensure confidentiality, all participants will be given

	relevant in meeting my study's aims and outcomes. This will be structured in three phases involving different tools of data collection, all of which are outlined below. The first two phases involve gathering data from a school about the different perspectives in relation to teaching and development of self-determination to young people with autism. The third phase will explore the use of video as a tool to promote the self-determination to young people with autism. **Participants:** Phase 1: Semi-structured interviews: 5 senior members of staff involved in the development of the Post-16 curriculum 5 parents of students currently enrolled in the specialist school Semi-structured observations: 15 students enrolled in the Post-16 curriculum, in the 'main' curriculum class 2 teachers		pseudonyms not related to their real names, from the start of the data collection process, and only the researcher will be aware of their identity. **Data storage:** All data will be stored using the University of Birmingham's BEAR storage, by the end of each day of data collection, and can only be accessed by the researcher and 2 supervisors. The data will also be backed-up on an encrypted external hard-drive, at the end of each day of data collection/transcription and kept in a locked filing cabinet in the participant's home. Field notes will be kept separately in a locked cabinet in the University of Birmingham, where the researcher spends most of the working day.

	5 teaching assistants Phase 2: Questionnaires: 80 members of the teaching staff permanently employed at the specialist school 80 parents/carers whose children are enrolled at specialist school 60 students enrolled at the specialist school, inclusion criteria Phase 3: 4 members of staff 10 students (over 16 years) **Recruitment:** Participants will be selected from the special school setting in which the researcher worked as a teaching assistant until the end of the previous school year and is currently a Co-opted school governor. Both staff and students are aware of the researchers' position, and parents/carers will be informed through the consent form.		

	All participants will be selected on a voluntary basis. Firstly, approval will be sought from the gatekeeper, the school's head teacher, who will review all the data collection tools.		

Subsequent amendment 1	The present amendments imply no changes regarding outcomes, methodology, participants or recruitment. The details submitted in the original application are still valid. The present amendments are submitted in order to provide further detail and finalised data collection tools for Phase 2 and Phase 3 as outlined in the original application.	No new ethical considerations arise.	
Subsequent amendment 2			
Subsequent amendment 3			

7. **DETAILS OF PROPOSED <u>NEW AMENDMENT</u>**
   Provide details of the proposed new amendment, and clearly and explicitly state how the proposed new amendment will differ from the details of the study as already approved (see Q6 above).

The following amendments relate to the study titled: *Investigating the effectiveness of video as a tool for intervention and reflection to promote the independence of students with autism in Post-16 special education,* ethical review number: ERN_18-0815. The study has been **given full ethical approval** on 10 December 2018. The original methodology structured in three Phases outlined below has been given full ethical approval. The present amendments **do not bring any changes** to the original methodology. The present amendments are submitted to **provide further detail** about Phase 2 and Phase 3, and **finalised data collection tools** and related documents as informed by the data collected in Phase 1.

Original methodology (as outlined in the original application for ethical approval):
Phase 1 - Consultation / exploratory study:

- 5 semi-structured interviews with members of staff involved in the Post-16 setting of an all-age specialist school for students with autism
- 5 parents of students enrolled in the Post-16 setting of an all-age specialist school for students with autism
- 2 weeks of semi-structured observations of a main curriculum class in the Post-16 setting of an all-age specialist school for students with autism
- a document interrogation of the existing public documents regarding the Post-16 curriculum, and school development plan regarding the Post-16 setting, and other related documentation considered relevant and provided for analysis by the school's head teacher

Phase 2 - Wider consultation survey of the school:

- questionnaires with members of staff involved working in an all-age specialist school for students with autism
- questionnaires with parents of students enrolled in an all-age specialist school for students with autism
- questionnaires with students enrolled in an all-age specialist school for students with autism

Phase 3 - Design, implementation and evaluation of the video supported teaching approaches:

- action research with 4 staff and 10 students in the Post-16 setting of an all-age specialist school for students with autism (further details provided below)

<u>Further details regarding Phase 2 and Phase 3:</u>

The information below provides further details about Phase 2 and Phase 3 which have been given full ethical approval in the original application.

Phase 2:
As outlined in the original application, Phase 2 of the data collection for this study will involve carrying out a whole-school survey involving the staff, students, and parents of students enrolled in an all-age specialist school for students with autism. The present amendments will not bring any changes to the study outlined in the original application, but will include attached the finalised data collections tools, the 3 questionnaires, which have not previously been submitted. The questions included in the questionnaires for staff and parents have been developed based on the data collected in Phase 1. The interviews conducted in Phase 1 have also served a purpose of piloting the questions included in the questionnaires in Phase 2. The interview schedules have been submitted with the original application and have been given full ethical approval. Phase 1 also aimed to ensure that the appropriate terminology for each participant group was used in order to maximise inclusivity, and to generate valuable data. This data will also be used to inform the principles of the approach in Phase 3. The student questionnaire has been developed with prior knowledge of their level of understanding from researcher's previous experience of working in the school. The researcher will seek gatekeeper's approval for all 3 questionnaires.

Phase 3:
As outlined in the original application, Phase 3 will involve the development of the approach aimed at promoting the students' self-determination, through the use of video. This will be based on principles of Video Interaction Guidance, which is an intervention aimed at empowering practitioners by encouraging them to reflect on the positive elements of their existing practice, through the use of video.

Part A – Developing the approach
In order to develop the approach, the researcher will take short videos of up to 10mins for each student taking part in this phase of the study (up to 3 videos per student, during up to 3 different activities; the numbers might change depending on the number of students and their parents consenting to their participation). This is in accordance with the principles and empirical evidence for VIG, which shows that most progress is made within the first 3 sessions. The researcher will select short clips of up to 30seconds that demonstrate strengths in staff's practice. These videos will be reviewed with the staff and student groups separately. Staff will be encouraged to reflect on what they were doing in the clip that helped promote the students' self-determination and related skills. The students will be encouraged to reflect on what the adult was doing in the clip that helped promote their self-determination, what they were thinking and feeling at the time, and how they think this might help them in the future. The researcher will provide staff and students with initial principles for the approach developed based on principles of VIG and existing literature on self-determination as an educational outcome. These will be finalised in collaboration with the staff and students and the reflections they provide from reviewing the clips.

At the end of Part A, students' self-determination will be measured using the AIR self-determination scale, developed by the American Institutes for Research (AIR), in collaboration with Teachers College, Columbia University in New York City. The AIR self-determination scale includes student, parent, and educator versions of the AIR Self-Determination Assessments, and have been made available for public use, free of charge

on the University of Oklahoma's webpage. The same assessments will be used to measure students' self-determination at the end of Phase B to allow for comparison.

Part B – Evaluating, adapting, and implementing the approach
Following the development of the approach and its principles in Part A, the researcher will provide an initial training session for staff and students separately to introduce them to VIG with practitioners (or previously known as Video Enhanced Reflective Practice – VERP). This is based on the same principles as VIG, but staff and students will be taking the videos themselves, and will share and reflect on them in a group setting. This method is chosen instead of having the researcher continue filming the videos in order to empower both staff and students, and enhance the participatory nature of the research. Staff and students will be trained to select the clips during which they believe they/their partner is demonstrating the principles of the approach. This is to support the implementation of the approach, and also to encourage reflection. The need for reflection has been highlighted during the interviews conducted in Phase 1. The researcher will meet with the staff and students three times a week for 3-weeks following the training in VIG with practitioners to discuss the principles of the approach, adapt them accordingly, and review the clips. This is in accordance with the values of action research which involves revising the initial plan, reflecting, and adapting according to the needs of participants.

For the following 6 weeks the researcher will meet with the staff and students once a week to discuss the implementation of the approach. The sharing of videos during this time will be optional.

8. JUSTIFICATION FOR PROPOSED NEW AMENDMENT

Phase 2:
The study undertakes a participatory action research design, which involves identifying a need within a setting and designing, in this case, an approach to address it. In order to ensure that the approach is addressing the needs of all parties involved, it is essential that the thoughts of staff, students and parents are gathered and taken into consideration. Given the large sample size and the belief that members of all parties should have the opportunity to have their views heard, a survey has been chosen as most suitable for Phase 2 of the study.
The questionnaires will be distributed to all staff and students, and one per household to be completed by a main carer. The maximum numbers of expected responses are outlined below:

- 200 students currently on roll
- 110 member of teaching staff currently employed
- 200 parents/carers

Phase 3:
This phase represents the main part of the study which is informed by the previous two phases. This amendment is submitted to provide more detail regarding the data collection during this phase, as initially outlined in the original form. Developing the approach

collaboratively with the staff and students during this phase is crucial in following the principles of an action research design which involves research that target a specific problem in a particular context. The participants will be involved not only in developing the approach, but also in implementing it and reflecting on its effectiveness in practice.

9. **ETHICAL CONSIDERATIONS**

What ethical considerations, if any, are raised by the proposed new amendment?

The present amendments **do not bring any new ethical considerations** apart from those outlined in the original application. The procedure for data storage and management will be maintained as outlined in the original application. However minor differences should be mentioned regarding gaining consent and recruitment:

Phase 2:

Consent:

Phase 1 involved providing participants with separate forms to be signed before interviews and observations. For Phase 2 the consent form will be included in the questionnaire and will take the form of its first question. A positive response will lead the participant to the following question, whilst a negative one will lead to the end of the questionnaire. The student consent form has been written in a manner that matches their level of understanding.

Recruitment:

The process of recruitment will happen on a voluntary basis, same as in Phase 1. **Staff** will be emailed a link to the questionnaire via their school emails, and provided with paper copies at reception if they prefer to complete it in that manner. The researcher will also ask for permission to attend and invite staff to take part in the questionnaire during staff meetings. **Parents** will be sent home a printed version of the questionnaire, along with a link to the online version and a letter written by the headteacher to express support of the project. **Students** will be asked to complete their questionnaires in school, using school computers or paper copies. Teaching staff will be informed and support the students' completion of the questionnaire. The decision to use both online and paper questionnaire has been made based on the data collected in Phase 1, where it has been highlighted that some parents prefer electronic communication (via email), whilst others are not computer literate. This is to maximise inclusivity and number of responses.

Phase 3:

Consent:

Staff, students, and their parents will be provided with the Research Information Sheet and Consent form for this phase of the study. The researcher will provide a short presentation outlining Phase 3 of the study to ensure that all participants can provide informed consent. This will be provided for the main class in the Post-16 setting and the members of staff working there regularly, where the researcher carried out semi-structured observations during Phase 1. The researcher is familiar with the students and their level of

understanding, so she will be able to provide a presentation that matches their level of understanding and maximises their potential to provide informed consent.

Recruitment:
Staff and students will be recruited from the main curriculum class of an all-age autism specialist school in the Post-16 setting, on a voluntary basis.

Confidentiality, data storage and management:
The present amendments do not bring any further changes to confidentiality, data storage and management as outlined in the original application. Phase 2 and Phase 3 involve collecting data that differs in nature than that from the Phase 1. This will included data collected through questionnaires, AIR self-determination assessments, and video data. The data collected in Phase 2 and Phase 3 will be processed and managed in the same manner as that collected in Phase 1, which is in accordance with GDPR 2018 regulations and has been given full ethical approval. Please see below the information provided in the original application:

No personal data that could identify the participants (name, address) will be collected or stored. The name and location of the school will not be recorded or including in the presentation of the study.

In order to ensure confidentiality, all participants will be given pseudonyms not related to their real names, from the start of the data collection process, and only the researcher will be aware of their identity. Therefore, participants will not be anonymous but their data will be kept confidential in accordance with the GDPR 2018 regulations.
Video and audio-recorded data will not be shared outside of the participant group involved in the study.

All data will be stored using the University of Birmingham's the Birmingham Environment for Academic Research (BEAR) storage, by the end of each day of data collection, and can only be accessed by the researcher and 2 supervisors. This collection of IT services has been put in place following and in agreement with the GDPR 2018 requirements. The data will also be backed-up on an encrypted external hard-drive, at the end of each day of data collection/transcription, and kept in a locked filing cabinet in the participant's home.

Participants will be informed of the data collected, its storage, and access before beginning the first phase of the data collection, and reminded at each stage and method of data collection through the research information sheets and consent form. This is in accordance with the GDPR 2018 requirements of ensuring data protection by design, thus taking into consideration data protection measures and informing participants at the design phase.

Only necessary personal data will be collected in the study, in accordance with the GDPR 2018 principles of data protection by default. For phase 1 this will involve recording participants' names through the consent forms which will be stored in a safe location in a

locked cabinet in the School of Education, where the researcher spends most of the working day. No other personal data will be stored during this phase, to ensure data minimization.

All data will be stored using the University of Birmingham's BEAR storage, by the end of each day of data collection, and can only be accessed by the researcher and 2 supervisors. The data will also be backed-up on an encrypted external hard-drive, at the end of each day of data collection/transcription, and kept in a locked filing cabinet in the participant's home. Field notes will be kept separately in a locked cabinet in the University of Birmingham, where the researcher spends most of the working day.
Following the thesis publication, a subset of the data that underpins the paper will be transferred to the UoB Research Data Archive (RDA), and will be kept for at least 10 years in accordance with the University of Birmingham regulations.

The following documents are attached with the amendments form:
Phase 2:
Parent/carer questionnaire (consent form and information sheet included)
Student questionnaire (consent form and information sheet included)
Staff questionnaire (consent form and information sheet included)
*the questionnaires have been exported from Qualtrics into Word; participants will also be provided with a link to the online version of the same questionnaire.
Phase 3:
Research information sheet (for staff and parents)
Student video recording information sheet and consent form
Video recording consent form for parents
Video recording consent form for staff

10. **DECLARATION BY APPLICANTS**

I make this application on the basis that the information it contains is confidential and will be used by the
University of Birmingham for the purposes of ethical review and monitoring of the research project described
herein, and to satisfy reporting requirements to regulatory bodies. The information will not be used for any
other purpose without my prior consent.

I declare that:

- The information in this form together with any accompanying information is complete and correct to the best of my knowledge and belief and I take full responsibility for it.
- I undertake to abide by University Code of Conduct for Research (http://www.birmingham.ac.uk/Documents/university/legal/research.pdf) alongside any other relevant professional bodies' codes of conduct and/or ethical guidelines.
- I will report any changes affecting the ethical aspects of the project to the University of Birmingham Research Ethics Officer.
- I will report any adverse or unforeseen events which occur to the relevant Ethics Committee project to the University of Birmingham Research Ethics Officer.

Signature of Principal investigator/project supervisor:	
Date:	03/04/2019

Appendix 2c – Data Management Plan

DataManagementPlan_Draft 9_May 2019 Investigating the potential of using video as a tool for reflection to develop an environmental approach to promote the self- determination of students with autism in Post-16 special education

Data description
What types of data will be used or created?
The process of data collection will be structured in 3 phases, each meant to inform and develop the next.

In Phase 1 data will be collected through semi-structured interviews with 5 members of staff and 5 parents of students enrolled in the Post-16 setting of a specialist school for students with autism. The interviews will be audio-recorded and later transcribed into text format. Data will also be collected through conducting 2 weeks of semi-structured observations in the Post-16 setting of a specialist school. A table will be used to collect field notes, which will later be transcribed.

Phase 2 will involved a whole-school survey, during which data will be collected through online and paper questionnaires with all the members of teaching staff, students, and their parents/carers, in the same school setting. The data collected in this phase will be processed using Qualtrics.

The data collected in Phase 3 will involve video recordings of students and staff in the Post-16 setting of the same specialist school. Unstructured notes will also be kept to record researcher's reflections on the process.

How will the data be structured and documented?
Data will be structured according to my thesis' stucture, and the information made publicly available will be according to participants' consent.

Data storage and archiving
How will your data be stored and backed up?
All data will be stored using the University of Birmingham's BEAR storage, which can only be accessed by the researcher and 2 supervisors. The data will also be backed up on an encrypted external hard-drive, at the end of each day of data collection/transcription. Paper versions of questionnaires, consent forms, and field notes will be kept in a secure, locked location within the University of Birmingham.

Is any of the data of (ethically or commercially) sensitive nature? If so, how do you ensure the data are protected accordingly?
All names and other information that might lead to the identification of participants will be anonymised. Video and audio data will not be made publicly available.

Where will your data be archived in the long term?
Following the thesis publication, a subset of the data that underpins the paper will be transferred to the UoB Research Data Archive (RDA).

Data sharing

Which data will you share, and under which conditions? How will you make the data available to others?

Data collected through observation sheets and transcriptions of interviews will be made available upon request, and following participant consent. Video data will not be made publicly available.

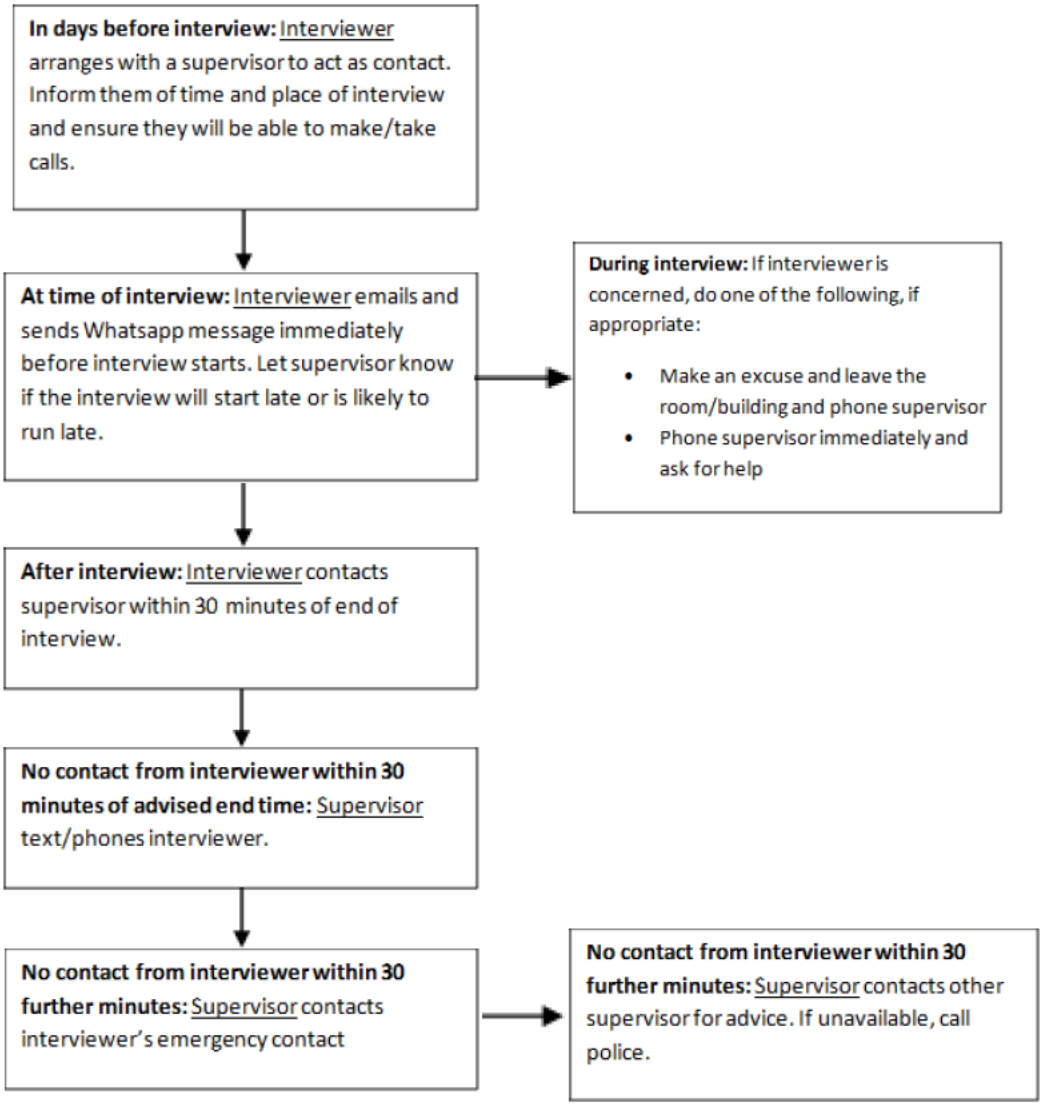
Appendix 2d – Lone Working Protocol

Face to face interview procedure

Participants will be invited for an interview at the school. If this is not convenient for the participants, the researcher will ask them to suggest location of their choice. For all interviews occurring in a different setting apart from the school, the researcher will inform one of the supervision team, Despina Papoudi, of the planned time, duration and location of the interview.

All face to face interviews will take place during working hours and at a time when one of the supervision team would be available to be their contact and to act in case of emergency. It is the responsibility of the interviewer to arrange this with the supervisors and ensure they are aware of the following steps. The interviewer is responsible for following the face-to-face interview procedure.

For interviews taking place anywhere outside of the school, the following steps will be taken:



Appendix 3 – Phase 1 (Exploration)

Appendix 3a - Phase 1 Interview Research Information Sheet (Staff)

Research Information Sheet

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Research context:
The idea for this study came from an analysis of the current statutory guidance stated in the 2015 Special educational needs and disability code of practice: 0 to 25 years, which appears promising regarding the opportunities given to young people to make decisions regarding their education and transition to adulthood, but lacks in practical guidance. Thus, the need to develop an approach to ensure that a school's current curriculum is meeting the aims of the current statutory guidance arises.

The increasing use of video as a tool for intervention over the last decades has demonstrated its potential for developing a range of skills with different target groups. In the area of autism research especially, the use of video has proven effective when used with instructional purposes, but research is also growing regarding its use as a tool for reflection. The use of video in Video Interaction Guidance is one such example, where videos taken of the interaction between parent and child are used by practitioners to empower parents in their relationships with their children. Thus, by looking back at moments of positive practice selected by practitioners, the parents are encouraged to recognise their own strengths and thus improve their self-confidence. Similar uses of video have been employed in school environments, mainly with the aim of empowering teaching staff, and helping them seek moments of positive interaction with the students.

The study's framework is based on Bronfenbrenner's bioecological model of human development, which recognises the importance of the relationship between human behaviour and the environment, and the significant of research in context.

Research aims:
This study aims to explore the potential of video as a tool for reflection through developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education. Previous research shows that self-determined individuals with autism and additional needs have better post-school outcomes and increased quality of life, by being equipped with the skills and abilities to exert control over their lives. The study will undertake a participant action research design, in which both the staff and students will be actively involved in shaping the approach.

Researcher information:
Laura Cristescu is a postgraduate researcher carrying out this study in fulfilment of her PhD in Education thesis, under the supervision of Dr. Despina Papoudi and Prof. Graeme Douglas, at

the University of Birmingham. Laura is a former teaching assistant at [school's name], and currently a Co-opted school governor.

Participant contribution:

For the initial phase of the study, staff will be asked to take part in a semi-structured face-to-face interview conducted by the researcher which will be audio-recorded and transcribed. The interview aims to gather information regarding staff's views on self-determination, the development of the school curriculum, and students' involvement in decisions about their learning.

Data analysis:

The data will be analysed using data processing software (NVivo and SPSS) in order to inform the following phase of the study.

Results:

Results will be shared with participants after the completion of the whole study through a summary of the findings, and a presentation of the approach, if participants are interested.

Confidentiality:

The information provided by the participants during the interview will be audio-recorded and transcribed at the end of each day of the data collection and stored securely on the University of Birmingham's Birmingham Environment for Academic Research (BEAR) storage. BEAR is a collection of IT resources including high performance computing, storage, and archiving, that are designed to help research, in accordance with the General Data Protection Regulations (GDPR) 2018. The data will also be stored on an encrypted password-protected external hard-drive as back-up. Hard copies of the data will be stored securely in a locked cabinet in a safe location in the University of Birmingham. The information will be retained by the University of Birmingham and will only be used for the purpose of research and statistical and audit purposes. At the end of the study, the data will be disposed of in accordance with the University of Birmingham Ethical Review procedures. Quotations from participants will be used within the study, but names or any other personal information will not be recorded or included in the reporting of the study. The name and location of the school will not be reported in the study.

Right to withdraw:

Participation in this study is voluntary, and participants have the right to withdraw at any point before or after the data is collected without any information being requested. Participants will not be able to withdraw after the completion of the data analysis for the study's initial phase at the end of February 2018.

Contact information:

If you require any further details, please do not hesitate to contact the researcher:

Name: Laura Cristescu

Mobile phone: [redacted]

Email: [redacted]

First supervisor's contact details:

Dr Despina Papoudi
Lecturer in Autism in the Department of Disability, Inclusion and Special Needs/DISN at the School of Education, University of Birmingham
Email: [redacted]
Phone: [redacted]

Appendix 3b - Phase 1 Interview Research Information Sheet (Parents/Carers)

Research Information Sheet

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Research context:
The idea for this study came from an analysis of the current statutory guidance stated in the 2015 Special educational needs and disability code of practice: 0 to 25 years, which appears promising regarding the opportunities given to young people to make decisions regarding their education and transition to adulthood, but lacks in practical guidance. Thus, the need to develop an approach to ensure that a school's current curriculum is meeting the aims of the current statutory guidance arises.

The increasing use of video as a tool for intervention over the last decades has demonstrated its potential for developing a range of skills with different target groups. In the area of autism research especially, the use of video has proven effective when used with instructional purposes, but research is also growing regarding its use as a tool for reflection. The use of video in Video Interaction Guidance is one such example, where videos taken of the interaction between parent and child are used by practitioners to empower parents in their relationships with their children. Thus, by looking back at moments of positive practice selected by practitioners, the parents are encouraged to recognise their own strengths and thus improve their self-confidence. Similar uses of video have been employed in school environments, mainly with the aim of empowering teaching staff, and helping them seek moments of positive interaction with the students.

The study's framework is based on Bronfenbrenner's bioecological model of human development, which recognises the importance of the relationship between human behaviour and the environment, and the significant of research in context.

Research aims:
This study aims to explore the potential of video as a tool for reflection through developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education. Previous research shows that self-determined individuals with autism and additional needs have better post-school outcomes and increased quality of life, by being equipped with the skills and abilities to exert control over their lives. The study will undertake a participant action research design, in which both the staff and students will be actively involved in shaping the approach.

Researcher information:
Laura Cristescu is a postgraduate researcher carrying out this study in fulfilment of her PhD in Education thesis, under the supervision of Dr. Despina Papoudi and Prof. Graeme Douglas, at the University of Birmingham. Laura is a former teaching assistant at [school's name, and currently a Co-opted school governor.

Participant contribution:

For the initial phase of the study, parents/carers will be asked to take part in a semi-structured face-to-face interview conducted by the researcher which will be audio-recorded and transcribed. The interviews will be conducted in the meeting room at Russell Road or at the University of Birmingham, at a time suitable for the participant. The interview aims to gather information regarding parents' views on self-determination, the current school curriculum, and students' involvement in decisions about their learning.

Data analysis:
The data will be analysed using data processing software (NVivo and SPSS) in order to inform the following phase of the study.

Results:
Results will be shared with participants after the completion of the whole study through a summary of the findings, and a presentation of the approach, if participants are interested.

Confidentiality:
The information provided by participants will be stored securely on the University of Birmingham BEAR cloud storage, and on an encrypted password-protected external hard-drive as back-up. Hard copies of the data will be stored securely in a locked cabinet in a safe location in the researcher's home. The information will be retained by the University of Birmingham and will only be used for the purpose of research and statistical and audit purposes. At the end of the study, the data will be disposed of in accordance with the University of Birmingham Ethical Review procedures. Quotations from participants will be used within the study, but names or any other personal information will not be recorded or included in the reporting of the study. The name and location of the school will not be reported in the study.

Right to withdraw:
Participation in this study is voluntary, and participants have the right to withdraw at any point before or after the data is collected without any information being requested. Participants will not be able to withdraw after the completion of the data analysis for the study's initial phase at the end of April 2019.

Contact information:
If you require any further details, please do not hesitate to contact the researcher:
Name: Laura Cristescu
Mobile phone: [redacted]
Email: [redacted]

First supervisor's contact details:
Dr Despina Papoudi
Lecturer in Autism in the Department of Disability, Inclusion and Special Needs/DISN at the School of Education, University of Birmingham
Email: [redacted]
Phone: [redacted]

Appendix 3c – Phase 1 Interview Consent Form

Interview Consent Form

Please keep this form for your information.

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Fair Processing Statement:
This information is being collected as part of a research project concerned the investigation of the potential of video as a tool for reflection in developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education within Department of Education in the University of Birmingham. The information which you supply and that which will be collected as part of the research project will be stored on the secure BEAR cloud storage and will only be accessed by authorised personnel involved in the project. The Birmingham Environment for Academic Research (BEAR) is a collection of IT resources including high performance computing, storage, and archiving, that are designed to help research, in accordance with the General Data Protection Regulations (GDPR) 2018. After the completion of the research project, the information collected will be disposed of in accordance with the University of Birmingham Ethical Review procedures. No identifiable personal data will be recorded or published.

Statements of understanding/consent:
I confirm that I have read and understand the participant information sheet provided for this study. I have had the opportunity to ask questions if necessary and have had these answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time until the specified deadline, without giving any reason. If I withdraw before the deadline my data will be removed from the study and will be destroyed. After the deadline, I understand that my data will not be removed from the study.

I understand that my personal data will be processed for the purposes detailed in the information sheet, in accordance with the General Data Protection Regulation 2018.

I consent to being audio recorded during the interview, as part of the data analysis process.

I understand that any information recorded will remain confidential and no information that identifies me will be made publicly available.

I understand that any quotations used in the written report will not identify me.

Please keep this form for your information.

Agreement:
Based on the above, I agree to take part in this study:
Name of Participant:

Signature of Participant:

Date:

Please return this form to the researcher on the day of your interview.

Agreement:
Based on the above, I agree to take part in this study:
Name of Participant:

Signature of Participant:

Date:

Appendix 3d – Phase 1 Observation Research Information Sheet (Staff)

Research Information Sheet

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Research context:
The idea for this study came from an analysis of the current statutory guidance stated in the 2015 Special educational needs and disability code of practice: 0 to 25 years, which appears promising regarding the opportunities given to young people to make decisions regarding their education and transition to adulthood, but lacks in practical guidance. Thus, the need to develop an approach to ensure that a school's current curriculum is meeting the aims of the current statutory guidance arises.

The increasing use of video as a tool for intervention over the last decades has demonstrated its potential for developing a range of skills with different target groups. In the area of autism research especially, the use of video has proven effective when used with instructional purposes, but research is also growing regarding its use as a tool for reflection. The use of video in Video Interaction Guidance is one such example, where videos taken of the interaction between parent and child are used by practitioners to empower parents in their relationships with their children. Thus, by looking back at moments of positive practice selected by practitioners, the parents are encouraged to recognise their own strengths and thus improve their self-confidence. Similar uses of video have been employed in school environments, mainly with the aim of empowering teaching staff, and helping them seek moments of positive interaction with the students.

The study's framework is based on Bronfenbrenner's bioecological model of human development, which recognises the importance of the relationship between human behaviour and the environment, and the significant of research in context.

Research aims:
This study aims to explore the potential of video as a tool for reflection through developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education. Previous research shows that self-determined individuals with autism and additional needs have better post-school outcomes and increased quality of life, by being equipped with the skills and abilities to exert control over their lives. The study will undertake a participant action research design, in which both the staff and students will be actively involved in shaping the approach.

Researcher information:
Laura Cristescu is a postgraduate researcher carrying out this study in fulfilment of her PhD in Education thesis, under the supervision of Dr. Despina Papoudi and Prof. Graeme Douglas, at the University of Birmingham. Laura is a former teaching assistant at [school's name], and currently a Co-opted school governor.

Participant contribution:
In order to ensure that the study is addressing needs of the school, the researcher will undertake semi-structured observations for the initial phase of the study. The researcher will observe every day for up to two weeks for the whole duration of the school day in the Post-16 setting. The researcher will not interfere with staff and students' usual routine or learning, or obstruct in any way the normal schedule of the school day. Data will be recorded through hand-written notes describing the context of the lesson, the activity students are undertaking, information regarding their goal-setting and attainment, their opportunities to make choices and decisions, and support provided by staff. Staff and students' participation is essential in this part of the study in order to determine which areas of the curriculum can be addressed and how students can be further supported in the development of their self-determination.

Data analysis:
The data will be analysed using data processing software (NVivo and SPSS) in order to inform the following phase of the study.

Results:
Results will be shared with participants after the completion of the whole study through a summary of the findings, and a presentation of the approach, if participants are interested.

Confidentiality:
No information that can identify the staff or students will be recorded through the fielda notes. The hand-written notes will be typed at the end of each day of the data collection and stored securely on the University of Birmingham's Birmingham Environment for Academic Research (BEAR) storage. BEAR is a collection of IT resources including high performance computing, storage, and archiving, that are designed to help research, in accordance with the General Data Protection Regulations (GDPR) 2018. The data will also be stored on an encrypted password-protected external hard-drive as back-up. Hard copies of the data will be stored securely in a locked cabinet in a safe location in the University of Birmingham. The information will be retained by the University of Birmingham and will only be used for the purpose of research and statistical and audit purposes. At the end of the study, the data will be disposed of in accordance with the University of Birmingham Ethical Review procedures. The name and location of the school will not be reported in the study.

Right to withdraw:
Participation in this study is voluntary, and participants have the right to withdraw at any point before or after the data is collected without any information being requested. Participants will not be able to withdraw after the completion of the data analysis for the study's initial phase at the end of February 2018.

Contact information:
If you require any further details, please do not hesitate to contact the researcher:
Name: Laura Cristescu
Mobile phone: [redacted]
Email: [redacted]

First supervisor's contact details:

Dr Despina Papoudi
Lecturer in Autism in the Department of Disability, Inclusion and Special Needs/DISN at the School of Education, University of Birmingham
Email: [redacted]
Phone: [redacted]

Appendix 3e – Phase 1 Observation Research Information Sheet (Parents/Carers)

Research Information Sheet

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Research context:
The idea for this study came from an analysis of the current statutory guidance stated in the 2015 Special educational needs and disability code of practice: 0 to 25 years, which appears promising regarding the opportunities given to young people to make decisions regarding their education and transition to adulthood, but lacks in practical guidance. Thus, the need to develop an approach to ensure that a school's current curriculum is meeting the aims of the current statutory guidance arises.

The increasing use of video as a tool for intervention over the last decades has demonstrated its potential for developing a range of skills with different target groups. In the area of autism research especially, the use of video has proven effective when used with instructional purposes, but research is also growing regarding its use as a tool for reflection. The use of video in Video Interaction Guidance is one such example, where videos taken of the interaction between parent and child are used by practitioners to empower parents in their relationships with their children. Thus, by looking back at moments of positive practice selected by practitioners, the parents are encouraged to recognise their own strengths and thus improve their self-confidence. Similar uses of video have been employed in school environments, mainly with the aim of empowering teaching staff, and helping them seek moments of positive interaction with the students.

The study's framework is based on Bronfenbrenner's bioecological model of human development, which recognises the importance of the relationship between human behaviour and the environment, and the significant of research in context.

Research aims:
This study aims to explore the potential of video as a tool for reflection through developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education. Previous research shows that self-determined individuals with autism and additional needs have better post-school outcomes and increased quality of life, by being equipped with the skills and abilities to exert control over their lives. The study will undertake a participant action research design, in which both the staff and students will be actively involved in shaping the approach.

Researcher information:
Laura Cristescu is a postgraduate researcher carrying out this study in fulfilment of her PhD in Education thesis, under the supervision of Dr. Despina Papoudi and Prof. Graeme Douglas, at the University of Birmingham. Laura is a former teaching assistant at [school's name], and currently a Co-opted school governor.

Participant contribution:
In order to ensure that the study is addressing needs of the school, the researcher will undertake semi-structured observations for the initial phase of the study. The researcher will observe every day for up to two weeks for the whole duration of the school day in the Post-16 setting. The researcher will not interfere with students' usual routine or learning, or obstruct in any way the normal schedule of the school day. Data will be recorded through hand-written notes describing the context of the lesson, the activity students are undertaking, information regarding their goal-setting and attainment, their opportunities to make choices and decisions, and support provided by staff. Students' participation is essential in this part of the study in order to determine which areas of the curriculum can be addressed and how students can be further supported in the development of their self-determination.

Data analysis:
The data will be analysed using data processing software (NVivo and SPSS) in order to inform the following phase of the study.

Results:
Results will be shared with participants after the completion of the whole study through a summary of the findings, and a presentation of the approach, if participants are interested.

Confidentiality:
No information that can identify the staff or students will be recorded through the field notes. The hand-written notes will be typed at the end of each day of the data collection and stored securely on the University of Birmingham's Birmingham Environment for Academic Research (BEAR) storage. BEAR is a collection of IT resources including high performance computing, storage, and archiving, that are designed to help research, in accordance with the General Data Protection Regulations (GDPR) 2018. The data will also be stored on an encrypted password-protected external hard-drive as back-up. Hard copies of the data will be stored securely in a locked cabinet in a safe location in the University of Birmingham. The information will be retained by the University of Birmingham and will only be used for the purpose of research and statistical and audit purposes. At the end of the study, the data will be disposed of in accordance with the University of Birmingham Ethical Review procedures. The name and location of the school will not be reported in the study.

Right to withdraw:
Participation in this study is voluntary, and participants have the right to withdraw at any point before or after the data is collected without any information being requested. Participants will not be able to withdraw after the completion of the data analysis for the study's initial phase at the end of February 2018.

Contact information:
If you require any further details, please do not hesitate to contact the researcher:
Name: Laura Cristescu
Mobile phone: [redacted]
Email: [redacted]

First supervisor's contact details:

Dr Despina Papoudi
Lecturer in Autism in the Department of Disability, Inclusion and Special Needs/DISN at the School of Education, University of Birmingham
Email:
Phone:

Appendix 3f – Phase 1 Observation Consent Form (Staff)

Observation Consent Form

Please keep this form for your information.

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Fair Processing Statement:
This information is being collected as part of a research project concerned the investigation of the potential of video as a tool for reflection in developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education within Department of Education in the University of Birmingham. The information which you supply and that which will be collected as part of the research project will be stored on the secure BEAR cloud storage and will only be accessed by authorised personnel involved in the project. The Birmingham Environment for Academic Research (BEAR) is a collection of IT resources including high performance computing, storage, and archiving, that are designed to help research, in accordance with the General Data Protection Regulations (GDPR) 2018. After the completion of the research project, the information collected will be disposed of in accordance with the University of Birmingham Ethical Review procedures. No identifiable personal data will be recorded or published.

Statements of understanding/consent:
I confirm that I have read and understand the research information sheet provided for this study. I have had the opportunity to ask questions if necessary and have had these answered satisfactorily.

I understand that my child's participation is voluntary and that we are free to withdraw at any time until the specified deadline, without giving any reason. If we withdraw before the deadline the data will be removed from the study and will be destroyed. After the deadline, I understand that the data will not be removed from the study.

I understand that personal data will be processed for the purposes detailed in the information sheet, in accordance with the General Data Protection Regulation 2018.

I consent to my child being observed without any interference from the researcher, as part of the data analysis process.

I understand that any information recorded will remain confidential and no information that identifies my child will be made publicly available.

I understand that any information used in the written report will not identify my child.

Please keep this form for your information.

Agreement:

Based on the above, I consent that my child can take part in the observation for this study:

Name of Parent/Carer:
Name of Student:
Signature of Parent/Carer:
Date:

Please return this form to the school's office.

Agreement:
Based on the above, I consent that my child can take part in the observation for this study:

Name of Parent/Carer:
Name of Student:
Signature of Parent/Carer:
Date:

Appendix 3g – Phase 1 Observation Consent Form (Parents/Carers)

Please keep this form for your information.

Observation Parental Consent Form

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Fair Processing Statement:
This information is being collected as part of a research project concerned the investigation of the potential of video as a tool for reflection in developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education within Department of Education in the University of Birmingham. The information which you supply and that which will be collected as part of the research project will be stored on the secure BEAR cloud storage and will only be accessed by authorised personnel involved in the project. The Birmingham Environment for Academic Research (BEAR) is a collection of IT resources including high performance computing, storage, and archiving, that are designed to help research, in accordance with the General Data Protection Regulations (GDPR) 2018. After the completion of the research project, the information collected will be disposed of in accordance with the University of Birmingham Ethical Review procedures. No identifiable personal data will be recorded or published.

Statements of understanding/consent:
I confirm that I have read and understand the research information sheet provided for this study. I have had the opportunity to ask questions if necessary and have had these answered satisfactorily.

I understand that my child's participation is voluntary and that we are free to withdraw at any time until the specified deadline, without giving any reason. If we withdraw before the deadline the data will be removed from the study and will be destroyed. After the deadline, I understand that the data will not be removed from the study.

I understand that personal data will be processed for the purposes detailed in the information sheet, in accordance with the General Data Protection Regulation 2018.

I consent to my child being observed without any interference from the researcher, as part of the data analysis process.

I understand that any information recorded will remain confidential and no information that identifies my child will be made publicly available.

I understand that any information used in the written report will not identify my child.

Please keep this form for your information.
Agreement:
Based on the above, I consent that my child can take part in the observation for this study:

Name of Parent/Carer:
Name of Student:
Signature of Parent/Carer:
Date:

Please return this form to the school's office.

Agreement:
Based on the above, I consent that my child can take part in the observation for this study:

Name of Parent/Carer:
Name of Student:
Signature of Parent/Carer:
Date:

Appendix 3h – Phase 1 Observation Consent Form (Students)

Who am I?
My name is Miss Laura Cristescu. You might know me as I worked as a teaching assistant in secondary.

I am a student at the University of Birmingham working on developing a program to help the students at [school name] learn about what they need and how they can talk about it.

What will I be doing?
I will be coming into [Post-16 site name] to find out more about what you are doing in Post-16. I will be writing notes on a notepad of the lessons you are doing, the choices you can make and how staff are helping you.

What should you do?
Go to lessons and do your work as usual. You can talk to me about my project, ask any questions and tell me if you have any worries about my study.

What should you be worried about?
Nothing. I will not be looking at how well you are doing your work or testing you. My notes will be kept in a safe place where no one else can see them.

How can I find out about your program?
When my study is finished (2-3 years from now) I will offer a presentation for all the students that are interested in finding out more.

Would you like me to come into [Post-16 site name] to find out more about what you are doing?

Yes ☐
No ☐

Student signature:
Date:

Please return this form to [school name] by 1st November 2018.

Would you like me to come into [{Post-16 site name] to find out more about what you are doing?

Yes ☐
No ☐

Student signature:
Date:

Appendix 3i – Phase 1 Semi-Structured Interview Schedule (Staff)

1) **Opening questions:**
   a) Possible questions:
      i) How long have you been working here?
      ii) What is your professional background?

   b) Possible follow-up questions:
      i) What do you most enjoy about working here?

   c) Probes:
      i) Could you please tell more about that?

2) **Understanding of the term self-determination:**
   b) Possible questions:
      i) Are you familiar with the term self-determination?
      ii) What is your opinion on teaching students with autism about:
         - Making choices
         - Making decisions
         - Problem solving
         - Setting goals and devising the steps to achieve them
         - Self-advocacy
         - Self-awareness and self-knowledge
         - Self-regulation

   b) Possible follow-up questions:
      i) How would you define self-determination?
      ii) What do you think is the relation between teaching students about these things and their life after leaving school?
      iii) How do you think promoting self-determination can impact on students' outcomes after leaving school?

   c) Probes:
      i) And how else?
      ii) Could you please expand on that?
      iii) Could you give an example?
      iv) Can you tell me more?

3) **Current school curriculum:**
   a) Possible questions:
      i) How do you think the current school curriculum is doing in promoting students' self-determination?
      ii) What would you say is the students' role in shaping the current school curriculum?

   b) Possible follow-up questions:
      i) What do you think can be improved in this area?
      ii) How can this be achieved?
      iii) What does the school do to ensure that students' views are heard?
      iv) How are students' opinions used in shaping their learning?

   c) Probes:
      i) Could you please expand on that?
      ii) Could you provide some practical examples?
      iii) Can you tell me about a time you observed this in your practice?
      iv) And how else?

4) **Current statutory guidance:**
   a) Possible questions:
      i) Are you familiar with the current statutory guidance as stated in the 2015 Special educational needs and disability code of practice: 0 to 25 years?
      ii) The current statutory guidance states that 'independent living' consists of 'having choice, control, and freedom over their lives and the support they have'. In your opinion, is the current school curriculum addressing this guidance?
      iii) The statutory guidance also states that students should be actively involved in preparation and during EHC plan meetings. In your opinion, how well is the school addressing this?

   b) Possible follow-up questions:
      i) What is your opinion on the practical guidance this provides regarding the education of students enrolled in Post-16 special education?
      ii) What are some practical applications the school has in place?
      iii) What are some practical examples of how the school is involving students in this aspect of their learning?

   c) Probes:
      i) And what else?
      ii) Really?
      iii) Go on.
      iv) Please tell me more.

5) **Post-16 curriculum:**

a) Possible questions:

i) What is your opinion on the current Post-16 curriculum?

ii) How involved are the students in shaping the Post-16 curriculum?

iii) How involved are the students' parents/carers in shaping the Post-16 curriculum?

b) Possible follow-up questions:

i) Can you name some of the strengths and weaknesses of the current Post-16 curriculum?

ii) In your opinion, how well is the current Post-16 curriculum addressing students' needs for adulthood?

iii) In your opinion, how can the Post-16 curriculum be improved?

iv) What are some barriers that might be encountered when making these improvements?

c) Probes:

i) Could you please tell more about that?

ii) And how else?

iii) Go on.

iv) And?

Appendix 3j – Phase 1 Semi-Structured Interview Schedule (Parent/Carer)

1) **Opening questions:**
   a) Possible questions:
      i) What is your relationship with the student enrolled at the school?
      ii) How long has your child/the child in your care been attending this school?

   d) Possible follow-up questions:
      i) What is a positive/happy memory you have since your child/the child in your care been attending this school?

   e) Probes:
      i) Could you please tell more about that?

2) **Understanding of the term self-determination:**
   a) Possible questions:
      i) Are you familiar with the term self-determination?
      ii) How important do you think it is for an individual with autism to be self-determined?
      iii) What is your opinion on teaching students with autism about:
         - Making choices
         - Making decisions
         - Problem solving
         - Setting goals and devising the steps to achieve them
         - Self-advocacy
         - Self-awareness and self-knowledge
         - Self-regulation

   b) Possible follow-up questions:
      i) What does self-determination mean for you?
      ii) Can you provide some examples that show that an individual is self-determined?
      iii) How do you think promoting self-determination can impact on students' outcomes after leaving school?

   c) Probes:
      i) And how else?
      ii) Could you please expand on that?
      iii) Could you give an example?
      iv) Can you tell me more?

3) **Current school curriculum:**
   a) Possible questions:
      i) What role do you think school plays in helping students develop their self-determination?
      ii) How do you think teaching students about self-determination can help them after leaving school?

   b) Possible follow-up questions:
      i) Who else should be involved in teaching them about self-determination?
      ii) What is your opinion on how the school is promoting students' self-determination at the moment?
      iii) Can you provide some examples on how your child's self-determination has developed over the years at the school?
      iv) Is there anything you believe should be improved?

   c) Probes:
      i) Could you please expand on that?
      ii) Could you provide some practical examples?
      iii) Can you tell me about a time you observed this in your practice?
      iv) And how else?

4) **Current statutory guidance:**
   a) Possible questions:
      i) The current statutory guidance states that 'independent living' consists of 'having choice, control, and freedom over their lives and the support they have'. In your opinion, is the current school curriculum addressing this?
      ii) The current statutory guidance states that 'independent living' consists of 'having choice, control, and freedom over their lives and the support they have'. In your opinion, is the current school curriculum addressing this guidance?
      iii) The statutory guidance also states that students should be actively involved in preparation and during EHC plan meetings. In your opinion, how well is the school addressing this?

   b) Possible follow-up questions:
      i) Are you aware of any examples?
      ii) What are some practical examples of how the school is involving students in this aspect of their learning?

   c) Probes:
      i) And what else?
      ii) Go on.
      iii) Please tell me more.

5) **Post-16 curriculum:**

a) Possible questions:

i) What is your opinion on the current Post-16 curriculum?

ii) How involved are the students in shaping the Post-16 curriculum?

iii) How involved are the students' parents/carers in shaping the Post-16 curriculum?

b) Possible follow-up questions:

i) Can you name some of the strengths and weaknesses of the current Post-16 curriculum?

ii) In your opinion, how well is the current Post-16 curriculum addressing students' needs for adulthood?

iii) In your opinion, how can the Post-16 curriculum be improved?

iv) What are some barriers that might be encountered when making these improvements?

c) Probes:

i) Could you please tell more about that?

ii) And how else?

iii) Go on.

iv) And?

Appendix 3k – Phase 1 Semi-structured Observation Schedule

Time/ Lesson	Activity/Context	Student decisions	Goal attainment	Prompting/Support	Comments

Appendix 3l – Extract of Hannah's (P) Phase 1 Interview Transcript with Notes

Context: The interview was conducted at the secondary site as no rooms were available at the Post-16. The participant was emailed the Interview Research Information Sheet and Consent Form in advance and confirmed she has read them. A copy of the signed Consent Form was provided. The interview flowed really well, the participant provided very long answers, lots of examples and engaged well. Research prompts worked well, and encouraged the participant to expand on her answers. This could be due to the fact that the researcher has worked closely with both of the participant's children and could relate and understand what she was saying. This was the longest interview conducted with a parent during Phase 1.

Opening questions:

1. What is your relationship with the student enrolled at the school?

Mom of [student name] who's 19 and leaving this year and [student name] who's 13.

2. How long has your child/the child in your care been attending this school?

Since the senior school, they've both been here since secondary, so since year 7.

Understanding of the term self-determination:

1. Are you familiar with the term self-determination?

I don't know whether it meant that, for them to choose basically, just have more choice, I presumed that

Prompt: yes, that's one of the things. It's more about making decisions based on what they want and what's important to them to achieve what they feel it's important, rather than being influenced by others…

Cause I think that's really important, cause I don't have any experience because I have no children without autism, although I do teach and I have experience of other children and I spend a lot of time with my nephews and nieces, but just seeing my own children, especially [student name] as he's come through, he's made most progress, and he's more relaxed and happy, I can see it in himself, more confident really, when he feels like he's making the choice. And like this year at [Post-16 site name], he's happier and I can see it, and what you have to do when you have children with autism, I've had years of this, and you just have to read them, they're not always gonna say this so I know he's a lot happier because he's like 'oh we were discussing what to do tomorrow, we were discussing where to go', that's really important to him, and also because he's gone through years of let's say learning Maths, and numbers have meant nothing to him, and my daughter when she was much younger she was really into numbers, but as she's got older they mean nothing to her either, but for [student name] suddenly in the last year or two, he's really into numbers and Maths, but he's only into it in reference to things that are important to him: time, he's picked up like a flash because he wants to know the time; money, so he knows lots about numbers because it was useful. So just abstract years ago he hated Maths, but now he very much talks about Maths, and he'll say 'oh this is what we were doing'. And even if it's slightly abstract he doesn't mind because he still knows why it's important, and that's a big thing I noticed, because, he will, sometimes we'll be doing things around the house and we need to measure the floor because we're going to tile, or he's measuring his bedroom at the moment because we're going to re-design it this Sunday and things, basically we're going to Ikea. Years ago he would've said 'oh, it's numbers, I can't

deal with it', so in that respect you see, if it's important to him then he will learn it, but if it's just a shot out of the blue , I mean having said that he loves History and RE and that doesn't affect him, mind you it does because he picks up little patterns, so there's things that are of general interest, but Maths I remember years ago he did not like until it became about buying things, measuring household things, building things, but in that respect. And he loves having the choice, then the choice factor comes in; you've got this much money, what do you want to buy with it? Rather than us saying you can't have this, not it's up to you, but I think they do that at RR. We give them some money at the beginning of the week, hey choose to spend it.

Prompt: so you've seen a difference since being at [Post-16 site name]?
I think he's much happier in [Post-16 site name], what happened was they were in port-a-cabin, I think there was a lovely family atmosphere, there was a cosy, and when they moved here he lost his way, he was quite angry, I don't know whether it was hormones and things, I remember thinking, but I just remember he was just so different and also the work didn't really appeal to him, and they didn't have this let's arrange an outing, cause he's very much into I've emailed [Robert, AHT], I think we should go to this place, I think he lost a few, you know when they moved here, he was a bit lost, and now he's like back in the game, he loves it back there, he does love it because of going out into the community, they make the choices, they go shopping.

Prompt: and do you think it's important to do those things?
I think it really is because in the end you kind of end up trying to treat them like kids and not letting them, in a way the school has helped me in a way with that, because he makes tea and coffee for the teachers and at home we're like: 'don't go near hot water!' and the school was like no, he can do that, they make toast, they make sandwiches, they've done all that. Whereas my kind is because both of mine have autism is to mollycoddle a bit too much, oh don't do this, don't touch that, so I am slightly learning to let them do a bit more, and it's important because what's gonna happen in the years to come, really? I think that doesn't hit you until they're about to leave here and suddenly, I think it's important for anybody really, so why do we think it's different for children with autism? It winds them up, I even see it with my daughter, if it's her own choice, also when they were younger, it used to be their choice, but it used to be their choice between two things that I suggested, so you can kind of supported them in that way. But for [student name] especially, I can feel it, it's like a rage in him and he gets angry but that's like the frustration of being held back. It's this thing of yes he has got autism, he has got issue but he's still wants to go own and that battle makes them angry. Cause something he gets angry 'I just want to go out and buy my own fishmaker', but then he's scared to talk to the shopkeeper, but he wants to at least have that choice.

Appendix 3m – Phase 1 Interviews Coding

Theme	Coding label
Promoting student voice	Essential in learning to shape the future
	Needs to be supported through a unified approach
	Staff team are working to improve it and are motivated to do so
	Teaching saying 'no'
Addressing prompt dependence	Adults are too quick to take away responsibilities
	Challenging addressing students' prompt dependence
	Structure can lead to prompt-dependence
Focusing on empowerment	Aim of education is to develop autonomy
	Aspiring to empower students from early school years
	Empowering students
	Empowerment through giving choices
	Focusing on students' self-determination is valuable for their post-school outcomes
Challenges with decision-making	Decisions not their own
	Adults often make decisions for young people without realising
	Challenging for students' decisions to be fully their own in a special school
	Difficulty with decision-making
	Lack of access to opportunities for decision-making
	Students should be made aware that they have a voice
Difficulty with choice-making	Challenging for staff to understand students' ability to make authentic choices
	Difficulties in teaching the understanding of the longer term impact of choices
	Learned helplessness often occurs at home
	Opportunities provided both at school and at home
	Prompt dependence hinders choice making
	School environment promotes student choice
	Self-awareness and self-knowledge should be developed first
	Teaching students to choose from a limited range of options
Goal setting is challenging	An area for development for the school

	Difficult to find the balance between keeping the focus on a goal and taking the joy out of learning
	Difficulties in students' understanding that they can set goals
	Goals are not a good motivator for all students
	Good self-awareness is important in setting relevant goals
	Should be implemented much earlier
Good self-awareness	Self-awareness varies according to needs
	Self-awareness varies in accordance with students' area of need
	Students in Post-16 have good self-awareness
More problem-solving	Integrating problem solving
	More opportunities for problem solving
	Problem solving discussed with students
	Problem solving is an important area to address in preparing students for life after school
	Scaffolding of skills and knowledge should be taken into consideration
	Staff are afraid to let students fail
Teaching self-regulation	Addressing students' sensory needs should be integrated in the curriculum
	Consistency and collaboration
	Lack of resources to try different strategies to support students to self-regulate
	Robust strategies are in place to support students' self-regulation
	Self-regulation impacts students' learning
	Teaching self-regulation is a valuable skill for students with autism
Opportunities for self-determination vary	Areas of focus vary depending on needs
	School promotes opportunities for self-determination
	Some students are more involved in decision-making than others
Defining self-determination	Being motivated
	Being independent
	Being determined
	Doing things for oneself
	Developing independent living skills
Accreditation	Focusing on meeting the milestones of the national curriculum

	Pushing students towards accreditations that are not meaningful
	System puts pressure on school to run accreditations
	System that does not fit the needs of all
Parent involvement in curriculum - an area for development	Communication between school and parents carers needs improving
	Parent carer input is not gathered formally
	Parent carer input is valuable in curriculum development
	Parent carer input should be gathered systematically
	Parent carers are consulted in the course choices at Post-16
	Parents carers want children to be happy and able to do what they enjoy
Student involvement in curriculum development is lacking	Aspiring to involve students more actively in curriculum development
Involvement with local community needs development	Local employers need to better understand the needs of people with autism
	More opportunities are needed
	Students should be trusted to go out of the school on their own
	Training for the local community is needed
Future curriculum wishes	A new approach is needed
	Current curriculum needs to be more flexible
	Curriculum should be more student focused
	Reluctance to change from staff
	Student involvement at KS3 is essential
	Teachers should be empowered to take risks with curriculum development
	There has been a gradual change in staff's thinking
Barriers to curriculum development	Lack of funding impacting student opportunities outside of school
	Lack of staff and staff training to deliver activities outside the school
Difficult to translate statutory guidance into practice	Guidance not appropriate for students with autism
	Lack of involvement and support from the LA
	SLT took ownership of developing the Post-16 curriculum
Statutory guidance awareness	Familiar with the statutory guidance

	Lack of awareness of the Post-16 statutory guidance
Striving to involve students in the EHCP process	Appropriate preparation takes places with students before EHCP meetings
	Aspiration to involve students as much as possible
	Student involvement in the EHCP meetings has been increasing
Students' involvement in the EHCP process - an area for development	Challenges in gaining students' honest views and opinions
	Form is sent home for students' views, but likely filled in by parents/carers
	Increased awareness of goals is needed
	Some involvement has been lost with the school's expansion
	Work needs to be done to make EHCP meetings interesting and engaging for students
Students' involvement in the EHCP process varies	Involvement depends on students' needs
	Student involvement in EHCP meetings only takes place in Post-16
	When appropriate students are involved in meetings
Step forward from traditional curriculum	Combines academic and daily living skills
	Functional curriculum and great facilities
	Good links with colleges and other provisions that students can transition to
	Having to teach Maths and English is statutory
	Independence skills are more important than academic ones
	It's a step away from a traditional curriculum, but there is scope to move even further
	Moving from a traditional curriculum can be challenging and take time
	Overall is works well, but there are areas for improvement
Student-centred	Developed from looking at other provisions, with students' needs and interests in mind
	Parents carers say students are happier here
	Staff are motivated to focus on developing students' personal and social skills
	Student voices are taken into consideration
	Students seems happy

Student involvement in developing the curriculum	A survey was carried out to review the curriculum
	Preferences are taken into consideration
	Students are consulted in the choices for optional subjects
Collaboration with parents/carers	Ensuring opportunities are provided both at school and home to practice skills
	Involved in decision making
Areas for development	A need for a tool that captures personal and social development
	A need for further optional subjects to meet students' interests
	Academic curriculum is not interesting and motivating enough
	Accessing the local community - an area for development
	Curriculum should be fun for students, even Maths
	Need for reflection
	Significant focus on accreditations remains
	Some activities lack purpose, are there to fill the time
	Students' engagement with the local community should be meaningful
Staff training	Need for reflection in practice
	Staff struggle with change and letting go of structure
	Teaching staff to let go and empower students
	Training to empower staff
	Training to encourage student choice
	Upcoming training on the importance of student voice
Setting realistic expectations for life after school	Changes are needed in society to improve the opportunities of students with autism
	Having something to look forward to after finishing school
	Increased awareness of post-school opportunities is needed
	Managing students' expectations to avoid disappointment
	Providing students with real life opportunities in a school setting is challenging
Personalised learning	Communication should be flexible to address individuals' needs

	Learning should be personalised to students' needs and preferences
	Shared practice to identify best strategies for each student
Students are given responsibilities	Opportunities at school and at home
	Treating young people age appropriately
	Students are involved in their EHCP meetings

Appendix 4 – Phase 2 (Investigation)

Appendix 4a – Phase 2 Questionnaires Piloting Notes

Piloting and consultation 1:

The first piloting was done with a teaching assistant (Beatrice, TA/P) from a different specialist school in the same local authority as the one the study is conducted in. The researcher was familiar with the participant, as they have been colleagues in a different setting. The participant has a vast professional experience of working with children with special educational needs across a range of settings, for over 13 years at the time of piloting, and was able to provide useful and insightful feedback on the staff questionnaire. Beatrice (TA/P) will not be taking part in the main study, and was able to provide an outsider's perspective.

Consent

Beatrice (TA/P) had no changes to make to the information sheet and consent making up the first question of the questionnaire. She commented that the information provided by the researcher was very wisely chosen, as it provided enough information to gain informed consent, but without giving away too much about the study and creating bias.

Staff questionnaire

Section A

1. Beatrice (TA/P) suggested adding an option of 'other' or another more inclusive term to accommodate for a wider range of answers and provide inclusivity. The option 'Prefer to self-describe' with a space that allows for text entry has been added
2. Beatrice (TA/P) suggested adding the option of 'Prefer not to say' to allow for consistency with previous question.
3. Beatrice (TA/P) suggested adding the option of 'Prefer not to say' to allow for consistency with previous questions.
   4, 5, 6 – no changes
7. to add 'your' regarding the level of education obtained.

Section B

1. Beatrice (TA/P) suggested to add the option for 'not sure'. Although she was aware of the term, she was not completely sure of its meanings, thus the option of 'not sure' would have best described her answer, otherwise she would have chosen 'No'. The answer choice of 'not sure' has been added.
2. The definitions provided were clear and easy to understand. Beatrice (TA/P) suggested adding 'don't know' to the last answer choice of 'not sure'. This has been added.
3. Beatrice (TA/P) expressed that the use of the word 'important' might create bias, as participants might not tick the 'not at all' or 'slightly' options, because of the way the questions is worded, which might skew the results. Beatrice (TA/P) suggested using 'comparatively important', but researcher was not sure all teaching staff would understand the meaning of the phrase. The researcher suggested the word 'relevant' and Beatrice (TA/P) agreed to that being the most neutral option. Beatrice (TA/P) also suggested not adding 'relevant' in the answer choices, as that has a decreased chance of creating bias.
4. Beatrice (TA/P) made the same suggestions regarding the use of the word 'important' and the possibility of it creating bias. This has also been changed to relevant. Beatrice

(TA/P) queried the difference between choice and decision making, she said it might be a good idea to provide definitions for the terms. She suggested including definitions for self-advocacy and self-regulation. Although during the piloting interviews, staff understood did not require any clarifications regarding the terms, the sample population was not representative of the school, and some staff might not know what the terms mean. Beatrice (TA/P) also suggested that because there is no way of checking that staff have understood the meaning of the terms when answering the questions, it is best to include definitions. Beatrice (TA/P) also suggested adding the answer choice of 'not sure' in the matrix table. This has been included in all the matrix tables in the questionnaire.

5. Beatrice (TA/P) queried the meaning of 'curriculum' and how that is understood by staff. She agreed with the use of the word 'addressing' in the wording of the question.

Section C

1-4. Beatrice (TA/P) stated that questions 1-4 are clearly worded and she had no suggested changes.

5.Beatrice (TA/P) suggested changing some of the wording of the answer choices to match the question. (not instead of non, moderately instead of a moderate amount)

6.Beatrice (TA/P) suggested including the explanation of 'annual review' in brackets following EHCP meeting as some participants might be more familiar with this wording, and changing the wording of the first answer choice from 'none' to 'not'.

Section D

1. Beatrice (TA/P) queried the use the meaning of 'your students' for teaching staff as some might teach across a range of needs. Although this seems relevant, no solutions were found as a result of the conversation between Beatrice (TA/P) and the researcher. The researcher suggested adding another question in Section A, to ask staff in which type of class they are currently working in, as the school structure is divided in 'main curriculum' and 'extended curriculum' classes. Beatrice (TA/P) also questioned the meaning of the term 'Leisure skills', and the researcher added an explanation in brackets following the term: spending free time
2. No changes

Section E

1. Beatrice (TA/P) suggested changing the word order to make the question clearer
2. Beatrice (TA/P) suggested changing the word order to make the question clearer and maintain consistency with the previous one.
3. Beatrice (TA/P) suggested removing the 3rd and final question as it was included in the first and participants are more likely to provide answer to 2 rather than 3 open-ended questions.

Parent questionnaire
The first piloting was done with the same person who first piloted the staff questionnaire. Apart from her professional experience, Beatrice (TA/P) is also a parent of a 6-year-old with special educational needs, currently enrolled in an early years class at an all-age specialist school for children with moderate learning difficulties, most of which have autism, in the same LA as the school in which the study is carried out. Many of the suggested changes match those from the staff questionnaire.

Section A:

1. Added self-describe option
2. No changes
3. Beatrice (TA/P) suggested using non-gendered options for caring roles: Parent instead of mother/father and grandparent instead of grandmother/grandfather, also because first question asks for participants' gender.
4. Added your as in staff questionnaire
5. Added prefer not to say option

Section B:

1. Added not sure option
2. Added not sure/Don't know option

* Beatrice (TA/P) suggested including the definition of self-determination of the bottom of the page for the online questionnaire or having the option of going back to it
*we discussed who will complete the questionnaire for each student and I explained that a letter will be sent out from the school explaining that 'one main carer' should complete it. Beatrice (TA/P) agreed that is a very strong way pf phrasing it as it addresses current debates of who is a main carer, and if there should only by one main carer.

3. important has been replaced with relevant and the word has been taken from the answer choices to match the staff questionnaire
4. no changes
5. Beatrice (TA/P) suggested changing knowing to understanding in the explanation provided in brackers for Self-awareness and Self-knowledge

Section C:

1. Beatrice (TA/P) suggested adding the option of 'Not sure' as parents might not know very well what happens at school
2. Beatrice (TA/P) suggested adding the option of 'Not sure' as parents might not know very well what happens at school
3. Beatrice (TA/P) suggested adding the option of 'Not sure' as parents might not know very well what happens at school
4. Beatrice (TA/P) suggested adding the option of 'Not sure' as parents might not know very well what happens at school
5. Not add the option of Not sure as parents should be present in those meetings
6. Beatrice (TA/P) highlighted the need for consistency as I kept switching between students with autism to young people with autism and the young person in your care. I have decided to keep young people with autism as the main term, with only using the

young person in your care when talking about the questions regarding the statutory guidance, as parents/carers can only be familiar with the experience of the young person in their care.

Section D:

No changes apart from those related to consistency of terminology; see Section C, 6.

Section E:
The wording of the questions has been changed to match the changes made in the staff questionnaire and the last questions has been removed.

Student questionnaire:

Consent:
Beatrice (TA/P) suggested adding site or school after secondary as it seemed too informal.

To add: there are no right or wrong answers, remove 'not what you think I want to hear'.

Gender question: add 'don't want to say' option

Piloting and consultation 2

Teaching staff questionnaire

Kelly (CT) is a teacher in the school where the study is conducted and a former colleague. She has agreed to provide feedback on all 3 questionnaires.

Section A:
4 – Kelly (CT) suggested to distinguish between the key stages and main and extended curriculums; and to allow for selection of multiple answers as many teachers work across the key stages
5 – for Other allow for text entry as some TA/Teachers have additional responsibilities

Section B:
4-5 Kelly (CT) suggested added the explanations included in the parents' questionnaire; this is to ensure that all staff have the same understanding of the term even if staff interviewed in Phase 1 did not require explanations or clarifications.

Section C:
1 – Kelly (CT) suggested adding the option to explain the answer given as useful data might be collected that can support the answers provided, such as a lack of resources.
1-3- Answer choices changed from Not well at all to Not at all, and 'well' removed from slightly and moderately following suggestions from Kelly (CT)

Section D:
1 – to add 'at an appropriate level' in the wording of the question, especially for staff involved with extended students

Section E:
To add the option of adding anything else at the end

Parent questionnaire
Section C:
1-3- Answer choices changed from Not well at all to Not at all, and 'well' removed from slightly and moderately following suggestions from Kelly (CT)

Student questionnaire

Wording of programme
Changed the heading of 'What should you be worried about?'; Kelly (CT) said that this might imply that there is something they should be worried about.
Kelly (CT) also suggested changing the wording for 'secure cloud storage' as students might take this literally. She suggested changing it to 'answers will be kept private' and I have added 'on a secure storage'.

2 – add Key stages instead of parts of the school

3- for the answer choices, Kelly (CT) suggested changing the 2nd option to needing more help/support. I have replaced 'work' with 'help' following Kelly's (CT) suggestion and also from prior knowledge of the students, who I know will be familiar with the wording. In order to provide consistency, I have changed all the other answer choices to match this.
4- Kelly (CT) suggested changing the 2nd answer choice as it did not fit with the other 2 as it represented frequency rather than quantity. She suggested using 'a little' instead of 'sometimes'. All answer choices have been changed to maintain consistency.
10 – Kelly (CT) said students might be confused and think I am referring to Maths problems, thus I have added 'in your everyday life', the same explanation offered in the parents and staff questionnaires.
17 – Kelly (CT) suggested that the question might cause confusion amongst the students, as it is not very specific. I have changed it to 'Do you think you know what your strengths and weaknesses are?'; the answer choices have been amended to match that.
19-24 – In discussion with Kelly (CT) about the use of the word 'important' which has been highlighted as leading to bias in Piloting 1, she suggested changing it with 'useful'. Kelly (CT) also suggested changed 'it' to 'to' in the 3rd answer choice for these questions.

I have also decided to add an open-ended question at the end of the student questionnaire to match those in the parents and staff questionnaires, and to provide them with a platform to address anything that the questions did not touch upon. The following question has been added: 'Is there anything you would like to tell me that might help with my study?'

Piloting and consultation 3
The questionnaires have been edited based on feedback provided by Kelly (CT). During this last piloting a secondary student with high-functioning autism and her mother were asked to complete the student and parent/carer questionnaires and provide feedback. They both expressed that the language used was clear and created no confusion, thus no further changes were made.

Appendix 4b – Phase 2 Recruitment

Email to staff

Hello everyone!

For those that have not met me, I am Laura Cristescu and I am a former teaching assistant at [school name], and currently a PhD student at the University of Birmingham. I am conducting a study in collaboration with the school, and I would like to find out your views regarding the current school curriculum and teaching practice. Your opinion is really valuable in shaping my approach, which aims to help promote students' self-determination at school. I would like all of you to take part, as my aim is to make sure that my study takes into account the opinions and needs of all parties involved (teaching staff, parents/carers, and students).

I am kindly asking you to take 5 minutes to complete the online questionnaire linked below by Friday 7th June. If you prefer completing a paper copy or have any questions or enquiries, please contact me by replying to this email.

Thank you so much for your help, it is much appreciated!

[link has been removed for data protection purposes]

School newsletter message for parents/carers

Parents/Carers views needed

My name is Laura Cristescu and I am a former teaching assistant at [school name], and currently a PhD student at the University of Birmingham. I am conducting a study in collaboration with the school, and I would like to find out what parents/carers think about what their children and young people are taught and how they are taught at school. Your opinion is really valuable in shaping my approach, which aims to help promote students' self-determination at school. I am kindly asking you one of the main carers to take 5 minutes to complete the online questionnaire linked below by Friday 7th June. If you prefer completing a paper copy or have any questions or enquiries, please email me at: alc673@student.bham.ac.uk, or get in touch with the school. Thank you for your help!

[link has been removed for data protection purposes]

Email to staff regarding student questionnaire
Dear teachers at [school name],

Thank you so much to those who have completed my staff questionnaires so far, your help is much appreciated. Gaining students' views is equally as important in my study, as children and young people with autism are rarely involved in research concerning them, and their opinions often get lost. Below you can find a link to the student questionnaire, as well as the attached paper version as an alternative. Please see the teacher guidelines regarding the

student questionnaire attached, and reply to this email with any questions or concerns that you might have. I hope we can get as many students involved as possible! I really appreciate all your help.

[link has been removed for data protection purposes]

Teacher guidelines for student questionnaire
Dear teaching staff at [school's name],

Thank you so much for contributing to the development of my research, I appreciate all your help and support.

For the student questionnaire, please see below a sample of the questions asked, which should help you decide if they are appropriate for the level of understanding of your students.

Gaining students' consent before completing the questionnaire is just as important. I have explained in simple terms the purposes of my study, their participant contribution, and how the data will be processed and used. If you believe this is not suitable to your students' level of understanding, please use language or examples that you believe they will understand. This is crucial in ensuring that the students are able to provide informed consent. If you believe that your students are not able to provide informed consent even with the adaptations you provide, because they do not have the ability to understand their participation in the research, please inform me.

Please try to involve as many students as possible. I would like to have as many of their views heard, as this is crucial to my research. In the area of autism research, young people and particularly children are rarely involved, and this is an important gap that needs to be addressed.

Please help your students as much as they need to understand the questions, by offering them examples or support, but without trying to influence their answers. This questionnaire is aimed at hearing what students think, and is completely anonymous, thus no answers can be tracked to a particular class or student.

Their answers will not be used to negatively report on students' performance, but rather to determine which areas of the curriculum should be addressed in the next phase of my study.

If your students require communication support to complete the questionnaire, please feel free to use any methods you deem appropriate. I would really appreciate it if you could send me an email, or leave a note at one of the school's reception desks explaining how you supported your students to complete the questionnaire.

The most efficient way to complete the questionnaire is by getting students to use one of the school's computers and access it via the link provided in the email. If your students have the ability to access their own email, you could forward them the link. If your students feel more comfortable completing a paper questionnaire, please use the one attached to this email and

hand it in at the school's reception desk. If you would like me to provide printed copies for your students, please email me.

[link has been removed for data protection purposes]

Sample questions:

= I agree.	= Sometimes agree and sometimes I do not.	= I do not agree.	= I am not sure.

I can make choices about my free time.				
I learn how to solve problems at school.				
My teachers help me set targets about my work.				
I like learning about using money.				

If you have any questions or need further clarifications, please feel free to contact me. I would appreciate if your students can complete the questionnaire by Friday 14th June. Thank you for all your help!

Appendix 4c – Phase 2 Staff Questionnaire (Paper version)

Dear staff member at [school's name],

My name is Laura Cristescu and I am a postgraduate researcher at the University of Birmingham, co-opted governor and former teaching assistant at [school's name].

For my PhD thesis, I am working on developing an environmental approach aimed at promoting students' self-determination through the whole school curriculum. This will involve demonstrating the potential of using video as a tool for reflection on existing teaching practice. The approach will be developed collaboratively with a group of staff and students in Post-16. Previous research shows that self-determined individuals with autism have better post-school outcomes and increased quality of life, by being equipped with the skills and abilities to exert control over their lives.

The present survey is aimed at informing the development of the approach based on the needs and outcomes desired by students, staff, and parents/carers at [school's name]. It asks questions about what is taught in the school (curriculum) and how it is taught (teaching practice). This is to ensure that the approach targets the needs of all parties involved.

The information you provide will be stored securely on the University of Birmingham BEAR cloud storage, and on an encrypted password-protected external hard-drive as back-up. The information will be retained by the University of Birmingham and will only be used for the purpose of research and statistical and audit purposes. By supplying this information you are consenting to the University storing your information for the purposes stated above. The information will be processed by the University of Birmingham in accordance with the provisions of the General Data Protection Regulation 2018. The data is confidential and no identifiable personal data about the participants or the school will be reported in the study. The data will only be accessed by the researcher, and made available to her supervisors upon request.

Your opinion is extremely valuable in shaping an approach that meets the needs of those involved. After the data is processed and analysed you will be emailed a summary of the results via your school email. A presentation of the findings at the end of the study will be offered to those who are interested in finding out more. Your participation in this study is voluntary and you do not have to answer any questions you do not want to. Your participation is also completely anonymous, thus it will not be possible to withdraw your data after your answers have been submitted.

I consent to take part in the study

○ I do not consent to take part in the study

1. Please select your gender.

- ○ Female
- ○ Male
- ○ Prefer to self-describe: _____
- ○ Prefer not to say

2. Please select your age.

- ○ 18-30
- ○ 31-40
- ○ 41-50
- ○ 51-60
- ○ 61-70
- ○ Prefer not to say

3. Please select the ethnic group that best describes your heritage.

- ○ White British
- ○ White other
- ○ Asian/Asian British
- ○ African/Black/Black British/Caribbean
- ○ Mixed/Multiple ethnic groups
- ○ Other ethnic group
- ○ Prefer not to say

4. Please select the key stage you are currently working in. Select all that apply.

- ☐ EYFS main
- ☐ EYFS extended
- ☐ Key Stage 1 main
- ☐ Key Stage 1 extended
- ☐ Key Stage 2 main
- ☐ Key stage 2 extended
- ☐ Key Stage 3 main
- ☐ Key Stage 3 extended
- ☐ Key Stage 4 main
- ☐ Key Stage 4 extended
- ☐ Key Stage 5 main
- ☐ Key Stage 5 extended
- ☐ Other _____

5. Please select your current position.

- ○ Teacher
- ○ Teaching Assistant
- ○ Senior Management
- ○ Other _____

6. How many years have you been working in specialist education?

- ○ Less than 5 years
- ○ 5-10 years
- ○ 10-20 years
- ○ 20-30 years

7. Please select your highest level of education obtained.

- ○ GSCE
- ○ A levels
- ○ University degree (undergraduate)
- ○ University degree (postgraduate)
- ○ Other

8. Are you familiar with the term *self-determination?*

- ○ Yes
- ○ No
- ○ Not sure

If No is selected, please go to question 10.

9. Please select the definition that is closest to your understanding of the term 'self-determination'.

- ○ Having the motivation to pursue your dreams and aspirations
- ○ Having the abilities and skills needed to set goals and plan the steps to achieve them
- ○ Being determined to do things for oneself
- ○ Making choices and decisions based on self-knowledge and in pursuit of one's needs and interests
- ○ Having as much control over one's life as possible
- ○ Being independent in everyday life
- ○ Not sure/Don't know

10. Self-determination is choosing and enacting choices to control one's life – to the maximum extent possible – based on knowing and valuing oneself, and in pursuit of one's own needs, interests and values' (Campeau and Wolman, 1993, p. 2).

11. In your opinion, how relevant is it to promote the self-determination of students with autism as part of the school curriculum?

- ○ Not at all
- ○ Slightly
- ○ Moderately
- ○ Very
- ○ Extremely

12. The following skills and abilities are considered integral to the development of self-determination. In your opinion, how relevant is it to teach the following skills and abilities as part of the current school curriculum?

	Not at all	Slightly	Moderately	Very	Extremely	Not sure
Making choices	○	○	○	○	○	○
Making decisions	○	○	○	○	○	○
Problem solving (being able to find solutions to everyday problems)	○	○	○	○	○	○
Setting a target/goal and planning the steps to reach it	○	○	○	○	○	○
Self-advocacy (speaking up for your rights, interests, thoughts, opinions, etc.)	○	○	○	○	○	○
Self-awareness and self-knowledge (understanding your strengths, weaknesses, feelings, preferences, etc.)	○	○	○	○	○	○
Self-regulation (being able to control your emotions and behaviour)	○	○	○	○	○	○

13. In your opinion, how well is the current school curriculum addressing the following skills and abilities?

	Not well at all	Slightly well	Moderately well	Very well	Extremely well	Not sure
Making choices	○	○	○	○	○	○
Making decisions	○	○	○	○	○	○
Problem solving (being able to find solutions to everyday problems)	○	○	○	○	○	○
Setting a target/goal and planning the steps to reach it	○	○	○	○	○	○
Self-advocacy (speaking up for your rights, interests, thoughts, opinions, etc.)	○	○	○	○	○	○
Self-awareness and self-knowledge (understanding your strengths, weaknesses, feelings, preferences, etc.)	○	○	○	○	○	○
Self-regulation (being able to control your emotions and behaviour)	○	○	○	○	○	○

14. The current *Special educational needs and disability code of practice: 0 to 25 years* states that preparing students for adulthood should involve having choice, control, and freedom over their lives and the support they have, and that schools have a duty to provide students with opportunities to develop them.

In your opinion, how well is the current school curriculum providing students with those opportunities?

- ○ Not at all
- ○ Slightly
- ○ Moderately
- ○ Very well
- ○ Extremely well

Explain your answer _____

15. The current *Special educational needs and disability code of practice: 0 to 25 years* states that students should be supported to participate in discussions about their aspirations, their needs, and the support that they think will help them best.

In your opinion, how well is this addressed in the current school curriculum?

- ○ Not at all
- ○ Slightly
- ○ Moderately
- ○ Very well
- ○ Extremely well

16. The current *Special educational needs and disability code of practice: 0 to 25 years* states that students should be supported to participate in discussions regarding their education and development.

In your opinion, how well is this addressed in the current school curriculum?

- ○ Not at all
- ○ Slightly
- ○ Moderately
- ○ Very well
- ○ Extremely well

17. From your experience, how involved are the students you work with in setting their EHCP targets?

- ○ Not at all
- ○ A little
- ○ Moderately
- ○ A lot
- ○ A great deal

18. From your experience, how involved are the students you work with during EHCP Annual Review meetings?

- ○ Not at all
- ○ A little
- ○ Moderately
- ○ A lot
- ○ A great deal

19. In your opinion, how important is it to address the following areas of the curriculum for your students with autism at an appropriate level?

	Not at all important	Slightly important	Moderately important	Very important	Extremely important	Not sure
Financial skills	○	○	○	○	○	○
Employability skills	○	○	○	○	○	○
Social skills	○	○	○	○	○	○
Independent living skills (cooking, cleaning, self-care)	○	○	○	○	○	○
Leisure skills (spending free time)	○	○	○	○	○	○
Community involvement	○	○	○	○	○	○
Self-advocacy	○	○	○	○	○	○

20. In your opinion, how well is the current school curriculum teaching students about the following areas?

	Extremely well	Very well	Moderately well	Slightly well	Not well at all	Not sure
Financial skills	○	○	○	○	○	○
Employability skills	○	○	○	○	○	○
Social skills	○	○	○	○	○	○
Independent living skills (cooking, cleaning, self-care)	○	○	○	○	○	○
Leisure skills (spending free time)	○	○	○	○	○	○
Community involvement	○	○	○	○	○	○
Self-advocacy	○	○	○	○	○	○

21. In your opinion, how could the current school curriculum be improved?

_____

22. In your opinion, how could current teaching practice be improved?

_____

23. Is there anything you would like to add?

_____

Appendix 4d – Phase 2 Parent/Carer Questionnaire (Paper version)

Dear Parent/Carer,

My name is Laura Cristescu and I am a postgraduate researcher at the University of Birmingham, co-opted governor and former teaching assistant at [school's name].

For my PhD thesis, I am working on developing an environmental approach aimed at promoting students' self-determination through the whole school curriculum. This will involve demonstrating the potential of using video as a tool for reflection on existing teaching practice. The approach will be developed collaboratively with a group of staff and students in Post-16. Previous research shows that self-determined individuals with autism have better post-school outcomes and increased quality of life, by being equipped with the skills and abilities to exert control over their lives.

The present survey is aimed at informing the development of the approach based on the needs and outcomes desired by students, staff, and parents/carers at [school's name]. It asks questions about what is taught in the school (curriculum) and how it is taught (teaching practice). This is to ensure that the approach targets the needs of all parties involved.

The information you provide will be stored securely on the University of Birmingham BEAR cloud storage, and on an encrypted password-protected external hard-drive as back-up. The information will be retained by the University of Birmingham and will only be used for the purpose of research and statistical and audit purposes. By supplying this information you are consenting to the University storing your information for the purposes stated above. The information will be processed by the University of Birmingham in accordance with the provisions of the General Data Protection Regulation 2018. The data is confidential and no identifiable personal data about the participants or the school will be reported in the study. The data will only be accessed by the researcher, and made available to her supervisors upon request.

Your opinion is extremely valuable in shaping an approach that meets the needs of those involved. After the data is processed and analysed you will receive a summary of the results through the school newsletter. A presentation of the findings at the end of the study will be offered to those who are interested in finding out more. Your participation in this study is voluntary and you do not have to answer any questions you do not want to. Your participation is also completely anonymous, thus it will not be possible to withdraw your data after your answers have been submitted.

○ I consent to take part in the study

○ I do not consent to take part in the study

1. Please select your gender.

- ○ Female
- ○ Male
- ○ Prefer to self-describe: _____
- ○ Prefer not to say

2. Please select your age.

- ○ 18-30
- ○ 31-40
- ○ 41-50
- ○ 51-60
- ○ 61-70
- ○ 70+
- ○ Prefer not to say

3. Please select how you would best describe your relationship with the student enrolled at [school's name].

- ○ Parent
- ○ Grandparent
- ○ Carer
- ○ Other family member

4. Please select your highest level of education obtained.

- ○ GSCE
- ○ A levels
- ○ University degree (undergraduate)
- ○ University degree (postgraduate)
- ○ Other
- ○ Prefer not to say

5. Please select the ethnic group that best describes your heritage.

- ○ White British
- ○ White other
- ○ Asian/Asian British
- ○ African/Black/Black British/Caribbean
- ○ Mixed/Multiple ethnic groups
- ○ Other ethnic group
- ○ Prefer not to say

6. Are you familiar with the term *self-determination?*

- ○ Yes
- ○ No
- ○ Not sure

If No is selected, please go to question 8.

7. Which of the following definitions is closest to your understanding of the term self-determination? Please select one.

- ○ Having the motivation to pursue your dreams and aspirations
- ○ Having the abilities and skills needed to set goals and plan the steps to achieve them
- ○ Being determined to do things for oneself
- ○ Making choices and decisions based on self-knowledge and in pursuit of one's needs and interests
- ○ Having as much control over one's life as possible
- ○ Being independent in everyday life
- ○ Other:_____
- ○ Not sure/Don't know

8. Self-determination is choosing and enacting choices to control one's life – to the maximum extent possible – based on knowing and valuing oneself, and in pursuit of one's own needs, interests and values' (Campeau and Wolman, 1993, p. 2).

9. In your opinion, how relevant is it to promote the self-determination of young people with autism at school?

- ○ Not at all
- ○ Slightly
- ○ Moderately
- ○ Very
- ○ Extremely

10. In your opinion, how important is it to teach the following skills and abilities to young people with autism at school?

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Making choices	○	○	○	○	○
Making decisions	○	○	○	○	○
Problem solving (being able to find solutions to everyday problems)	○	○	○	○	○
Setting a target/goal and planning the steps to reach it	○	○	○	○	○
Self-advocacy (speaking up for your rights, interests, thoughts, opinions, etc.)	○	○	○	○	○
Self-awareness and self-knowledge (understanding your strengths, weaknesses, feelings, preferences, etc.)	○	○	○	○	○
Self-regulation (being able to control your emotions and behaviour)	○	○	○	○	○

11. In your opinion, how important is it to teach the following skills and abilities to young people with autism at home?

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Making choices	○	○	○	○	○
Making decisions	○	○	○	○	○
Problem solving (being able to find solutions to everyday problems)	○	○	○	○	○
Setting a target/goal and planning the steps to reach it	○	○	○	○	○
Self-advocacy (speaking up for your rights, interests, thoughts, opinions, etc.)	○	○	○	○	○
Self-awareness and self-knowledge (understanding your strengths, weaknesses, feelings, preferences, etc.)	○	○	○	○	○
Self-regulation (being able to control your emotions and behaviour)	○	○	○	○	○

12. In your opinion, how well is the school teaching young people with autism about the following?

	Not well at all	Slightly well	Moderately well	Very well	Extremely well
Making choices	○	○	○	○	○
Making decisions	○	○	○	○	○
Problem solving (being able to find solutions to everyday problems)	○	○	○	○	○
Setting a target/goal and planning the steps to reach it	○	○	○	○	○
Self-advocacy (speaking up for your rights, interests, thoughts, opinions, etc.)	○	○	○	○	○
Self-awareness and self-knowledge (understanding your strengths, weaknesses, feelings, preferences, etc.)	○	○	○	○	○
Self-regulation (being able to control your emotions and behaviour)	○	○	○	○	○

13. The statutory guidance which schools must follow by law states that: preparing students for adulthood should involve giving them opportunities to have choice, control, and freedom over their lives and the support they have.

In your opinion, how often is the school currently offering these opportunities to the young person in your care?

- ○ Never
- ○ Sometimes
- ○ About half the time
- ○ Most of the time
- ○ Always
- ○ Not sure

14. The statutory guidance also states that students should be supported to participate in discussions about their aspirations, their needs, and the support that they think will help them best, with the aim of promoting student independence.

From your own experience, how often is the school having those discussions with the young person in your care?

- ○ Never
- ○ Sometimes
- ○ About half the time
- ○ Most of the time
- ○ Always
- ○ Not sure

15. The statutory guidance also states that students should be supported to participate in discussions regarding their education and development.

From your own experience, how often is the school having those discussions with the young person in your care?

- ○ Never
- ○ Sometimes
- ○ About half the time
- ○ Most of the time
- ○ Always
- ○ Not sure

16. From your own experience, how much is the young person in your care involved in choosing their EHCP targets?

- ○ Not at all
- ○ A little
- ○ A moderate amount
- ○ A lot
- ○ A great deal
- ○ Not sure

17. From your own experience, how much is the young person in your care involved during EHCP Annual Review meetings?

- ○ Not at all
- ○ A little
- ○ A moderate amount
- ○ A lot
- ○ A great deal

18. In your opinion, how important is it to teach the young people with autism about the following?

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Financial skills	○	○	○	○	○
Employability skills	○	○	○	○	○
Social skills	○	○	○	○	○
Independent living skills (cooking, cleaning, self-care)	○	○	○	○	○
Leisure skills (spending free time)	○	○	○	○	○
Community access	○	○	○	○	○
Self-advocacy	○	○	○	○	○

19. In your opinion, how well is the school teaching the young people with autism about the following?

	Extremely well	Very well	Moderately well	Slightly well	Not well at all
Financial skills	○	○	○	○	○
Employability skills	○	○	○	○	○
Social skills	○	○	○	○	○
Independent living skills (cooking, cleaning, self-care)	○	○	○	○	○
Leisure skills (spending free time)	○	○	○	○	○
Community access	○	○	○	○	○
Self-advocacy	○	○	○	○	○

20. In your opinion, how could the current school curriculum be improved?

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21. In your opinion, how could current teaching practice be improved?

Thank you for answering!

Appendix 4e – Phase 2 Student Questionnaire (Paper version)
Dear student at [school's name],

My name is Miss Laura Cristescu. You might know me as I worked as a teaching assistant in the secondary school.

Why are you here?
Because I need your help. I am working on a programme to help students at [school's name] learn about what they need and how they can talk about it.

What do you need to do?
Circle one smiley face for each question. This is not a test. There are no right or wrong answers. Please say what you think. This is to help me find out your views, so I know how best to help your school. Please answer all the questions you want.

Who will see your answers?
I will not know the names of the students who answer the questions.
Your teachers or parents/carers will not see your answers.
Your answers will be kept private in a secure storage.

How can I find out about your programme?
When my study is finished (2-3 years from now) I will offer a presentation for all the students that are interested in finding out more.

1. Do you want to take part in the study?

○ Yes

○ No

2. What is your gender?

○ Girl

○ Boy

○ Don't want to say

3. What year are you in?

_____

4. Are you in a main or extended class?

○ Main

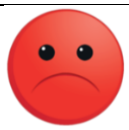
○ Extended

○ Don't know

= I agree.	= Sometimes agree and sometimes I do not.	= I do not agree.	= I am not sure.

I can make choices about my free time.				
I can make choices about my work at school.				
I can make choices about food and drink.				
I can make choices about who my friends are.				
I can make choices about what clothes to wear.				
I learn about making choices at school.				
My teachers help me make choices at school.				
I can solve problems.				

I learn how to solve problems at school.				
I can set targets about my work.				
My teachers help me set targets about my work.				
I am good at talking about my thoughts and feelings.				
I can talk to my teachers about my thoughts and feelings.				
I know what I am good at.				
I know what I need to work on.				
I know how to calm myself down when I am worried.				
My teachers help me learn how to calm myself down.				
I like learning about using money.				
I like learning about getting a job.				
I like learning about making friends.				
I like learning about cooking.				

I like learning about cleaning.				
I like learning about what I can do in my free time.				
I like learning about the area I live in.				

Thank you for helping me with my study!

Appendix 5 – Phase 3 (Collaboration)

Appendix 5a - Phase 3 Research Information Sheet

Research title: *Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education*

Research context:

The idea for this study came from an analysis of the current statutory guidance stated in the 2015 Special educational needs and disability code of practice: 0 to 25 years, which appears promising regarding the opportunities given to young people to make decisions regarding their education and transition to adulthood, but lacks in practical guidance. Thus, the need to develop an approach to ensure that a school's current curriculum is meeting the aims of the current statutory guidance arises.

The increasing use of video as a tool for intervention over the last decades has demonstrated its potential for developing a range of skills with different target groups. In the area of autism research especially, the use of video has proven effective when used with instructional purposes, but research is also growing regarding its use as a tool for reflection. The use of video in Video Interaction Guidance is one such example, where videos taken of the interaction between parent and child are used by practitioners to empower parents in their relationships with their children. Thus, by looking back at moments of positive practice selected by practitioners, the parents are encouraged to recognise their own strengths and thus improve their self-confidence. Similar uses of video have been employed in school environments, mainly with the aim of empowering teaching staff, and helping them seek moments of positive interaction with the students. The study's framework is based on Bronfenbrenner's bioecological model of human development, which recognises the importance of the relationship between human behaviour and the environment, and the significant of research in context.

Research aims:

This study aims to explore the potential of video as a tool for reflection through developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education. Previous research shows that self-determined individuals with autism and additional needs have better post-school outcomes and increased quality of life, by being equipped with the skills and abilities to exert control over their lives. The study will undertake a participant action research design, in which both the staff and students will be actively involved in shaping the approach.

Researcher information:

Laura Cristescu is a postgraduate researcher carrying out this study in fulfilment of her PhD in Education thesis, under the supervision of Dr. Despina Papoudi and Prof. Graeme Douglas, at the University of Birmingham. Laura is a former teaching assistant at [school's name], and currently a Co-opted school governor.

Participant contribution:

For the last phase of the study, staff and students will work collaboratively with the researcher in developing the approach through the use of video. During Part A of this phase, the researcher will take short videos (up to 10 minutes) of a member of staff and a student during 2 different subjects/areas of the curriculum. These will be selected based on the data collected

in Phase 2 through the staff, parent/carer and student questionnaires, aimed at determining which areas are most valued by the participant groups. The researcher will then select short clips (up to 30 seconds) which will be shown to staff and students who have given consent for video recording, in separate groups. These clips will show moments of positive interaction between the partners and will focus only on strengths and abilities. This is to encourage reflection and develop the principles of the approach. Three video-recorded sessions of 45mins will be carried out for each staff and student group. The principles of the approach will be informed both by existing practice and self-determination literature. The staff and students will then put the principles of the approach into practice and meet with the researcher to discuss and adjust accordingly. Weekly discussions will be held to discuss the implementation of the approach for 4 weeks, and a standardised assessment to measure the students' self-determination will be taken before and after this period.

Data analysis:
The data will be analysed using data processing software (NVivo and SPSS) in order to inform the following phase of the study.

Results:
Results will be shared with participants after the completion of the whole study through a summary of the findings, and a presentation of the approach, if participants are interested.

Confidentiality:
The information provided by participants will be stored securely on the University of Birmingham BEAR cloud storage, and on an encrypted password-protected external hard-drive as back-up. Hard copies of the data will be stored securely in a locked cabinet in a safe location in the University of Birmingham's School of Education, where the researcher spends most of the working day. Video data will not be shared outside the school setting. The information will be retained by the University of Birmingham and will only be used for the purpose of research and statistical and audit purposes. At the end of the study, the data will be disposed of in accordance with the University of Birmingham Ethical Review procedures. Quotations from participants will be used within the study, but names or any other personal information will not be recorded or included in the reporting of the study. The name and location of the school will not be reported in the study.

Right to withdraw:
Participation in this study is voluntary, and participants have the right to withdraw at any point before or after the data is collected without any information being requested. Participants will not be able to withdraw after the completion of the data analysis for the study's initial phase at the end of September 2019.

Contact information:
If you require any further details, please do not hesitate to contact the researcher:
Name: Laura Cristescu
Mobile phone: [redacted]
Email: [redacted]

First supervisor's contact details:
Dr Despina Papoudi
Lecturer in Autism in the Department of Disability, Inclusion and Special Needs/DISN at the School of Education, University of Birmingham
Email [redacted]
Phone: [redacted]

Appendix 5b – Phase 3 Recruitment

Staff recruitment presentation slides

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Investigating the potential of using video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Laura Cristescu

PhD candidate at the University of Birmingham

Why self-determination?

- from the mid-1990s it started gaining attention as a *'critical outcome for youth with disabilities'* (Wehmeyer, 1996, p. 18)
- in the context of transition services requirements it has been named *'the ultimate goal of education'* (Halloran, 1993, p. 212)
- higher levels of self-determination lead to more positive post-school outcomes including employment, financial independence and accommodation (Wehmeyer and Garner, 2003)
- can be conceptualised within the quality of life framework, as being considered one of its eight core elements, and refers to the composing factors of an individual's well-being

My study so far: Phase 1

- 7 interviews with senior members of staff and teaching staff involved in Post-16
- 5 interviews with parents of students in Post-16
- 2 weeks of semi-structured observations of the Post-16 main class

Initial findings

- both staff and parents recognise the importance of promoting self-determination for young people with autism
- all skills related to self-determination are valuable, but often difficult to teach within the school curriculum
- staff agree that students should be allowed to take more risks, which is often inhibited by concerns related to behaviour management
- it is difficult to distinguish when a young person with autism says something because they believe it or because they think that is what adults like to hear
- staff agree that young people should be given more opportunities for autonomous behaviour, but that is difficult to translate into practice
- staff highlight the need for reflective practice and training

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Phase 2-in progress

Questionnaires given to all staff, parents/carers, and students across the school. Initial results show that:

- majority of staff believe that promoting the self-determination of students with autism is very or extremely relevant
- majority of staff agree that teaching the composing skills of self-determination is extremely relevant, but the current curriculum needs to focus more on addressing them
- majority of staff believe that the school is addressing the points set in the statutory guidance regarding student involvement moderately well
- students are moderately to not at all involved in setting their EHCP targets and during Annual Review meetings
- most staff recognise the importance of the different areas of the curriculum, highlighting a need for improvement regarding financial and employability skills, and community involvement

- most students are confident in their ability to make choices regarding their free time, work at school, food and drink, friends, clothes
- majority of students are confident is all areas of self-determination skills, except being good at talking about their thoughts and feelings
- most students enjoy all areas of the curriculum addressed in the questionnaire, with a larger majority liking learning about making friends and cooking
- parents agree that all self-determination skills are important, particularly social skills and self-advocacy
- parents highlight a need for more access to the community

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Phase 3-developing the approach

- we will work together, using principles of Video Interaction Guidance (VIG)
- VIG is an evidence-based intervention that focuses on positive reflection of existing teaching practice
- the principles of the approach will be developed collaboratively from strengths of current practice
- video recordings of staff-student interactions will be used to encourage positive reflection
- group discussions will take place to encourage reflection on own and colleagues' teaching practice
- the principles will be discussed and changed to meet the needs of both staff and students

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Student recruitment presentation slides

Who am I?

- My name Laura Cristescu
- I worked as a teaching assistant at [school's name]
- I am now studying at the University of Birmingham
- For my studies, I am doing a project with your school

What is my project about?

- Helping young people like you to speak about their wants and needs
- Helping your teaching staff find out how best to support you

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Why is this important?

- You, your parents/carers and teaching staff told me in my questionnaires
- To help you speak up for yourselves
- To give you useful skills for your adult life
- To give you more opportunities in the future
- To hear what you think

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What will I do?

- I will film you and your teaching staff with my camera for around 10 minutes during the school day
- I will do this 3 times
- I will share with you short video clips
- We will discuss together about what your teaching staff are doing well to support you
- We will meet to discuss 3 times

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What do you need to do?

- Let me film you during the school day
- You do not need to do anything differently
- Meet with me and your peers to talk about the short video clips
- Help me and your teaching staff find out how to best support you
- You and a parent/carer will need to sign a form to say you want to help me with my project

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Who is interested?

If you have any questions about my project you can ask me anytime

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Appendix 5c – Phase 3 Video Consent Form for Staff
Please keep this form for your information.

Video Recording Consent Form

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Fair Processing Statement:
This information is being collected as part of a research project concerned the investigation of the potential of video as a tool for reflection in developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education within Department of Education in the University of Birmingham. The information which you supply and that which will be collected as part of the research project will be stored on the secure BEAR cloud storage and will only be accessed by authorised personnel involved in the project. The Birmingham Environment for Academic Research (BEAR) is a collection of IT resources including high performance computing, storage, and archiving, that are designed to help research, in accordance with the General Data Protection Regulations (GDPR) 2018. After the completion of the research project, the information collected will be disposed of in accordance with the University of Birmingham Ethical Review procedures. No identifiable personal data will be recorded or published.

Statements of understanding/consent:
I confirm that I have read and understand the research information sheet provided for this study. I have had the opportunity to ask questions if necessary and have had these answered satisfactorily.

I understand that my participation is voluntary and that I am free to withdraw at any time until the specified deadline, without giving any reason. If I withdraw before the deadline my data will be removed from the study and will be destroyed. After the deadline, I understand that my data will not be removed from the study.

I understand that my personal data will be processed for the purposes detailed in the information sheet, in accordance with the General Data Protection Regulation 2018.

I consent to being video recorded by the researcher and to have the clips shared in a group with other staff members.

I understand that any information recorded will remain confidential and no information that identifies me will be made publicly available.

I understand that any information used in the written report will not identify me.
Please keep this form for your information.

Agreement:
Based on the above, I agree to take part in this study:
Name of Participant:

Signature of Participant:

Date:

Please return this form to the researcher.

Agreement:
Based on the above, I agree to take part in this study:
Name of Participant:

Signature of Participant:

Date:

Appendix 5d – Phase 3 Video Parental Consent Form
Please keep this form for your information.

Video Recording Parental Consent Form

Research title:
Investigating the potential of video as a tool for reflection to develop an environmental approach to promote the self-determination of students with autism in Post-16 Special Education

Fair Processing Statement:
This information is being collected as part of a research project concerned the investigation of the potential of video as a tool for reflection in developing an environmental approach to promote the self-determination of students with autism in Post-16 Special Education within Department of Education in the University of Birmingham. The information which you supply and that which will be collected as part of the research project will be stored on the secure BEAR cloud storage and will only be accessed by authorised personnel involved in the project. The Birmingham Environment for Academic Research (BEAR) is a collection of IT resources including high performance computing, storage, and archiving, that are designed to help research, in accordance with the General Data Protection Regulations (GDPR) 2018. After the completion of the research project, the information collected will be disposed of in accordance with the University of Birmingham Ethical Review procedures. No identifiable personal data will be recorded or published.

Statements of understanding/consent:
I confirm that I have read and understand the research information sheet provided for this study. I have had the opportunity to ask questions if necessary and have had these answered satisfactorily.

I understand that my child's participation is voluntary and that we are free to withdraw at any time until the specified deadline, without giving any reason. If we withdraw before the deadline the data will be removed from the study and will be destroyed. After the deadline, I understand that the data will not be removed from the study.

I understand that personal data will be processed for the purposes detailed in the information sheet, in accordance with the General Data Protection Regulation 2018.

I consent to my child being video recorded without any interference from the researcher, and to have the clips shared in the school with members of staff and other students.

I understand that any information recorded will remain confidential and no information that identifies my child will be made publicly available.

I understand that any information used in the written report will not identify my child.

Please keep this form for your information.

Agreement:
Based on the above, I consent that my child can take part in the observation for this study:

Name of Parent/Carer:
Name of Student:
Signature of Parent/Carer:
Date:

Please return this form to the researcher.

Agreement:
Based on the above, I consent that my child can take part in the observation for this study:

Name of Parent/Carer:
Name of Student:
Signature of Parent/Carer:
Date:

Appendix 5e – Phase 3 Student Research Information Sheet and Consent Form

Student Information Sheet and Consent Form

Who am I?

My name is Miss Laura Cristescu. You might know me as I worked as a teaching assistant in secondary.

I am a student at the University of Birmingham working on developing a program to help the students at [school's name] make their own choices and decisions based on what they want.

What will I be doing?

I will be coming into [Post 16 site name] to work with you and your teachers on how we can help you make your own choices and decisions. I will be taking short videos of you and your teachers during the school day, and then we will look at small parts of them together with your teachers and classmates.

What should you do?

Go to lessons and do your work as usual. You do not need to do anything differently when I am filming. You can talk to me about my project, ask any questions, and tell me if you have any worries about my study. I will also show you how you can take videos yourself, and we can look at them together with your teachers and classmates.

What should you be worried about?

Nothing. I will not be looking at how well you are doing your work or testing you. I will not show the videos to anyone else. I will keep the videos in a safe place where no one else can see them.

How can I find out about your program?

When my study is finished (2-3 years from now) I will offer a presentation for all the students that are interested in finding out more.

Would you like to work with me on my study?

Yes ☐
No ☐

Student signature:
Date:

Please return this form to [school's name].

Would you like me to work with me on my study?

Yes ☐
No ☐

Student signature:
Date:

Appendix 5f – AIR Self-Determination Scales

AIR Self-Determination Scale©

STUDENT FORM

Student's Name _____ Date_____

School Name_____ Your Grade_____

Your Date of Birth_____
Month Day Year

HOW TO FILL OUT THIS FORM

Please answer these questions about how you go about getting what you want or need. This may occur at school, or after school, or it could be related to your friends, your family, or a job or hobby you have.

This is not a Test. There are no right or wrong answers. The questions will help you learn about what you do well and where you may need help.

Goal You may not be sure what some of the words in the questions mean. For example, the word **goal** is used a lot. A **goal is something you want to get or achieve**, either now or next week or in the distant future, like when you are an adult. You can have many different kinds of goals. You could have a goal that has to do with school (like getting a good grade on a test or graduating from high school). You could have a goal of saving money to buy something (a new iPod® or new sneakers), or doing better in sports (getting on the basketball team). Each person's goals are different because each person has different things that they want or need or that they are good at.

Plan Another word that is used in some of the questions is **plan**. A **plan is the way you decide to meet your goal, or the steps you need to take in order to get what you want or need**. Like goals, you can have many different kinds of plans. An example of a plan to meet the goal of getting on the basketball team would be: to get better by shooting more baskets at home after school, to play basketball with friends on the weekend, to listen to the coach when the team practices, and to watch the pros play basketball on TV.

The AIR Self-Determination Scale was developed by the American Institutes for Research (AIR), in collaboration with Teachers College, Columbia University, with funding from the U.S. Department of Education, Office of Special Education Programs (OSEP), under Cooperative Agreement HO23J200005

HOW TO MARK YOUR ANSWERS

EXAMPLE QUESTION:

I check for errors after completing a project.

EXAMPLE ANSWER:

Circle the number of the answer which tells what you are most like:
(Circle ONLY ONE number).

1 **Never**……student **never** checks for errors.

2 **Almost Never**……student **almost never** checks for errors.

3 **Sometimes**…….student **sometimes** checks for errors.

4 **Almost Always**……..student **almost always** checks for errors.

5 **Always**……student **always** checks for errors.

REMEMBER

There are NO right or wrong answers.	This will not affect your grade. So please think about each question carefully before you circle your answer.

THINGS I DO

1. I know what I need, what I like, and what I'm good at.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
2. I set goals to get what I want or need. I think about what I am good at when I do this.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			Things I Do – Total Items 1 + 2		☐
3. I figure out how to meet my goals. I make plans and decide what I should do.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
4. I begin working on my plans to meet my goals as soon as possible.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			Things I Do – Total Items 3 + 4		☐
5. I check how I'm doing when I'm working on my plan. If I need to, I ask others what they think of how I'm doing.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
6. If my plan doesn't work, I try another one to meet my goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			Things I Do – Total Items 5 + 6		☐

Please go on to the next page ⇒

HOW I FEEL

1. I feel good about what I like, what I want, and what I need to do.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
2. I believe that I can set goals to get what I want.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			How I Feel – Total Items 1 + 2		☐
3. I like to make plans to meet my goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
4. I like to begin working on my plans right away.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			How I Feel – Total Items 3 + 4		☐
5. I like to check on how well I'm doing in meeting my goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
6. I am willing to try another way if it helps me to meet my goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			How I Feel – Total Items 5 + 6		☐

Please go on to the next page ⇒

WHAT HAPPENS AT SCHOOL

1. People at school listen to me when I talk about what I want, what I need, or what I'm good at.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
2. People at school let me know that I can set my own goals to get what I want or need.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 1 + 2	
3. At school, I have learned how to make plans to meet my goals and to feel good about them.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
4. People at school encourage me to start working on my plans right away.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 3 + 4	
5. I have someone at school who can tell me if I am meeting my goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
6. People at school understand when I have to change my plan to meet my goals. They offer advice and encourage me when I'm doing this.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 5 + 6	

Please go on to the next page ⇒

WHAT HAPPENS AT HOME

1. People at home listen to me when I talk about what I want, what I need, or what I'm good at.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
2. People at home let me know that I can set my own goals to get what I want or need.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at Home – Total Items 1 + 2	
3. At home, I have learned how to make plans to meet my goals and to feel good about them.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
4. People at home encourage me to start working on my plans right away.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at Home – Total Items 3 + 4	
5. I have someone at home who can tell me if I am meeting my goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
6. People at home understand when I have to change my plan to meet my goals. They offer advice and encourage me when I'm doing this.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at Home – Total Items 5 + 6	

Please go on to the next page ⇒

PLEASE WRITE YOUR ANWERS TO THE FOLLOWING QUESTIONS…

Give an example of a goal you are working on.

_____

_____

_____

_____

_____

What are you doing to reach this goal?

_____

_____

_____

_____

_____

How well are you doing in reaching this goal?

_____

_____

_____

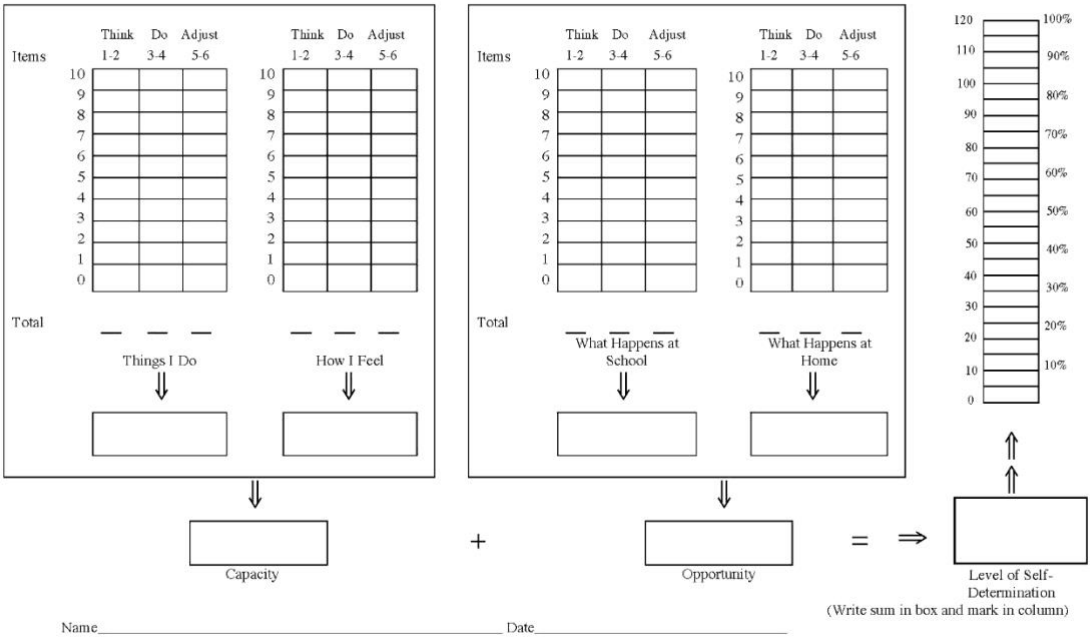
_____

_____

THANK YOU!

7 *AIR* Self Determination Scale, Student Form

The AIR Self-Determination Profile
Student Form



Name_____ Date_____

8 *AIR* Self-Determination Scale, Student Form

AIR Self-Determination Scale©
EDUCATOR FORM

Student's Name _____Date _____

Date of Birth (or age)_____ Grade_____ ☐ Female ☐ Male

Educator's Name _____

School Name _____

HOW TO FILL OUT THIS FORM

Each page of this form lists characteristics and behaviors that indicate the degree to which your student demonstrates traits of self-determination and the degree to which the people influencing your student provides opportunities that foster self-determination. For each item, select the appropriate rating code based on what you have observed about your student. An example is provided to illustrate each characteristic. Feel free to write in a different example that supports your rating for your student.

Here is an example of how you should mark your answers.

EXAMPLE QUESTION:

Student checks for errors after completing a project.

EXAMPLE ANSWER:

Check the box of the rating code which tells what your student is most like:
(Check ONLY ONE box per question).

1 **Never**……student **never** checks for errors.

2 **Almost Never**……student **almost never** checks for errors.

3 **Sometimes**…….student **sometimes** checks for errors.

4 **Almost Always**……..student **almost always** checks for errors.

5 **Always**……student **always** checks for errors.

©The *AIR Self-Determination Scale* was developed by the American Institute for Research (AIR), in collaboration with Teachers College, Columbia University, with funding from the U. S. Department of Education, Office of Special Education Programs (OSEP), under cooperative agreement H023J200005.

KNOWLEDGE of Self-Determination Behaviors

1. Student knows own abilities and limitations. *Example:* James can identify his personal strengths and talents, such as his musical ability as well as areas in which he needs improvement, like his below average math problem-solving skills.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
2. Student knows how to set expectations and goals that satisfy own interests and needs. *Example:* Lee wants to attend college and knows that to get good grades, she needs to work hard on her assignments and complete them on time.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Knowledge Total: Items 1+2	
3. Student knows how to make choices, decisions, and plans to meet own goals and expectations. *Example:* When making plans to meet her goals, Lynn knows how to identify various strategies, weigh the pros and cons, and follow through.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
4. Student knows how to take actions to complete own plans successfully. *Example:* Kenneth knows how to follow through on a scheduled plan to complete his work accurately and on time.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Knowledge Total: Items 3+4	
5. Student knows how to evaluate results of actions to determine what was effective. *Example:* Germaine knows what questions to ask to find out how well she is doing.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
6. Student knows how to change actions or plans to meet goals and satisfy needs and wants. *Example:* Jose understands that to get an A in math, he may need to study one hour every night; if that doesn't work he may have to work two hours every night; and if that doesn't work he may have to learn to study more effectively.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Knowledge Total: Items 5+6	

Please go on to the next page⇒

ABILITY to Perform Self-Determination Behaviors

1. Student expresses own interests, needs, and abilities. *Example:* Sarah communicates her athletic interest and talent in conversations, written journals, or participation in sports activities.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
2. Student sets expectations and goals that will satisfy own interests needs, and wants. *Example:* Loving to spend time drawing and doing art, Daniel sets the goal of finding art classes that he can take after school once a week.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Ability Total: Items 1+2	☐
3. Student knows how to make choices, decisions, and plans to meet own goals and expectations. *Example:* Anna weighed the pros and cons of doing three types of history projects, chose to write a research report, outlined the report, and made a schedule for completing the report on time.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
4. Student initiates actions on own choices and plans. *Example:* Ming begins work right away each time he gets an assignment or is asked by someone to help with a project.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Ability Total: Items 3+4	☐
5. Student gathers information on results of actions. *Example:* After completing her work, Theresa checks it for errors and asks others to look it over and make suggestions.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
6. Student changes own actions or plans to satisfy expectations and goals, if necessary. *Example:* Ricardo tries different approaches to solve problems and to complete tasks that are difficult for him.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Ability Total: Items 5+6	☐

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PERCEPTION of Knowledge and Ability to Perform Self-Determination Behaviors

1. Student feels free to express own needs, interests, and abilities, even when facing opposition from others. *Example:* Fran defends her needs and interests to anyone who questions them.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
2. Student feels free to set own goals and expectations, even if they are different from the expectations others have for the student. ***Example:*** Trevor does not feel constrained by others' opinions in setting goals and expectations for himself.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Perception Total: Items 1+2	☐
3. Student feels free to make own choices, decisions, and plans to meet own goals and expectations. *Example:* Corine often considers her parents' suggestions when making choices and plans, but the final plans taken to meet her goals are her own.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
4. Student feels confident about being able to successfully complete own plans. *Example:* When Nicholas schedules his own activities, he is confident he can complete them accurately and on time.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Perception Total: Items 3+4	☐
5. Student is confident about using feedback to evaluate results of own work. *Example:* Amanda is confident that she will be able to benefit from the feedback she receives from her parents, teachers, and peers.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
6. Student changes plans again and again to meet a goal without getting discouraged. *Example:* Levar is motivated to work on a project as long as it takes, using whatever approaches are necessary, to get it right.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Perception Total: Items 5+6	☐

Please go on to the next page⇒

OPPORTUNITY To Perform Self-Determination Behaviors AT SCHOOL

1. Student has opportunities at school to explore, express, and feel good about own needs, interests, and abilities. *Example:* Christine's teachers encourage her to talk about her athletic interests and abilities and about what sports activities she wants to do.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
2. Student has opportunities at school to identify goals and expectations that will meet his or her needs, interests, and abilities; to set these goals; and to feel good about them. *Example:* Troy's teachers let him know that he is responsible for setting his own goals to get his needs and wants met.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Opportunity at School Total: Items 1+2	
3. Student has opportunities at school to learn about making choices and plans, to make them, and to feel good about them. *Example:* Shebra's teachers allow her to make her own choices and plans for school assignments, family chores, and leisure activities.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
4. Student has opportunities at school to initiate actions to meet expectations and goals. *Example:* Manuel's teachers tell him that he is responsible for scheduling study time and for handing in assignments on time.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Opportunity at School Total: Items 3+4	
5. Student has opportunities at school to get results of actions taken to meet own plans. *Example:* Michelle's teachers are available to give feedback on projects whenever she needs it.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
6. Student has opportunities at school to change actions and plans to satisfy own expectations. *Example:* Laurent's teacher encouraged him to take his time and to revise his work as often as necessary to satisfy his own expectations.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Opportunity at School Total: Items 5+6	

Please go on to the next page⇒

OPPORTUNITY To Perform Self-Determination Behaviors AT HOME

1. Student has opportunities at home to explore, express, and feel good about own needs, interests, and abilities. *Example:* Maria's parents encourage her to talk about her athletic interests and abilities and about what sports activities she wants to do.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
2. Student has opportunities at home to identify goals and expectations that will meet his or her needs, interests, and abilities; to set these goals; and to feel good about them. *Example:* Roberto's parents let him know that he is responsible for setting his own goals to get his needs and wants met.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Opportunity at Home Total: Items 1+2	
3. Student has opportunities at home to learn about making choices and plans, to make them, and to feel good about them. *Example:* Kelly's parents allow her to make her own choices and plans for school assignments, family chores, and leisure activities.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
4. Student has opportunities at home to initiate actions to meet expectations and goals. *Example:* Anthony's parents tell him that he is responsible for scheduling study time and for handing in assignments on time.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Opportunity at Home Total: Items 3+4	
5. Student has opportunities at home to get results of actions taken to meet own plans. *Example:* Thuy's parents are available to give feedback on projects whenever she needs it.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
6. Student has opportunities at home to change actions and plans to satisfy own expectations. *Example:* Stacy's parents encourage him to take his time and to revise his work as often as necessary to satisfy his own expectations.	Never ☐ **1**	Almost Never ☐ **2**	Sometimes ☐ **3**	Almost Always ☐ **4**	Always ☐ **5**
				Opportunity at Home Total: Items 5+6	

Please go on to the next page⇒

PLEASE WRITE YOUR ANSWERS TO THE FOLLOWING QUESTIONS IN THE SPACES BELOW.

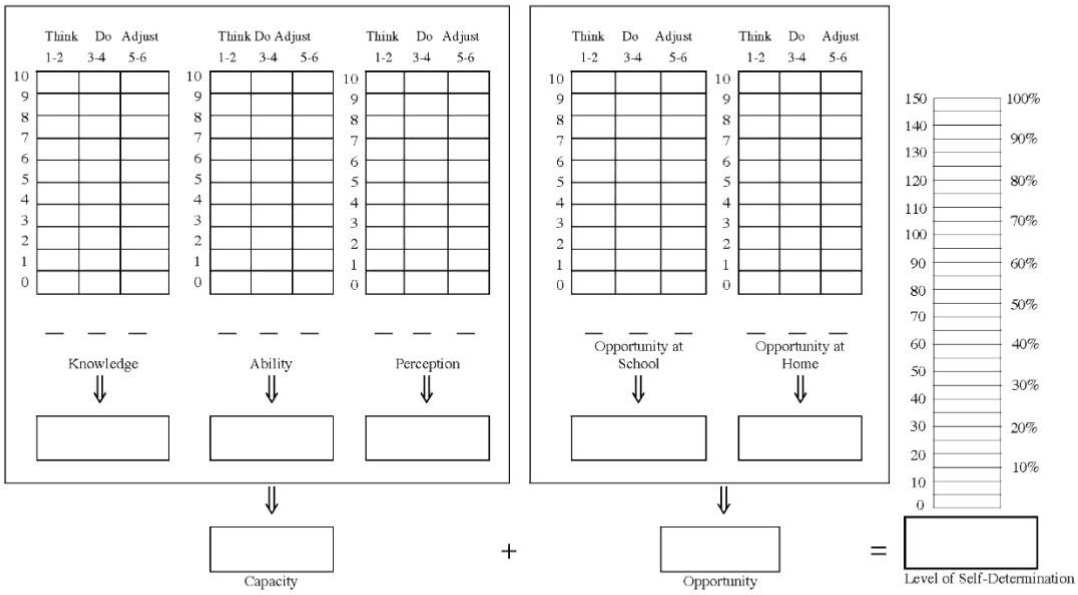
Give an example of a goal the student is working on.

What is the student doing to reach this goal?

How is the student doing in reaching this goal?

Thank you.

The AIR Self-Determination Profile
Educator Form



(Write sum in box and mark in column)

Student Name_____ Date_____

AIR Self-Determination Scale©

PARENT FORM

Student's Name _____

Date _____

School Name_____

Parent's Name_____

HOW TO FILL OUT THIS FORM

Please answer these questions about how your child goes about getting what he or she wants or needs. This may occur at school, or after school, or it could be related to your child's friends, other family members, a job or hobby.

This is not a Test. There are no right or wrong answers. The questions will help us learn about your child's strengths and areas where your child may need help.

Goal A **goal is something your child wants to get or achieve**, either now or next week or in the distant future. Your child can have many different kinds of goals. Your child could have a goal that has to do with school (like getting a good grade on a test or graduating from high school). Your child could have a goal that has to do with getting along better with friends or family (like making his mom proud). Your child could have a goal of saving money to buy something (a new iPod® or new sneakers), or doing better in sports (getting on the basketball team). Each child's goals are different because each person has different things that they want or need or that they are good at.

Plan A **plan is the way your child decides to meet his or her goal, or the steps your child needs to take in order to get what (s)he wants or needs**. Like goals, your child can have many different kinds of plans. An example of a plan to meet the goal of getting on the basketball team would be: to get better by shooting more baskets at home after school, to play basketball with friends on the weekend, to listen to the coach when the team practices, and to watch the pros play basketball on TV.

The AIR Self-Determination Scale was developed by the American Institutes for Research (AIR), in collaboration with Teachers College, Columbia University, with funding from the U.S. Department of Education, Office of Special Education Programs (OSEP), under Cooperative Agreement HO23J200005.

HOW TO MARK YOUR ANSWERS

EXAMPLE QUESTION

After completing a project, my child checks for errors.

EXAMPLE ANSWER

Circle the number of the answer that tells what your child is most like.

Circle ONLY ONE number.

1. **Never……**My child **never checks for errors** after completing a project.
2. **Almost Never…..**My child **almost never checks for errors** after completing a project.
3. **Sometimes……..**My child **sometimes checks for errors** after completing a project.
4. **Almost Always….**My child **almost always checks for errors** after completing a project.
5. **Always……** My child **always checks for errors** after completing a project.

REMEMBER

There are NO right or wrong answers.	This will not affect your child's grade. So please think about each question carefully before you circle your answer.

THINGS MY CHILD DOES

1. My child knows what (s)he needs, likes, and is good at.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
2. My child sets his or her own goals to satisfy wants or needs. (S)he thinks about his or her own abilities when setting goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			Things My Child Does– Total Items 1 + 2		☐
3. My child figures out how to meet goals alone. (S)he makes plans and decides what to do independently.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
4. My child begins work on plans to meet his or her goals as soon as possible.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			Things My Child Does – Total Items 3 + 4		☐
5. My child checks his or her own progress when completing his or her plan. (S)he asks others what they think of his or her progress.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
6. If my plan doesn't work, my child tries another one to meet his or her goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
			Things My Child Does – Total Items 5 + 6		☐

Please go on to the next page ⇒

WHAT HAPPENS AT HOME

1. At home, people listen when my child talks about what (s)he wants and is good at.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
2. At home, people let my child know that (s)he can set his or her own goals to get what (s)he wants or needs.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 1 + 2	
3. At home, my child has learned how to make plans to meet his or her own goals and to feel good about them.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
4. At home, my child is allowed to act on his or her plans right away.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 3 + 4	
5. At home, my child has someone to tell him or her when (s)he is meeting his or her own goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
6. At home, people understand my child when (s)he has to change plans to meet his or her own goals. They offer advice and encouragement.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 5 + 6	

Please go on to the next page ⇒

WHAT HAPPENS AT SCHOOL

1. At school, people listen when my child talks about what (s)he wants and is good at.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
2. At school, people let my child know that (s)he can set his or her own goals to get what (s)he wants or needs.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 1 + 2	
3. At school, my child has learned how to make plans to meet his or her own goals and to feel good about them.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
4. At school, my child is allowed to act on his or her plans right away.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 3 + 4	
5. At school, my child has someone to tell him or her when (s)he is meeting his or her own goals.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
6. At school, people understand my child when (s)he has to change plans to meet his or her own goals. They offer advice and encouragement.	Never ☐ 1	Almost Never ☐ 2	Sometimes ☐ 3	Almost Always ☐ 4	Always ☐ 5
				What Happens at School – Total Items 5 + 6	

Please go on to the next page ⇒

PLEASE WRITE YOUR ANWERS TO THE FOLLOWING QUESTIONS…

Give an example of a goal your child is working on now.

_____

_____

_____

_____

_____

What is your child doing to reach this goal?

_____

_____

_____

_____

_____

How is your child doing in reaching this goal?

_____

_____

_____

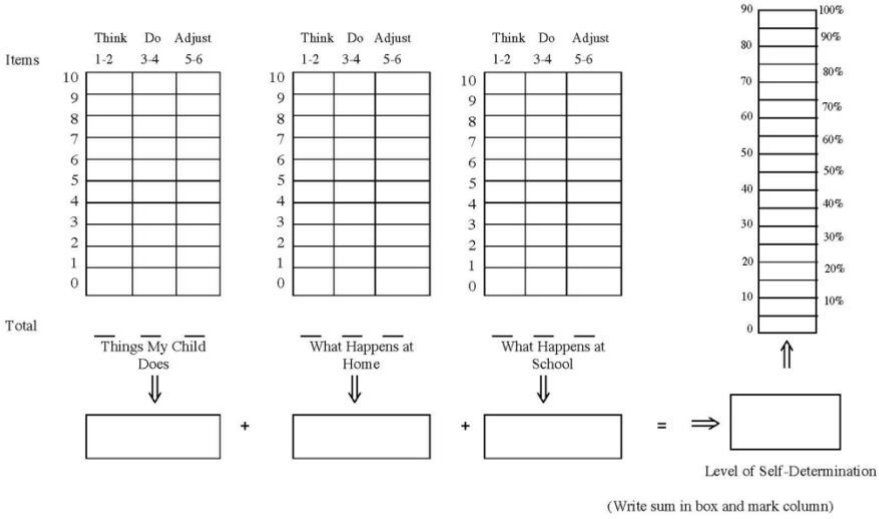
_____

_____

THANK YOU!

The AIR Self-Determination Scale was developed by the American Institutes for Research (AIR), in collaboration with Teachers College, Columbia University, with funding from the U.S. Department of Education, Office of Special Education Programs (OSEP), under Cooperative Agreement HO23J2000.

The AIR Self-Determination Profile
Parent Form



Student's Name_____ Date_____

7 AIR Self Determination Scale, Parent Form

Appendix 6 – VIG Principles of Attuned Interactions and Guidance

Being attentive	• Looking interested with friendly posture • Giving time and **space** for other • Turning towards • Wondering about what they are doing, thinking or feeling • Enjoying watching the other
Encouraging initiatives	• **Waiting** • Listening actively • Showing emotional warmth through intonation • Using friendly and/or playful intonation as appropriate • **Naming** what the child is doing, might be thinking or feeling • Naming what you are doing, thinking or feeling • **Looking for initiatives**
Receiving initiatives	• Showing you have heard, noticed the other's initiative • Receiving with body language • Being friendly and/or playful as appropriate • Returning eye-contact, smiling, nodding in response • Receiving what the other is saying or doing with words • Repeating/using the other's words or phrases
Developing attuned interactions	• **Receiving and then responding** • Checking the other is understanding you • Waiting attentively for your turn. • Having fun • Giving a second (and further) turn on same topic • Giving and taking short turns • Contributing to interaction / activity equally • Co-operating - helping each other
Guiding	• Scaffolding • Saying 'no' in the 'yes' cycle (attuned limit setting) • Extending, building on the other's response • Judging the amount of support required and adjusting • Giving information when needed • Providing help when needed • Offering choices that the other can understand • Making suggestions that the other can follow
Deepening discussion	• Supporting goal-setting • Sharing viewpoints • Collaborative discussion and problem-solving • Naming difference of opinion • Investigating the intentions behind words • Naming contradictions/conflicts (real or potential) • Reaching new shared understandings • Managing conflict (back to being attentive and receiving initiatives with the aim of restoring attuned interactions)

Appendix 7 - Report of Phase 2 Questionnaire Results

Awareness and knowledge of self-determination:

For the staff and parent/carer questionnaires, the demographic section is followed by two questions aimed at gathering data regarding participants' awareness and understanding of the term self-determination, which are reported in the table below.

Table 7.1. Staff and parents/carers' awareness and knowledge of the term self-determination

		N		%	
		Staff (N=31)	**Parents/ Carers (N=23)**	**Staff (N=31)**	**Parents/ Carers (N=23)**
Familiar with the term self-determination	Yes	24	16	77	69
	No	3	2	10	9
	Not sure	4	5	13	22
Definition closest to participant's understanding of self-determination	Having the motivation to pursue your dreams and aspirations	4	3	15	13
	Having the abilities and skills needed to set goals and plan the steps to achieve them	6	7	23	31
	Being determined to do things for oneself	5	3	19	13
	Making choices and decisions based on self-knowledge and in pursuit of one's needs and interests	7	4	27	17
	Having as much control over one's life as possible	3	3	12	13
	Being independent in everyday life	1		4	
	Not sure/Don't know		3		13

When asked if familiar with the term self-determination, most staff (almost 80%) and parents/carers (almost 70%) answered 'Yes', the remaining participants either responding 'No' (around 10% for both staff and parents/carers) or 'Not sure' (5% for staff and around 20% for parents/carers).

Regarding the closest definition to participants' understanding, most staff (almost 30%) chose the definition derived from the OSERS definition (1993), simplified as 'making choices and decisions based on self-knowledge and in pursuit of one's needs and interests', followed by the definition related to goal-setting (over 20%) and 'being determined to do things for oneself (almost 20%). Around 15% of staff chose the definition related to motivation as closest to their understanding, with just over 10% choosing that which focuses on control over one's life, and less than 5% choosing the definition related to independence. Most parents/carers on the other hand, chose the definition relates to goal setting (over 30%), with the remaining responses being distributed amongst the definitions related to motivation (13%), being determined (13%), the OSERS definition (17%), having control (13%). Unlike staff, over 10% of parents/carers responded: 'Not sure/Don't know'.

Relevance of promoting self-determination:

Staff and parent/carer questionnaires were also asked for their opinion on promoting self-determination of young people with autism at school, their answers being reported in the table below.

Table 7.2. Staff and parents/carers' opinion on the relevance of promoting self-determination at school

		N		%	
		Staff (N=31)	**Parents/ Carers (N=23)**	**Staff (N=31)**	**Parents/ Carers (N=23)**
Relevance of promoting self-determination at school	Extremely	13	9	42	39
	Very	13	12	42	53
	Moderately	4	1	13	4
	Slightly	1		3	
	Not at all		1		4

Relevance of the composing skills of self-determination and how they are addressed in the current curriculum:

Making choices

Staff and parents/carers' views

Table 7.3. Staff and parents/carers' views on the relevance and teaching of making choices for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N			%		
		Staff (N=31)	Parents/Carers (N=23)		Staff (N=31)	Parents/Carers (N=23)	
			School	Home		School	Home
How relevant/ important to teach	Extremely	21	13	14	75	57	61
	Very	7	10	9	25	43	39
	Moderately						
	Slightly						
	Not at all						
	Not sure						
How well addressed in the curriculum	Extremely	5	5		18	22	
	Very	13	13		46	56	
	Moderately	7	5		25	22	
	Slightly	3			11		
	Not at all						
	Not sure						

When asked about the value of teaching students with autism about making choices at school, over half of both staff (75%) and parents/carers (57%) viewed it as extremely relevant/important, the remaining viewing it as very relevant/important. Parents/carers provided similar answers for the importance of teaching the skill of making choices at home: 61% extremely important and 39% very important. However, when asked how well the skill of making choices is addressed in the current school curriculum, less 25% of both staff (18%) and parents/carers (22%) believed this was done extremely well. Around half of both groups thought making choices was addressed very well, with the remaining viewing it as either moderately or slightly well.

Students' views

Table 7.4. Students' views on making choices for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35) **I can make choices about:**		**N**	**%**
Free time	I agree	25	71
	Sometimes I agree and sometimes I do not	3	9
	I do not agree	2	6
	I am not sure	5	14
Work at school	I agree	15	43
	Sometimes I agree and sometimes I do not	9	26
	I do not agree	3	9
	I am not sure	8	23
Food and drink	I agree	22	63
	Sometimes I agree and sometimes I do not	4	11
	I do not agree	4	11
	I am not sure	5	14
Friends	I agree	28	82
	Sometimes I agree and sometimes I do not	4	12
	I do not agree	1	3
	I am not sure	1	3
Clothes	I agree	18	51
	Sometimes I agree and sometimes I do not	6	17
	I do not agree	8	23
	I am not sure	3	9

When asked about their ability to make choices in different areas, most students agreed that they are able to make such choices. Regarding their ability to make choices about how to spend their free time, over 70% of students agreed, with less than 15% for each sometimes, do not agree and not sure. Although the majority of students agreed (43%) that they can make choices about their work, almost 30% said this happens sometimes, with over 20% being not sure. Over 60% of students agreed they can make choices about their food and drink, with less than 15% for each of the other options. A large majority of over 80% of students also responded that they agree with being able to make choices about their friends, with less than 15% saying this happens sometimes. Regarding their ability to make choices about their clothes, more than half of students agreed, with over 15% saying this happens sometimes, and almost 25% disagreeing, and 10% being not sure.

Table 7.5. Students' views on learning and receiving help with making choices at school for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
Learning about making choices at school	I agree	27	77
	Sometimes I agree and sometimes I do not	5	14
	I do not agree		
	I am not sure	3	9
Teachers help with making choices at school	I agree	25	71
	Sometimes I agree and sometimes I do not	4	11
	I do not agree	3	9
	I am not sure	3	9

Students were also asked whether they learn at school about making choices, and almost 80% agreed, with less than 15% saying this happens sometimes, and less than 10% being not sure. When asked about their teachers helping them with making choices at school, over 70% of students agreed, with around 10% for each sometimes, do not agree, and not sure.

Making decisions

Table 7.6. Staff and parents/carers' views on the relevance and teaching of making decisions for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N			**%**		
		Staff (N=31)	**Parents/Carers (N=23)**		**Staff (N=31)**	**Parents/Carers (N=23)**	
			School	**Home**		**School**	**Home**
How relevant/ important to teach	Extremely	21	14	14	75	61	61
	Very	5	9	9	18	39	39
	Moderately	2			7		
	Slightly						
	Not at all						
	Not sure						
How well addressed in the curriculum	Extremely	1	4		4	18	
	Very	11	12		39	52	
	Moderately	13	7		46	40	
	Slightly	2			7		
	Not at all						
	Not sure	1			4		

The composing skill of making decision was also regarded as valuable with over 60% of both staff (75%) and parents/carers (61%) considering it as extremely relevant/important, the remaining viewing it as either very or moderately relevant/important. Similarly, parents/carers thought that the skill of making decisions should also be taught at home with over 60% considering it as extremely important, and almost 40% as very important. When

asked about how this was addressed in the current school curriculum, less than 25% of staff (4%) and parents/carers (18%) thought this was done extremely well. Most parents/carers (52%) said that making decisions is very well addressed in the current curriculum, while around 40% of staff thought this was done either very (39%) or moderately well (46%).

Problem solving

Staff and parents/carers' views

Table 7.7. Staff and parents/carers' views on the relevance and teaching of problem solving for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N			%		
		Staff (N=31)	**Parents/Carers (N=23)**		**Staff (N=31)**	**Parents/Carers (N=23)**	
			School	**Home**		**School**	**Home**
How relevant/ important to teach	Extremely	20	13	14	71	57	61
	Very	8	10	8	29	43	39
	Moderately			1			
	Slightly						
	Not at all						
	Not sure						
How well addressed in the curriculum	Extremely	2	4		7	18	
	Very	7	8		25	35	
	Moderately	14	9		50	39	
	Slightly	3	1		11	4	
	Not at all	1	1		4	4	
	Not sure	1			4		

Problem solving was also regarded as relevant/important to teach students with autism both at school and at home, with over 70% of staff and over 60% of parents/carers seeing it as extremely relevant/important, with the rest considering it very relevant/important. When asked how well problem solving is addressed in the current curriculum, the responses were mixed and distributed across the rating scale for staff, with less than 10% saying this was done extremely well, 25% very well, and 50% moderately well, the remaining viewing it as either slightly well or not well at all, with one participant being 'Not sure'. Similarly, parents/carers responses were mixed, with less than 20% viewing problem solving as extremely well addressed in the curriculum, over 30% as very well done, and almost 40% as moderately well.

Students' views

Table 7.8. Students' views on own ability and learning of problem solving for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
Can solve problems	I agree	16	46
	Sometimes I agree and sometimes I do not	10	29
	I do not agree	4	11
	I am not sure	5	14
Learn how to solve problems school	I agree	22	64
	Sometimes I agree and sometimes I do not	8	24
	I do not agree	1	3
	I am not sure	3	9

When asked about their ability to solve problems, almost 50% of students agreed they can, with almost 30% sometimes, and less than 15% for each do not agree and not sure. Regarding their learning about how to solve problems at school, over 60% of students agreed this is in place, with less than 30% responding sometimes, and almost 10% being not sure.

Setting a target/goal and devising the steps to achieve it

Staff and parents/carers' views

Table 7.9. Staff and parents/carers' views on the relevance and teaching of setting a target/goal and devising the steps to achieve it for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N			**%**		
		Staff (N=31)	**Parents/Carers (N=23)**		**Staff (N=31)**	**Parents/Carers (N=23)**	
			School	**Home**		**School**	**Home**
How relevant/ important to teach	Extremely	12	11	12	43	48	52
	Very	14	11	9	50	48	39
	Moderately	2	1	1	7	4	4
	Slightly						
	Not at all			1			4
	Not sure						
How well addressed in the curriculum	Extremely	1	6		4	26	
	Very	8	7		29	31	
	Moderately	11	9		39	39	
	Slightly	5			18		
	Not at all	2			7		
	Not sure	1	1		4	4	

The skill of setting a target/goal and devising the steps to achieve it was seen as valuable to teach students with autism at school, with over 40% of staff and of parents/carers seeing it as extremely relevant/important, 50% of staff and almost 40% of parents/carers considering it very relevant/important, and moderately relevant/important for the remaining participants. Parents/carers responded that this skill was even more important to teach at home, with over 50% as extremely important, almost 40% as very important, and less than 10% as moderately important. Staff's responses regarding how well teaching about setting a target/goal and devising the steps to achieve it is addressed in the curriculum were mixed: less than 5% thought it was done extremely well, almost 30% very well, almost 40% moderately well, the remaining as either slightly well or not well at all, and one participant being not sure. Parents/carers responses were also mixed between the three upper points of the scale with almost 30% considering it as extremely well addressed, another 30% as very well, and the remaining as moderately well, with one being not sure.

Students' views

Table 7.10. Students' views on own ability and teacher's help with setting targets for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
Can set targets about work	I agree	11	31
	Sometimes I agree and sometimes I do not	10	29
	I do not agree	1	3
	I am not sure	13	37
Teachers help with setting targets about work	I agree	17	49
	Sometimes I agree and sometimes I do not	7	20
	I do not agree	1	3
	I am not sure	10	29

Students' responses about whether they are able to set targets about their work at school were mixed with around 30% for each agreeing, sometimes and not sure, and less than 5% who do not agree. Similarly, responses to the question regarding teachers providing help with setting targets about their work were mixed, with almost half of students agreeing, 20% saying this happens sometimes, and almost 30% being not sure.

Self-advocacy

Staff and parents/carers' views

Table 7.11. Staff and parents/carers' views on the relevance and teaching of self-advocacy for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N			%		
		Staff (N=31)	**Parents/Carers (N=23)**		**Staff (N=31)**	**Parents/Carers (N=23)**	
			School	**Home**		**School**	**Home**
How relevant/ important to teach	Extremely	18	14	15	64	61	66
	Very	10	8	6	36	35	26
	Moderately		1	2		4	8
	Slightly						
	Not at all						
	Not sure						
How well addressed in the curriculum	Extremely	2	4		7	17	
	Very	9	7		32	31	
	Moderately	8	10		29	44	
	Slightly	5	1		18	4	
	Not at all	2			7		
	Not sure	2	1		7	4	

Self-advocacy was viewed as a valuable skill to teach students with autism both at school and at home, with over 60% of both staff and parents/carers viewing it as extremely relevant/important, the remaining either considering it as very or moderately relevant/important. The responses given to how well self-advocacy is addressed in the school curriculum were mixed for both staff and parents/carers: less than 10% of staff and less than 20% of parents/carers viewed it as extremely well addressed, around 30% of both staff and parents/carers as either very or moderately well.

Students' views

Table 7.12. Students' views on own ability and learning of self-advocacy for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
Good at talking about own thoughts and feelings	I agree	10	29
	Sometimes I agree and sometimes I do not	14	41
	I do not agree	4	12
	I am not sure	6	18
Can talk to teachers about own thoughts and feelings	I agree	19	56
	Sometimes I agree and sometimes I do not	8	24
	I do not agree	3	9
	I am not sure	4	12

In order to find out students' views on their ability to self-advocate, a question was asked about their ability to talk about their own thoughts and feelings and almost 30% agreed, over 40% responded sometimes, less than 15% did not agree, and almost 20% were not sure. Regarding their ability to talk about their thoughts and feelings to their teachers, almost 60% of students agreed, almost 25% said they are able to sometimes, around 10% did not agree and further 10% were not sure.

Self-awareness and self-knowledge

Staff and parents/carers' views

Table 7.13. Staff and parents/carers' views on the relevance and teaching of self-awareness and self-knowledge for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N			**%**		
		Staff (N=31)	**Parents/Carers (N=23)**		**Staff (N=31)**	**Parents/Carers (N=23)**	
			School	**Home**		**School**	**Home**
How relevant/ important to teach	Extremely	17	11	13	61	48	57
	Very	10	11	8	36	48	35
	Moderately	1	1	2	3	4	8
	Slightly						
	Not at all						
	Not sure						
How well addressed in the curriculum	Extremely	2	7		7	31	
	Very	11	5		39	22	
	Moderately	10	7		36	31	
	Slightly	3	3		11	13	
	Not at all	1			4		
	Not sure	1	1		4	4	

The relevance of teaching self-awareness and self-knowledge to students with autism at school brought mixed responses from both staff and parents/carers, with over 60% of staff and over 50% of parents/carers regarding them as extremely relevant/important, less than 40% of staff and almost 50% of parents/carers as very relevant/important, the remaining considering them as moderately relevant/important. Parents/carers responses on teaching self-awareness and self-knowledge at home were similar, with almost 60% seeing them as extremely relevant/important, around 30% as very relevant/important and less than 10% as moderately relevant/important. Regarding how well self-awareness and self-knowledge are addressed in the current curriculum, staff and parents/carers responses differed in that less than 10% of staff and over 30% of parents/carers saw it as extremely well done. Almost 40% of staff and 20% of parents/carers viewed the skills as either very or moderately well addressed, the remaining around 10% as slightly well, with less than 5% of staff for not well at all or not sure.

Students' views

Table 7.14. Students' views on own strengths and weaknesses for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
Know what I am good at	I agree	27	77
	Sometimes I agree and sometimes I do not	4	11
	I do not agree	1	3
	I am not sure	3	9
Know what I need to work on	I agree	21	60
	Sometimes I agree and sometimes I do not	8	23
	I do not agree		
	I am not sure	6	17

Students' thoughts on their self-awareness and self-knowledge were gathered through two questions asking them about knowing what they are good at and what they need to work on. Regarding the first, almost 80% of students agreed they are aware of their own strengths, with around 10% sometimes and not sure, and less than 5% who do not agree. Similarly, the majority of students (60%) agreed they know what areas they need to work on, with around 20% for each sometimes and not sure.

Self-regulation

Staff and parents/carers' views

Table 7.15. Staff and parents/carers' views on the relevance and teaching of self-regulation for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N			%		
		Staff (N=31)	**Parents/Carers (N=23)**		**Staff (N=31)**	**Parents/Carers (N=23)**	
			School	**Home**		**School**	**Home**
How relevant/ important to teach	Extremely	24	15	18	86	65	78
	Very	4	7	4	14	31	18
	Moderately		1	1		4	4
	Slightly						
	Not at all						
	Not sure						
How well addressed in the curriculum	Extremely	5	7		18	31	
	Very	12	8		43	35	
	Moderately	8	5		29	22	
	Slightly	3	2		11	8	
	Not at all						
	Not sure		1			4	

When asked about the relevance of teaching self-regulation, the majority of both staff (86%) and parents/carers (65%) responded that this was extremely relevant/important to teach at school, with the remaining viewing it as either very or moderately relevant/important. Similarly, the majority of parents/carers responded that self-regulation was extremely important (78%) to teach at home, with 35% seeing it as very important, and 22% as moderately important. Staff's views on how well self-regulation was addressed in the current curriculum were mixed, with less than 20% as extremely well, over 40% as very well, less than 30% as moderately well, and around 10% as slightly well. Parents/carers responses were also mixed, with over 30% seeing it as extremely well and very well done, around 20% for moderately well and less that 10% slightly well.

Students' views

Table 7.16. Students' views on own ability and learning of self-regulation for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
Know how to calm myself down when worried	I agree	21	60
	Sometimes I agree and sometimes I do not	7	20
	I do not agree	2	6
	I am not sure	5	14
Teachers help me learn how to calm myself down	I agree	24	71
	Sometimes I agree and sometimes I do not	6	18
	I do not agree		
	I am not sure	4	12

As the term self-regulation was too complex and likely to be unfamiliar to most students, in order to get their views on the skill, they were asked about their ability to calm themselves down when worried. Over 60% agreed that they are able to do so, with 20% sometimes, around 5% do not agree, and almost 15% being not sure. The majority of students (over 70%) also agreed that their teachers help them learn how to calm themselves down, with almost 20% saying this happen sometimes and less than 15% being not sure.

The application of the statutory guidance as set in the 2015 SEND Code of Practice: 0 to 25 years:

Table 7.17. Staff and parents/carers' views on how well/often the school provides opportunities for choice, control and freedom for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		**%**	
		Staff (N=31)	**Parents /Carers (N=23)**	**Staff (N=31)**	**Parents /Carers (N=23)**
Opportunities for choice, control, and freedom	Extremely well/Always	1	3	4	13
	Very well/Most of the time	10	10	36	44
	Moderately/About half the time	13		46	
	Slightly/Sometimes	4	1	14	4
	Not at all/Never				
	Not sure		9		39

Staff's responses regarding how well the current school curriculum is providing students with opportunities for self-determination, as outlined in the statutory guidance as set in the *2015 SEND Code of Practice: 0 to 25 years* as 'opportunities for choice, control and freedom', were mixed. Less than 5% of staff responded that the school is providing such opportunities

extremely well, less than 40% very well, almost 50% moderately well, and less than 15% slightly well. Similarly, when asking parents/carers how often such opportunities were given, the responses were mixed, with less than 15% believing they were always provided, more than 40% as most of the time, less than 5% as sometimes, the remaining almost 40% being not sure.

Table 7.18. Staff and parents/carers' views on how well/often the school provides opportunities for discussions about own aspirations, needs, and support for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		%	
		Staff (N=31)	**Parents /Carers (N=23)**	**Staff (N=31)**	**Parents /Carers (N=23)**
Opportunities for discussions about own aspirations, needs, and support	Extremely well/Always	1	3	4	13
	Very well/Most of the time	8	10	29	44
	Moderately/About half the time	13		46	
	Slightly/Sometimes	5	1	18	4
	Not at all/Never	1		4	
	Not sure		9		39

The responses collected regarding views on the opportunities for discussions about own aspirations, needs, and support were also mixed. Most staff (almost 50%) responded that this was moderately well addressed in the current school curriculum, followed by almost 30% as very well, and less than 20% as slightly well, the remaining 10% being divided evenly between those seeing it as extremely well or not at all addressed. Parents/carers' responses were also mixed, with over 40% considering that opportunities for discussions about own aspirations, needs, and support were given most of the time, 13% as always, and less than 5% as sometimes, with almost 40% being not sure.

Table 7.19. Staff and parents/carers' views on how well/often the school provides opportunities for discussions about own education and development for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		%	
		Staff (N=31)	**Parents /Carers (N=23)**	**Staff (N=31)**	**Parents /Carers (N=23)**
Opportunities for discussions about own education and development	Extremely well/Always	1	5	4	22
	Very well/Most of the time	3	5	11	22
	Moderately/About half the time	17	2	61	8
	Slightly/Sometimes	6	2	21	8
	Not at all/Never	1	1	4	4
	Not sure		8		35

When asked about how well the current school curriculum provides students with opportunities for discussions about their own education and development, most staff (over 60%) said this is moderately well done, over 20% as slightly well, over 10% as very well, and less than 5% for each extremely well and not well at all. Parents/carers' responses regarding how frequently students are given such opportunities were also mixed, with 22% believing they are always or most of the time provided, with less than 10% for each about half the time and sometimes, and 35% being not sure.

Table 7.20. Staff and parents/carers' views on student involvement in setting EHCP targets, for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		%	
		Staff (N=31)	**Parents /Carers (N=23)**	**Staff (N=31)**	**Parents /Carers (N=23)**
Student involvement in setting EHCP targets	A great deal		6		23
	A lot		2		9
	Moderately	8	3	29	13
	A little	13	2	46	9
	Not at all	7	7	25	30
	Not sure		3		13

Staff's responses regarding student involvement in setting their EHCP targets were concentrated around the lower points of the rating scale, with almost 30% thinking they are moderately involved, almost 50% as a little involved, the remaining not involved at all. Parents/carers' responses were mixed, with over 20% seeing them as a great deal involved, around 10% for a lot, moderately, and a little, with 30% being not sure.

Table 7.21. Staff and parents/carers' views on student involvement during EHCP Annual Review meetings, for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		%	
		Staff (N=31)	**Parents /Carers (N=23)**	**Staff (N=31)**	**Parents /Carers (N=23)**
Student involvement during EHCP Annual Review meetings	A great deal		1		4
	A lot		7		31
	Moderately	8	4	29	9
	A little	8	4	29	9
	Not at all	12	7	43	31

Regarding student involvement during EHCP Annual Review meetings, staff's responses were evenly distributed along the lowest three points of the rating scale, with almost 30% for each moderately and a little involved, and a majority of over 40% as not at all involved. Parents/carers' responses were mixed across the rating scale, with just over 30% viewing them as a lot involved and not at all each, and almost 10% as moderately and a little involved each.

The relevance and teaching of different areas of the curriculum:

Financial skills

Staff and parents/carers' views

Table 7.22. Staff and parents/carers' views on the relevance and teaching of financial skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		%	
		Staff (N=31)	**Parents/Carers (N=23)**	**Staff (N=31)**	**Parents/Carers (N=23)**
How important to teach at an appropriate level	Extremely	9	12	32	52
	Very	13	9	46	39
	Moderately	4	1	14	4
	Slightly	2	1	7	4
	Not at all				
	Not sure				
How well addressed in the curriculum	Extremely		4		17
	Very	5	9	18	39
	Moderately	7	8	25	35
	Slightly	9	1	32	4
	Not at all	2	1	7	4
	Not sure	5		18	

When asked about the importance of teaching financial skills to students with autism, most staff and parents/carers responded that this was either extremely (32% staff, 52% parents/carers) or very important (46% staff, 39% parents/carers). The remaining 20% viewed it as either moderately or slightly important. Staff's responses regarding how well financial skills are addressed in the current school curriculum were mixed: less than 20% very well, 25% moderately well, over 30% slightly well, and less than 10% not well at all; almost 20% of staff were not sure. Parents/carers' responses were more focused around the top points of the scale, with 17% extremely well, almost 40% very well, and 35% moderately well.

Students' views

Table 7.23. Students' views on learning financial skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
I like learning about using money	I agree	23	66
	Sometimes I agree and sometimes I do not	6	17
	I do not agree	1	3
	I am not sure	5	14

The majority of students (almost 70%) agreed they enjoy learning about money, with less than 20% sometimes and not sure, and less than 5% who do not agree.

Employability skills

Staff and parents/carers' views

Table 7.24. Staff and parents/carers' views on the relevance and teaching of employability skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		**%**	
		Staff (N=31)	**Parents/Carers (N=23)**	**Staff (N=31)**	**Parents/Carers (N=23)**
How important to teach at an appropriate level	Extremely	9	12	32	52
	Very	15	9	54	39
	Moderately	2	1	7	4
	Slightly	1		4	
	Not at all	1	1	4	4
	Not sure				
How well addressed in the curriculum	Extremely		4		18
	Very	6	9	21	39
	Moderately	5	6	18	26
	Slightly	9	3	32	13
	Not at all	1	1	4	4
	Not sure	7		25	

Staff's responses regarding the importance of teaching employability skills to students with autism were distributed across all points of the rating scale, with over half viewing them as very important, over 30% as extremely important, and less than 10% for each moderately, slightly and not important at all. Similarly, parents/carers' responses were mixed with almost 20% extremely well, almost 40% very important, and less than 30% moderately well. Staff's responses regarding how well employability skills are addressed in the current curriculum were also mixed, with the majority (32%) claiming that this is slightly well addressed, and around 20% for each very, moderately well, and not sure. However, almost 40% of

parents/carers believed employability skills are very well addressed, and around 20% for each extremely and moderately well, with less than 15% for each slightly and not well at all.

Students' views

Table 7.25. Students' views on learning employability skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
I like learning about getting a job	I agree	19	54
	Sometimes I agree and sometimes I do not	6	17
	I do not agree	2	6
	I am not sure	8	23

Over half of students (54%) agreed they enjoy learning about getting a job, with around 20% for each sometimes and not sure, and less than 10% who do not agree.

Social skills

Staff and parents/carers' views

Table 7.26. Staff and parents/carers' views on the relevance and teaching of social skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		**%**	
		Staff (N=31)	**Parents/Carers (N=23)**	**Staff (N=31)**	**Parents/Carers (N=23)**
How important to teach at an appropriate level	Extremely	23	16	82	70
	Very	3	6	11	26
	Moderately	2		7	
	Slightly				
	Not at all		1		4
	Not sure				
How well addressed in the curriculum	Extremely	2	6	7	26
	Very	14	10	50	44
	Moderately	4	6	14	26
	Slightly	5		18	
	Not at all	2	1	7	4
	Not sure	1		4	

Social skills were regarded as important to teach students with autism by both participant groups, with an overwhelming over 80% of staff and 70% of parents/carers seeing them as extremely important, with the remaining responding they are either very (11% of staff and 26% of parent/carers) or moderately important (7% of staff), with less than 5% of parents seeing them as not at all important. The majority of both staff (50%) and parents/carers (44%)

responded that the current school curriculum is addressing social skills very well, less than 10% of staff and 25% of parents/carers as extremely well, the remaining being distributed between moderately, slightly, and not well at all.

Students' views

Table 7.27. Students' views on learning social skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
I like learning about making friends	I agree	28	80
	Sometimes I agree and sometimes I do not	3	9
	I do not agree	1	3
	I am not sure	3	9

An overwhelming majority of 80% of students agreed they enjoy learning about making friends, with less than 10% for each sometimes, do not agree, and not sure.

Independent living skills

Staff and parents/carers' views

Table 7.28. Staff and parents/carers' views on the relevance and teaching of independent living skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		**%**	
		Staff (N=31)	**Parents/Carers (N=23)**	**Staff (N=31)**	**Parents/Carers (N=23)**
How important to teach at an appropriate level	Extremely	22	17	79	74
	Very	6	5	21	22
	Moderately				
	Slightly				
	Not at all		1		4
	Not sure				
How well addressed in the curriculum	Extremely	4	8	14	35
	Very	8	7	29	30
	Moderately	7	7	25	30
	Slightly	7		25	
	Not at all	1	1	4	4
	Not sure	1		4	

Staff and parents/carers' responses regarding the importance of teaching independent living skills to students with autism were concentrated around the top two points of the rating scale, with almost 80% of staff and over 70% of parents viewing them as extremely important, around 20% as very important for each participant group, and less than 5% of parents/carers seeing them as not at all important. Staff's responses regarding how well independent living skills were addressed in the current school curriculum were mixed: less than 20% as extremely well, almost 30% very well, 25% for each moderately and slightly well, and less than 5% for each not at all and not sure. Similarly, parents/carers' responses were also mixed, with around 30% for each extremely, very, and moderately well, and less than 5% as not well at all.

Students' views

Table 7.29. Students' views on learning independent living skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
I like learning about cooking	I agree	28	80
	Sometimes I agree and sometimes I do not	3	9
	I do not agree	3	9
	I am not sure	1	3
I like learning about cleaning	I agree	25	71
	Sometimes I agree and sometimes I do not	3	9
	I do not agree	3	9
	I am not sure	4	11

Students' views on learning about independent living skills, were gathered by asking how they feel about learning about cooking and cleaning. Most students agreed they enjoy learning about both cooking (80%) and cleaning (over 70%), with around 10% for each sometimes, do not agree, and not sure.

Leisure skills

Staff and parents/carers' views

Table 7.30. Staff and parents/carers' views on the relevance and teaching of leisure skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		%	
		Staff (N=31)	**Parents/Carers (N=23)**	**Staff (N=31)**	**Parents/Carers (N=23)**
How important to teach at an appropriate level	Extremely	20	13	71	57
	Very	8	6	29	26
	Moderately		3		13
	Slightly				
	Not at all		1		4
	Not sure				
How well addressed in the curriculum	Extremely	2	7	7	30
	Very	9	8	32	35
	Moderately	7	6	25	26
	Slightly	5		18	
	Not at all	2	2	7	9
	Not sure	3		11	

Regarding the importance of leisure skills when teaching students with autism, a large majority of both staff (over 70%) and parents/carers (almost 60%) viewed them as extremely important, around 30% of staff and 20% of parents/carers as very important, the remaining parents/carers seeing them as either moderately or not at all important. When asked about how well leisure skills are addressed in the current curriculum, most staff (over 30%) and parents/carers (35%) responded that this is done very well, followed by 30% extremely well for parents/carers, 25% of staff and over 20% of parents/carers as moderately well, and almost 20% of staff as slightly well. Less than 10% of both staff and parents/carers responded that leisure skills are addressed not well at all, with over 10% of staff being not sure.

Students' views

Table 7.31. Students' views on learning leisure skills for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
I like learning about what I can do in my free time	I agree	28	80
	Sometimes I agree and sometimes I do not	3	9
	I do not agree		
	I am not sure	4	11

A large majority of students (80%) also agreed they enjoy learning about what they can do in their free time, with around 10% sometimes, and a further 10% being not sure.

Community involvement/access

Staff and parents/carers' views

Table 7.32. Staff and parents/carers' views on the relevance and teaching of community involvement/access for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		**%**	
		Staff (N=31)	**Parents/Carers (N=23)**	**Staff (N=31)**	**Parents/Carers (N=23)**
How important to teach at an appropriate level	Extremely	10	14	36	61
	Very	15	5	54	25
	Moderately	1	2	4	9
	Slightly	1		4	
	Not at all		1		4
	Not sure				
How well addressed in the curriculum	Extremely		4		17
	Very	7	9	25	39
	Moderately	4	7	14	31
	Slightly	10		36	
	Not at all	3	3	11	13
	Not sure	4		14	

Community involvement/access was seen as important by both participant groups, most responses concentrating around the top two points of the scale, with almost 40% of staff and over 60% of parents/carers viewing it as extremely important, over 50% of staff and 25% of parents/carers as very important, and less than 10% foreach of the other points of the scale. Staff's responses regarding how well community involvement is addressed in the current curriculum were mixed, with 25% as very well, over 10% moderately well, almost 40% as

slightly well, and around 10% for each not well at all and not sure. Parents/carers' responses to the same question were also mixed, but mainly focused on the upper three points of the scale, with a majority almost 40% as very well, almost 20% extremely and 30% moderately well, and less than 15% as not well at all.

Students' views

Table 7.33. Students' views on learning about the local community for students attending an all-age autism specialist school in the West Midlands, United Kingdom

Students (N = 35)		**N**	**%**
I like learning about what happens in the area I live in	I agree	14	40
	Sometimes I agree and sometimes I do not	9	26
	I do not agree	4	11
	I am not sure	8	23

Regarding their view on community involvement, students were asked to agree with the statement: 'I like learning about what happens in the area I live in'. Although the majority (40%) agreed with the statement, almost 30% answered sometimes, around 10% did not agree, and almost 25% being not sure, the latter could have been due to the complexity of the question.

Self-advocacy

Staff and parents/carers' views

Table 7.34. Staff and parents/carers' views on the relevance and teaching of self-advocacy for students attending an all-age autism specialist school in the West Midlands, United Kingdom

		N		**%**	
		Staff (N=31)	**Parents/Carers (N=23)**	**Staff (N=31)**	**Parents/Carers (N=23)**
How important to teach at an appropriate level	Extremely	14	14	50	61
	Very	11	5	39	22
	Moderately	2	2	7	9
	Slightly				
	Not at all		1		4
	Not sure	1		4	
How well addressed in the curriculum	Extremely		4		17
	Very	4	9	14	39
	Moderately	11	8	39	35
	Slightly	4		14	
	Not at all	4	2	14	9
	Not sure	5		18	

Self-advocacy, as a composing element of the school curriculum was regarded as extremely important by 50% of staff and over 60% of parents/carers, very important by almost 40% of staff and 20% of parents/carers, and less than 10% for each of the other points of the scale. Staff's responses regarding how well self-advocacy is addressed in the current school curriculum were mixed, with almost 40% viewing it as moderately well done, and less than 20% for each of the other points of the scale apart from extremely well, for which no responses were recorded. However, parents/carers' responses were more positive, with almost 20% as extremely well, 40% as very well, 35% moderately well, and less than 10% as not well at all.

Improving the current school curriculum

For both the staff and parent/carer questionnaire, the last section was made up of open questions aimed at gathering their views on how the current school curriculum and teaching practice can be improved.

Staff's views

Table 7.35. Staff's suggestions on improving the current curriculum for students attending an all-age autism specialist school in the West Midlands, United Kingdom

include travel training
This is difficult - in this school, I teach a KS2 extended class with a range of communication and learning needs. I couldn't comment on what happens in main classes or across the school. I need more experience of what goes on in different parts of the school before I could accurately give a true answer to this question.
Difficult to say at a time when the curriculum is in the process of being changed.
More opportunities to learn functional skills within school and local community
More focus on adapting the curriculum for extended classes.
Academia to be put on hold it not always the most important but life skills simple thing such as tieing a shoe lace sitting on a chair cooking skills for example and if a child is not academic pursuing other avenues that are more practical
Maybe involving the older children in how they would like to implement areas of the curriculum into their school life.
Involving the students in more community programs e.g local sports facilities, shopping, banking etc, and encouraging independence
More opportunity to experience being in the community. More opportunity to practice independent living skills in context.
There needs to be a clear vision that ever staff member in the school knows. It needs to be clear and simple. Teachers should have the ability to work creatively but within the framework of that goal in orde rthat theres is consistency. Pupils should have more access to the community.
none
Encouraging children to have more interest in the world.
Involving students in it - including their interests and motivators

Greater focus on pupils own interests and opportunities outside of the classroom.
We need to embed some of the good practices in KS5 lower down the school e.g. KS3 and KS4 especially regarding advocacy and developing skills for adulthood.
Students need to accessing the local community more frequently, engaging in activities and social event outside of the school building. Unfortunately many of our students do not access much outside of their home, transport and school however due to funding staffing and other issues many of our extended students have a limited experience of life outside of school. Students should be accessing real life to practise their life skill, problem solving, decision making and leisure time in the real world life setting.
STARTING FROM PRIMARY LEVEL.
By changing its ways and adapting their approach and mentality to life for our autistic pupils. We need to think of the end goal which is making sure that all pupils develop their own skills to enhance their own life and their successful futures. We as a school can support them is developing their skills and therefore hopefully by the end of the education system they will flourish into amazing adults who feel happy and secure in themselves and have the skills to deal with anything that life throws their way. Happiness and feeling content in your life.
develop more problems solving, developing areas appropriate to each individuals - more emphasis on certain areas dependent on need
focusing more on life skills and independence

Out of the 20 responses collected from staff regarding how the current curriculum could be improved, 8 focus on equipping students with life skills and preparing them for adulthood. One staff member explains that the school should think of 'the end goal which is making sure that all pupils develop their own skills to enhance their own life and their successful future'. Five staff provide examples of which life skills should be given more attention in the current curriculum, and they include: travel training, cooking, advocacy, decision making, problem solving, and spending leisure time. Furthermore, two of the responses specify that students should have opportunities to practice life skills in context, as many 'have a limited experience of life outside of school'. One response makes a reference to shifting the focus away from academia to life skills, as the first 'is not always the most important', and another to students' happiness and 'feeling content in your life'.

Another common response provided to the question regarding the improvement of the curriculum, is the need for further developing students' involvement in the local community, which appeared in 5 of the responses. This is to provide students with opportunities 'to experience being in the community', to be involved in 'more community programs', with the aims of 'engaging in activities and social events outside of the school building' and 'encouraging independence'.

Increasing student involvement in shaping the curriculum appeared in three staff responses. This includes focusing on students' 'interests and motivators', and looking at 'how they would like to implement areas of the curriculum into their school life'.

Two staff members explain that it is difficult to identify how the current curriculum could be improved, one due to lack of experience across the school, and another due to the changes which are in progress. A further response explained that no improvements can be made.

Lastly, one response identifies a need for ‘a clear vision that every staff member in the school knows’.

Parents/carers’ views

Table 7.36. Parents/carers’ suggestions on improving the current curriculum for students attending an all-age autism specialist school in the West Midlands, United Kingdom

I am very happy with the school and staff
NOT AT THE MOMENT
My child has only been in special school just over a year but has made fantastic progress. Not sure how improvement could be made.
Am pleased with the current school curriculum
Curriculum needs to be all of the above not just qualifications
More access to the community.

Only 6 of the parents/carers chose to add a comment regarding how the current curriculum could be improved, out of which four were complimenting it, with one even stating that ‘not sure how improvement could be made’. The other two comments included a need for more access to the community and less focus on qualifications.

Improving current teaching practice

Staff’s views

Table 7.37. Staff’s suggestions on improving the current teaching practice for students attending an all-age autism specialist school in the West Midlands, United Kingdom

more empathy with students
More opportunities to team teach, working with colleagues across teh key stages.
Give teachers more say in eg combinations of pupils in classes (personalities/dynamics etc) - don't rely too much on data.
Teachers need to be enabled deliver a more dynamic and exciting curriculum that students buy into
Less restrictions to the daily function of schools, i.e less budget cuts to resources and staffing in order to better support the everyday teaching practice.
Involving all matters of opinions on those who work with children directly
I believe life skills for our children is very important for them to reach a more independent life therefor i believe more opportunitys should be given. I believe a area in the school should be provided which is like a 'home' enviroment with a kitchen, bathroom, living room etc for children to learn basic life skills.
Listening to the needs of the pupils
More 'lessons' focussing on social skills, life skills.
Professional development needs to be given a higher priority.
none
Extending range of appropriate opportunities to develop independent livinhg - e.g., through residentials, rather than doing those things in the school day.

By looking more closley at EHCPs and matching provision to what is set out, sharing best practise, grouping students according to need
Opportunities to see how other teachers approach lessons/topics
We need to be more flexible in our approaches, less focus on content/subject -based and rather a greater focus on the development of skills regarding self-advocacy, social skills and living skills.
I believe funding is a major barrier to many teachers and their tracing practice, a more realistic, concrete approach which is often needed for the more extended students is often not able to be delivered simply due to funding. A simple teaching task of money and shopping is prevented due to simplicity of actually getting to the local shops.
GOOD COMMUNICATION THROUGH PRIMARY, SECONDARY AND SIXTH FORM.
Massively by not thinking they know it all and opening their own minds.Teachers need to put themselves in the shoes of each child they work with and the difficulties that each child faces everyday and question themselves on what really is important for this child and their future and what can i do as their teacher to promote a successful future.
develop training and discussion time to ensure a shared understanding - improve consistency and continuity
in need of more resources

Similarly, 20 answers were provided by staff regarding how current teaching practice can be improved. One common idea arising from staff's responses was the need for more opportunities to share practice between teaching staff, mentioned by five participants, either directly 'sharing best practise', 'more opportunities to team teach', 'see how other teachers approach lessons/topics', or indirectly through 'good communication' across the school, 'develop training and discussion time to ensure a shared understanding'.

Another common idea that came up from staff's responses to how teaching practice could be improved, was that of focusing on the development of students' independent skills with the aim of preparing them for life after school. This is the same idea that arose from staff's responses to how the current curriculum could be improved, focusing on 'life/living skills' mentioned in three responses, 'social skills' mentioned in two of them, 'professional development', and 'self-advocacy'.

Placing the student and their individual needs at the centre of teaching was another idea that arose from staff's responses to this open question, mentioned in 6 of them. Three participants highlighted a need for staff to focus on students' needs by listening to them and those that know them best, through putting 'themselves in the shoes of each child they work with', 'listening to the needs of the pupils', and 'involving all matters of opinions on those who work with children directly'. This was complimented by a need for further consideration to the 'combinations of pupils in classes', by 'grouping students according to need', and having 'more empathy with students'.

Barriers to teaching practice due to funding and resources were also mentioned in three of the staff responses, as either impeding the 'daily function of schools', or students learning or certain areas of the curriculum. Furthermore, one response highlighted a need for more freedom for teachers in delivering the curriculum, by being 'enabled deliver a more dynamic and exciting curriculum that students buy into' .

Parents/carers' views

Table 7.38. Parents/carers' suggestions on improving the current teaching practice for students attending an all-age autism specialist school in the West Midlands, United Kingdom

NO GREAT JOB
The teachers are fantastic, not sure about improvement.
more communication with parents, particularly parents of non-verbal pupils like my son
Teaching is good i.m.s. but needs to reflect what children need to survive their futures

Out of the four comments from parents/carers regarding how current teaching practice could be improved, two represented compliments, including one that could not see how further improvement could be made. The other two comments included highlighting a need for more communication with parents, and one regarding how teaching 'needs to reflect what children need to survive their futures'.

Appendix 8 – Phase 3 Shared Review Coding

Theme	Coding label	Shared Review
Working independently	Completing work independently	Student SR1
	Proud of work	
	Doing nice work	
	Having clues not answers	
Tone of voice	Nice voice	
	Voice that stands out	
	Soft voice	
Support with work	Enjoying support	
	Helpful explaining	
	Taking their time	
Giving time	Giving a bit of a clue	
Guiding	Not giving answers	
	Preferring clues to answers	
	Happy to have support	
	Guiding, not helping fully	
	Feeling heard to have clues	
Supportive environment	Supporting each other	
	Feels like they're there	
	Not feeling alone	
Trust and give responsibility	Feeling good to have responsibility	
	Staff trust you	
	Having responsibility for the school space	
	Being trusted to do thing independently	
Positive thoughts about clips	Interaction was really nice	
	Good to work together	
	Amazing	
Positive feelings	Happy	
	Excited	
	Equal	
	Supported	
	Peaceful	
Confidence	I knew how to do the work myself	Student SR2
Positive relationships with staff	Staff being relatable	Student SR3
	Nice to talk to them	
	Get to spend time with staff	
Reflections on the VIG process	Really helpful	
	Good to be involved	
	Being positive	
Giving the chance	Giving chance to try	

	Allowing students to make mistakes	Staff SR1
	Allowing space to make mistakes	
	Move away from prompting	
Guiding	Scaffolding	
	Asking leading questions	
	Promoting self-awareness of skills	
	Different approaches for different concept taught	
Giving positive feedback	Praising	
	Giving positive feedback	
Age appropriateness	Balance between age appropriateness and communication needs	
	Speaking to students as young people	
	Offering experiences of being exposed to age-appropriate language	
Staff self-awareness	Listening to own thoughts	
	Reflecting on experience	
	Taking space to reflect	
Confidence	Celebrating achievements	
	Empowering students	
	Increase in confidence	
Tone of voice	Appropriate tone	
	Tone not too excitable/loud	
Responsibility	Giving responsibility to organise after-school event	
	Providing opportunities for peer mentoring	
	Opportunities to try something new without adult prompting/support	
Open conversations	Social skills differences	
	Pressure of social interaction	
	Balance of scaffolding conversations	
	Providing opportunities for open conversations	
Giving time	Allowing appropriate processing times	
Positive reflection of peer practice	Recognising strengths of practice	
	Encouraging	
	Celebrating successes	
	Video as a helpful reflection tool	

Reflection on the VIG process and moving it further	Identify areas for improvement	
	Helpful to see own practice	
	Helpful to take time out to reflect and discuss	
	Video better than observation	
Reflection of own practice	Identifying own strengths in relation to self-determination	
	Learning with the students	
	Trying after reflecting	
Reflection on past and future practice	Examples of past practice	
	Reflecting on past success on students' confidence	
	Identifying areas for improvement	
Following students' initiatives	Acknowledging students' initiatives	Staff SR2
	Engaging with initiatives	
	Empowering through initiatives	
	Directing less	
Giving opportunities for real-life experiences	Creating a home environment	
	Creating environments similar to real-life	
	Providing appropriate experiences	
Balance between scaffolding and experimenting	Balancing age-appropriateness and understanding of language	
	Allowing the chance to try vs protecting from failure	
Positive relationships	Open and relaxed conversations	Staff SR3
	Not feeling judged	
	Being able to talk openly	
	Focusing on relationship and communication skills	

Appendix 9 – Summary of Findings

Summary distributed through school's newsletter

Dear parents/carers at [school's name],

Thank you for your invaluable support in conducting my research study. The responses you submitted via the questionnaires have helped us identify the areas of the curriculum which are most valuable and in need of development. Independent living skills and social skills were reported as extremely important in the majority of responses, with the former being an area that require improvement for the students in the school. At Post-16, we worked together with the staff and students to identify how teaching practice can be developed to support students' self-determination, preparing them for life after school. We created a set of ten principles to be applied in the school, which outline the opportunities that staff should provide, and their attitudes towards interacting with the students to enhance their self-determination. The principles include providing opportunities to try and learn from own mistakes, for real-life experiences, to take on responsibilities, be addressed and supported age-appropriately, through focusing on strengths and positive feedback. We will work together to implement the principles and continue their development to maximise their benefits for the students at [school's name].

Laura Cristescu

Summary for students involved in the *Collaboration*

Dear [student's name],

Thank you so much for helping me with my research study. Thank you for working with your teachers and me to find out how to best support you at school and prepare you for adult life.

Together we have created ten principles that your teachers will put in practice when working with you. We found out that it is helpful when:

- You have the chance to try things for yourself
- Teachers give you enough time to think
- You get clues to help you complete your work
- You receive encouraging feedback
- Teachers talk to you like young adults
- You are given trust and responsibility
- Teachers focus on what you are good at
- You have experiences outside of the school
- Teachers listen to what you have to say
- You can chat to your teachers about things that are important to you

Your teachers will work hard to do the things above when working with you, but they will need your help and support to do so. Thank you again for your help in working together!

Laura Cristescu

CERTIFICATE

OF APPRECIATION

PROUDLY PRESENTED TO

Student's name

For collaborating to a research study conducted at the University of Birmingham to develop an approach to teaching practice to enhance self-determination.

DATE

SIGNATURE