

**USING REALISTIC EVALUATION PRINCIPLES TO EVALUATE AN
INTERVENTION UTILISING A COLLABORATIVE PROBLEM SOLVING
FRAMEWORK AIMED AT SUPPORTING THE REFLECTIVE PRACTICE OF
MULTI-PROFESSIONAL GROUPS OF PRACTITIONERS IN TWO CHILDREN'S
CENTRES.**

by

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VOLUME 1

Abstract

The focus of this volume is on reflective practice. It presents a literature review relating to reflective practice and its development and an account of a research and development initiative aimed at promoting the development of reflective practice in Children's Centres. The Introductory Chapter provides an overview of the structure and contents of the volume as well as an explanation of the context in which the research study was completed and an account of the influence of a social constructivist perspective and empowerment research on the position of the researcher and the focus of the study. It also provides details regarding the completed and proposed dissemination of findings for a variety of audiences. Chapter 2 provides a review of the literature in relation to five broad questions but with a particular focus on the role of the Educational Psychologist in supporting organisational development through developing reflective practice. Literature regarding reflective practice is reviewed and used to inform the development of the focus for the research study which is presented in Chapter 3. The study involved the design, implementation and evaluation of an intervention aimed at supporting the reflective practice of practitioners in two Children's Centres. Realistic Evaluation principles were used to inform the design of the evaluation which measured the impact of the intervention through gathering the practitioners' perspectives. Implications for the role of Educational Psychologists in supporting reflective practice are also highlighted and discussed within Chapter 4.

To Alex

For being patient
and for living without a kitchen table
for three years!

ACKNOWLEDGEMENTS

I would like to thank the managers who volunteered for their Children's Centres to be involved in this research project
and also all of the staff who were directly involved.

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CHAPTER ONE

INTRODUCTION

INTRODUCTION TO VOLUME 1

1. Introduction

The work contained within this volume forms the first of two distinct volumes which combine to meet the assessed written requirements of the Doctorate in Applied Educational and Child Psychology. Volume 1 comprises two reports, the first of which is a comprehensive critique of the literature relevant to the agreed research proposal, and the second of which is an account of a substantive original research study. This introductory chapter provides an overview of the structure and content of this volume of work and discusses the context in which the research study was negotiated and conducted. It also provides an account of my epistemological position as a researcher and the influence of this on the study. Finally, it provides details of the journal for which Chapter 3 is written.

2. Structure and content

The first report (Chapter 2) provides a critical review of the literature relevant to the research focus. It explores the national context of Children's Centres, and considers research outlining the current role of Educational Psychologists in the Early Years. It also considers different conceptualisations of organisations and the implications these have for the approaches adopted to support professional development. Reflective practice is introduced as a potential method of supporting professional

development and improvements in practice, which acknowledges the need to directly involve practitioners in aspects of organisational development attempts. It provides a critique of definitions and conceptualisations of reflective practice before reviewing studies which have explored how best to promote reflective practice within educational contexts. This literature review highlights limitations within the existing research and identifies a need for future research in this field to apply a systematic approach to evaluation. It is proposed that program theory evaluations (specifically Realistic Evaluation, Pawson & Tilley, 2001), focussing on the identification of processes and contexts supportive of reflective practice, would contribute to the development of knowledge in the field.

The second report (Chapter 3) provides an account of an illuminative small scale research study. It provides details of the design, implementation and evaluation of the impact of an intervention aimed at supporting the reflective practice of multi-professional groups in two Children's Centres. The design of the evaluation, informed by Realistic Evaluation principles, is described and the rationale for use of this particular methodology is provided in relation to the gaps identified in the existing literature on reflective practice in educational contexts. The study aims to provide a systematic approach to evaluating the processes and contexts which the existing literature highlights as being supportive of reflective practice. This systematic approach to evaluating the impact of processes and contexts on reflective practice is a gap identified in the literature. The impact of processes and contexts is evaluated using the practitioners' voice. Findings are discussed in relation to the

methodological limitations of this small scale illuminative study and areas for further research are highlighted.

Chapter 4 provides concluding reflections on the implications of this study for knowledge development in the field of reflective practice. It also discusses the role of the Trainee Educational Psychologist in facilitating the intervention and possible implications for the role of Educational Psychologists in Children's Centres.

3. Context of research and negotiation of study

The general focus of the research was negotiated with the course provider for the Doctoral qualification in Child and Educational Psychology and with the Educational Psychology Team within my employing Authority. The employing Educational Psychology Team was flexible in their approach to negotiating the research focus although they were interested in exploring the role of the Educational Psychologist in the Early Years and how they might begin to work with Children's Centres. At the point of negotiation the Educational Psychology Team worked with schools using a time allocation model although, at this point, no time was allocated to work with the 15 local Children's Centres. During the year that the study was conducted a small proportion of Educational Psychology time was committed to supporting Children's Centres, mostly spent exploring potential roles. The Educational Psychology Team values research and is keen for the findings of this study to support ways forward for the Team in terms of how they can work most effectively and efficiently with Children's Centres.

4. My position as a researcher

When engaging in research it is important to consider the position the researcher takes in relation to the process and the practitioners, and the experience and values they bring to the area of study. Through my doctoral studies I have developed an interest in organisational psychology and the role Educational Psychologists can play in supporting change and development at an organisational level. Through my practice I have been engaged in work at a variety of levels (individual work with children and young people, supporting the needs of individuals through consultation with practitioners and families and supporting organisational change and development through delivery of training in schools and other educational settings). When negotiating training as a method of supporting developments in practice in settings, I have recognised the importance of fully engaging practitioners in the negotiation, planning and evaluation stages. My experience, and reading of the literature, has found that full and direct involvement of practitioners supports high levels of engagement, an understanding of the need for change and development and longer term maintenance of change. My experience as a practising Educational Psychologist has influenced my position as a researcher.

Firstly, I am influenced by a social constructivist perspective, aligning with the epistemological and ontological assumptions of this approach to understanding. A social constructivist approach to research acknowledges the complexity of social contexts and interactions and the influence these have on the research process (Cohen et al, 2000). It views the subject as powerful, rejects notions of determinism

and suggests the importance of gathering the perspectives of all individuals involved in the research process (Pawson & Tilley, 2001). It views knowledge as being socially constructed and therefore the research process does not seek to uncover 'truths' but rather seeks to develop context specific knowledge which can contribute to theory development over time (Hansen, 2005).

Secondly, I am influenced by the concept of empowerment research (Rappaport & Hess, 1984). This approach seeks to ensure that all research efforts are focussed on supporting the participants, who are the focus of the research, to make positive changes as a result of their engagement in the research process. The focus on reflective practice as a method for supporting change and development is considered to be related to notions of individual empowerment and organisational development. Involvement in the study is hoped to provide practitioners with a model for supporting their own professional development through engagement in a social process.

5. Dissemination of study and findings

The findings from the literature review and implications for future research were presented to colleagues within the Educational Psychology Team. Sharing information about the existing literature and the development of the research project was hoped to generate interest in the field of reflective practice and stimulate discussions about a potential role for Educational Psychologists in supporting reflective practice in educational settings. Information was shared through use of a presentation, a copy of which is provided in Appendix 1.

On completion of the research an overview of the study and the findings were disseminated to a range of audiences. Information was shared with the Children's Centre practitioners who were directly involved in the study and also to all Children's Centre managers through a presentation given at the Managers network meeting. This information was also shared with colleagues from the Educational Psychology team to stimulate discussion about possible ways forward in our work with Children's Centres. In addition to this, information about the study was also shared with a wider audience of Educational Psychology colleagues at the regional early years interest group, a group that meets termly to discuss the role of the Educational Psychologist in the early years. Again, information was shared through use of a presentation, a copy of which is provided in Appendix 2.

6. Journal specification

In accordance with the requirements of the doctoral course, Chapters 2 and 3 have been written to journal specification. The journal for which these reports are intended to be submitted is 'Reflective Practice'. This is an international peer reviewed journal which includes papers addressing the: different kinds of reflective practice; generation of knowledge in particular professions; way reflection is supported and the links between reflection and action. 'Reflective Practice' is a multidisciplinary journal and so papers are viewed and provided by a range of professionals from a range of fields. This paper is intended to provide an account of an intervention aimed at developing reflective practice in a particular education setting: Children's Centres. It is also intended to stimulate thought regarding the approach taken to evaluating

future attempts to support reflective practice in professional fields more generally. Details regarding the general role of Educational Psychologists in supporting educational settings is provided for the audience which is unfamiliar with the profession and discussion of the implications of this research for the profession are limited for the same reason. Implications for the role of Educational Psychologists supporting Children's Centres are discussed in more detail in Chapter 4. Although there are specific guidelines for the specification of the paper (see Appendix 3 for instructions to authors), some of these have been overridden in accordance with the University guidelines for submission of Volume 1.

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Appendix 1 – Public domain briefing: findings from the literature

Appendix 1 – Public domain briefing: findings from the literature

Exploring a potential role for Educational Psychologists in Children's Centres: consideration of the challenges and possibilities for supporting the development of practice in these diverse settings.

Emma Thornbery
Trainee Educational Psychologist

Discuss new training route – 3 year doctoral course with a focus on applied psychology and research

Requirement to carry out piece of research in second and third year of training

Now employed as a Trainee Educational Psychologist

Focus

- Focus on role of EP in Children's Centres
- Time allocation model used with no time allocated to Children's Centres at the time of negotiating research focus. Now has very limited allocation
- 15 Children's Centres in Authority currently, now moving into phase 3 (will be 18)
- Overall aim of research is to explore a potential time limited role for EP's in Children's Centres - to support their inclusion in time allocation model

My previous employment and training has been within Early Years (Early Years PGCE, Nursery teacher)

EP work in Children's Centre very new in Authority but quite new nationally

Currently in Authority

Early Years team – to support practice and training

Early Years AST – were area SENCo's and training role and support for individuals, now time allocation and IPM's

SALT – variable but quite high level of support, training focus

EP work was focussed on individuals supported through 'Early Years' time allocation

EP's now have 40 sessions allocated to CC's with 4 EP's supporting this year – attending IPM's, consultation, training

Critical Literature Review

5 key areas of interest:

- Context of Children's Centres
- The current role of EP's in Early Years/Children's Centres
- Applying psychology to promote organisational change and development
- Reflective practice; definitions and conceptualisations
- EP as a facilitator for developing reflective practice in educational settings, particularly Children's Centres

Context of Children's Centres:

- Early Years and development of Children's Centres high on government agenda
- Agent for change in local service delivery (Clark & Hall, 2008)
- An emphasis on being responsive to local community and engaging in multi-agency work to support all young children and their families, including the most vulnerable
- A need to develop relationships with services offering support to children with disabilities and special educational needs (DfES, 2007)
- EYSEN team beginning to work closely with Children's Centres but no longer have capacity.

NAO (2006) spending 3.2 billion on development of Children's Centres

Clark & Hall (2008) – agents for change – bringing services together to meet needs of all including most vulnerable within the community

Dennis (2004) – suggested that Children's Centres are the access route between voluntary, private and independent settings and support services

The current role of EP's in Early Years/Children's Centres:

Essential role in early years work and work with CC's:

- EPPE (Sylva et al, 2002)
- EYTSEN (Sammons et al, 2003)

Stoker et al (2001) - working group report on future of EPS's:

- 3 core functions (Early Years, work with schools, multi-agency work)
- need for greater access to EPs independent of schools

Practical difficulties of working with Children's Centres

EPPE (Sylva et al, 2002) - quality pre-school experience can have positive impact on outcomes over and above important family influences and quality of settings linked to skills of staff

EYTSEN (Sammons et al, 2003) - quality pre-school provision can effectively reduce the risk of children being identified as having special educational needs, particularly more vulnerable groups

Limited evaluation of EP role in Early Years

Stoker et al (2001) - working group report on future of EPS's:

3 core functions (Early Years, work with schs, multi-agency work) – could achieve early years and multi-agency through work with Children's Centres

need for greater access to EPS independent of schools – community link through Children's Centres

Dennis (2004) – Children's Centres so varied and difficult shift patterns to meet needs of community – makes access for support services difficult

Applying psychology to promote organisational change and development:

Positivist perspective:

- Teachers as technicians
- 'transfer of knowledge'
- Training as a way of building skills (add to 'toolkit')

Constructivist perspective:

- Influence of social and environmental factors on development
- Knowledge socially constructed through interaction
- Teachers need to be supported to develop knowledge and skills in context
- Reflective practice (Schon, 1983)

Time limited role - focus on capacity building, but direct delivery of training not closely matched to organisation's needs is likely to result in poor maintenance of change

Barber (2002) – informed professional judgment (teachers as researchers considering theory and context)

Schon (1983) – reflective practitioner

Teaching is changing profession and needs of children are always changing, therefore teachers need to be able to adapt and respond to variety of situations, drawing on previous experience and knowledge developed in context.

Reflective practice; importance, definitions and conceptualisations

- EYFS Guidance
- Children's Centre guidance
- Differing definitions:
 - Schon (1983) – reflection on and in action
 - Mezirow (1981) – 3 levels
 - Reynolds (1998) – 4 characteristics
 - Ghaye & Ghaye (1998) – 10 principles
 - Haggarty & Postlethwaite (2003) - cycle

Reflective practice is highly cited in the EYFS and the Children's Centre Practice Guidance but no information about what this is or how it is supported.

Effective leader will 'lead and encourage a culture of reflective practice, self evaluation, and informed discussion to identify the setting's strengths and priorities for development that will improve the quality of provision for all children'

Schon (1983) – reflection on and in action, espoused theories (what we say we do) and theories in action (what we actually do) – need to uncover theories in action to reflect on practice. Often unaware of our theories in action – need support to identify these.

Mezirow (1981) – 'a process of constructing meaning from experience through reflection and comparison with previously held beliefs, values and schemata'

3 levels of reflection; non reflection, awareness of judgments, assessment of the need for further learning and routines

Reynolds (1998) – 4 characteristics of critical reflection: (Questioning assumptions, Social rather than individual focus, Pays attention to the analysis of power relations, Concerned with emancipation)

Haggarty & Postlethwaite (2003) – cycle, considering theory, context and values at each stage (plan, act, evaluate, reconceptualise)

Benefits: Improvements in practice, Effective learners – cope with future difficulties – capacity building, Able to more accurately identify needs for development

Developing reflective practice in educational settings

- Limited research regarding how to develop reflective practice in early years settings
- Research within education suggests that the following processes and contexts support developments in reflective practice:
 - Discussion of real situations or realistic scenarios
 - Considering values and assumptions underpinning practice
 - Consideration of different perspectives
 - Reflecting on practice in a group context (making tacit knowledge explicit)
 - Support and challenge from external professional
 - Time committed to reflective practice
 - The need for a supportive context
 - Developing a shared understanding of reflective practice
 - Management involved in discussions about practice/reflective process

Studies implement different strategies to support reflective practice and don't tend to draw from previous attempts.

Kottkamp (1990) suggested different dimensions:

Medium (written, talking, observing)

Number (individual or group)

Locus of initiation (self or others)

Reality (real situations or scenarios)

Studies tend to be methodologically weak (based on author's reflections, narratives, not objectively measuring changes in thinking or practice)

Only two studies found directly related to early years (Fisher, 1993; Potter & Hodgson, 2007)

Need for further research

- Existing evaluations are methodologically weak
 - mostly providing reflective accounts or stakeholder views on process
 - little measurement of outcomes
 - poor identification of processes leading to outcomes
- Need for evaluations identifying what works, for who and in what contexts (not one fits all)

Outcomes evaluations alone do not develop theory about what works for whom and in what contexts – don't take account of complexity of programs and social context they are implemented in

Programme theory evaluations focus on identifying aspects of a programme that are effective and why (causal factors) – aim to refine theory and inform future application

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Appendix 2 – Public domain briefing: details of study

Appendix 2 – Public domain briefing: details of study

USING REALISTIC EVALUATION PRINCIPLES TO
EVALUATE AN INTERVENTION UTILISING A
COLLABORATIVE PROBLEM SOLVING FRAMEWORK
AIMED AT SUPPORTING THE REFLECTIVE
PRACTICE OF MULTI-PROFESSIONAL GROUPS OF
PRACTITIONERS IN TWO CHILDREN'S CENTRES.

Emma Thornbery
Trainee Educational Psychologist

Research aims

- To use Realistic Evaluation approach to design an intervention based on previous findings
- To evaluate the intervention and identify the contexts and mechanisms that are supportive of the outcomes
 - To identify outcomes experienced
 - To identify the contexts which practitioners perceive to impact significantly on their development of RP
 - To describe the extent to which practitioners perceive the mechanisms embodied within the RP program contribute to the promotion of RP

RE – Pawson & Tilley (2001)

Program specification – CMO configurations – based on findings from similar studies and general theory

Design intervention based on program specification

Test CMO configurations (program specification/theory) through applying intervention in context and getting feedback from participants

C- contexts that are thought to have impact on how program works

M- mechanisms – the processes embodied within the intervention that should support expected outcomes

O – outcomes that are expected based on context and mechanism interaction

CMO configurations based on findings from previous studies – provides a systematic approach to program design and evaluation – contribute to knowledge about what works for whom and in which contexts – helpful when wanting to develop intervention to support varied contexts (Children's Centres)

Findings from literature

- Research studies have identified (often implicitly) outcomes, mechanisms/processes and contexts that are supportive of reflective practice
- Evaluations do not tend to take a systematic approach to identifying the mechanisms and contexts that are most supportive of outcomes related to reflective practice

Realistic Evaluation

- CMO configurations developed from existing literature
- These inform program development
- Program implemented
- Data gathered
- CMO configurations refined
- New theory generated

Program theory evaluation, interested in how intervention works not just measuring outcomes

CMO configurations predict expected outcome patterns and form the program theory

This is refined through application of the program

Information gathered from subjects (experiencing program), practitioners (implementing program) and evaluator (evaluating program)

Program development

- 2 introductory sessions
 - Focus on reflective practice, develop context specific model (use of research literature)
 - Focus on values, agree set of core shared values
- 6 collaborative problem solving sessions
 - Framework influenced by Stringer et al (1992) & Hart (2006)
 - Discussion of problematic situations
- Evaluation
 - Scaling on centre specific model dimensions (every session)
 - End of project CMO questionnaire
 - Realistic evaluation informed interviews

Program/intervention developed from CMO configurations based on previous findings

CMO configurations related to outcomes, mechanisms and contexts within collaborative problem solving frameworks

Stringer et al (1992)– framework for group consultation

Hart (1996)– considering values and assumptions underpinning practice

Evaluate through gaining practitioner perceptions on program and CMO configurations

Evaluate progress through use of centre specific model of reflective practice developed during introductory sessions

Selection

- Children's Centre managers volunteered their centre
- Managers selected 6 staff to be involved (range of roles and experiences)

Ethical considerations – lack of true informed consent

Range and roles of experiences considered to be supportive of group consultation/collaborative problem solving outcomes (Hawkins & Shohet, 1996)

Data gathering

- Group feedback (enablers, inhibitors)
- Evaluation scales (based on context specific model)
- CMO questionnaires
- RE informed interviews (no volunteers)

Need to consider use of interviews – build it in to negotiation and costings – but has significant time implications

Evaluation scales based on centre models of RP considered to have high ecological validity

Findings

Outcomes

- All practitioners made progress against all dimensions of Centre specific model of RP
- Progress was made against outcomes in program specification (difference between outcomes achieved in Centres)

Important Mechanisms

- collaborative discussion
- questioning of specific elements of practice by others
- sharing of different perspectives

Important Contexts

- supportive relationships between practitioners in group
- groups containing practitioners from different professional roles

Outcomes:

The majority of practitioners in Centre A made at least one level of progress against expected outcomes, with mostly 5 out of 6 practitioners making a level of progress

Half of respondents or less made progress against expected outcomes in Centre B

Mechanisms:

Majority of mechanisms within the intervention rated as supportive or making highly significant contribution to outcomes related to RP

Having a shared understanding of RP and a shared set of core values supported RP.

Contexts:

Majority of contexts rated as being supportive of outcomes and mechanisms related to RP – some of these are embodied within the program but others are related to the practitioners or the Centre. Centre managers can be encouraged to develop some of the supportive contexts in advance of intervention. EP may have role in supporting contexts related to practitioners (positive relationships, perceive value of RP etc)

Some practitioners also experienced additional unexpected outcomes, mechanisms and contexts, mostly related to developing a better understanding of other people's roles, perspectives and values.

Conclusions

- Need for further systematic evaluations
- RE informed evaluation useful but need to consider how to make it accessible
- RE informed evaluations could be used within Centres to evaluate usefulness of staff development opportunities
- Intervention, using collaborative problem solving model, is supportive of RP but there is a need for supportive context and shared understanding of RP
- Provides support for many of the previous studies

Need to continue to implement in other settings to refine the program specification.

Provides support for previous studies:

Need for facilitator

Need for supportive context

Need for discussion in multi-professional group

Discussion of real situations

Need to consider broader implications of reflections

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Appendix 3 – Reflective Practice: Instructions for Authors

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CHAPTER TWO

EXPLORING A POTENTIAL ROLE FOR EDUCATIONAL PSYCHOLOGISTS IN

CHILDREN'S CENTRES:

CONSIDERATION OF THE CHALLENGES AND POSSIBILITIES FOR **SUPPORTING THE DEVELOPMENT OF PRACTICE IN THESE DIVERSE** **SETTINGS**

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Abstract

Children's Centres are a new and evolving part of Children's Services which aim to reach and support all young children and their families, particularly the most vulnerable (DfES, 2001; DCSF, 2009). With a broadening remit on early intervention and inclusion for all, and supporting positive outcomes for all children and young people, it is essential for Educational Psychologists to be working with all early years settings, including Children's Centres (Stoker et al, 2003). This literature review explores the role of Educational Psychologists in supporting organisational change and development and advocates a role for Educational Psychologists in supporting the reflective practice of practitioners in Children's Centres. Definitions and conceptualisations of reflective practice are explored to inform an understanding of how it can be effectively developed in settings. Research studies presenting accounts of interventions aimed at developing the reflective practice of professionals in a range of settings are critiqued. This literature review highlights the need for research in the field of reflective practice to employ a systematic approach to evaluation which effectively identifies the processes and contexts that are supportive of developments in reflective practice.

**EXPLORING A POTENTIAL ROLE FOR EDUCATIONAL PSYCHOLOGISTS IN
CHILDREN'S CENTRES: CONSIDERATION OF THE CHALLENGES AND
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THESE SETTINGS.**

1. Introduction

Children's Centres are a new and evolving part of Children's Services which aim to reach and support all young children and their families, particularly the most vulnerable (DfES, 2001; DCSF, 2009). With a broadening remit on early intervention and inclusion for all, and supporting positive outcomes for all children and young people, it is essential for Educational Psychologists to be working with all early years settings, including Children's Centres (Stoker et al, 2003). When exploring a possible role for Educational Psychologists in Children's Centres, a training role is often highlighted (Wolfendale & Robinson, 2001; Dennis, 2004). However, the literature on organisational change and development suggests that direct delivery of training may not always be the most effective tool for supporting positive change and sustainable development (Bolam, 1993). Within the organisational change and development literature, reflective practice (RP) is highlighted as being a central part of the change process (Fielding et al, 2005). So it is proposed that Educational Psychologist's time may be usefully invested in supporting the further development of RP in settings rather than adopting a purely training role. There are varying definitions and conceptualisations of RP in the literature but recent studies suggest

that it is perhaps important to develop a working model for the specific context (Forde et al, 2006).

This literature review aims to explore the national context of Children's Centres, examine literature reviewing the current role of Educational Psychologists in the early years, and specifically in Children's Centres and provide a brief overview of organisational change and development. It will then provide a more in depth critique of definitions and conceptualisations of RP before reviewing studies which have explored how best to promote RP within educational contexts. Finally, possible ways in which Educational Psychologists can support the development of RP are discussed and areas for further research are highlighted.

1.1 Aims of the paper

The literature review will therefore seek to address five broad questions:

1. What is the national context of Children's Centres?
2. What is known of the current role of the Educational Psychologist in early years and more specifically in Children's Centres?
3. What can the literature on organisational change and development tell us about a possible role for Educational Psychologists supporting the development of professional practice in educational settings?
4. What are the current definitions and conceptualisations of RP in the literature?

5. What does the literature tell us about effective ways to develop RP in educational settings, particularly Children's Centres, and what are the possible implications for the role of the Educational Psychologist in developing RP?

1.2 Search method

The literature reviewed was identified through a systematic search of the ASSIA, ERIC, Social Services Abstracts and Sociological Abstracts databases using specific search terms related to the questions given above. From this, further literature was identified through following up references identified by authors in earlier papers read. The process is detailed in Appendix 1.

2. National context of Children's Centres

Children's Centres are considered to be the cornerstone in provision for children and their families (DfES, 2001; DCSF, 2009). They provide integrated education, child care, family support and health services in a community location. These services are identified as being key factors in determining positive outcomes for children and their families (DfES, 2001; DCSF, 2009). Children's Centres aim to be accessible to all families including the most vulnerable and are tailored to meet the needs of the local community. Figures produced in 2006 by the National Audit Office (NAO) state that the Government is spending £3.2 billion on the development of Children's Centres which confirms that this is a rapidly developing area. Clark & Hall (2008) argue that Children's Centres are 'agents for change' in local service delivery and are

pioneering innovative ways of joining up services to create a cohesive approach to supporting young children and their families. However, the heterogeneous nature of the Centres poses practical difficulties if universal models of working with the Centres are considered. Whalley (2006) asserts that 'standardisation is the enemy of sustainable development and it would not be appropriate for all Centres to look alike' (p.5). This poses a problem for services aiming to support them, as they in turn will need bespoke services rather than a standard approach.

Clark & Hall (2008) conducted a recent evaluation of a Sure Start Local Programme in order to 'make explicit how professionals can work in this difficult area' (p.225). Whilst they recognised the complexities of external support services engaging in work with Sure Start centres they also note that it is a vital aspect of work that should be engaged in. They identify key barriers as being difficulties in engaging with a range of professionals with different roles and work patterns within the Centres, the high level of staff turnover and the tension between working in a service which is driven by the needs of the local community whilst at the same time having to conform to pressures from the national level. Additionally, a House of Commons Report commissioned by the Department for Education and Skills in 2007 (Ridley-May, 2007), focussed on parental satisfaction with the services provided by Children's Centres. This was a very positive step to include these key stakeholders in the evaluation of service provision and revealed that Children's Centres need to continue to develop their relationships with external services offering support to children with special educational needs and disabilities in order to provide a more cohesive service.

It is anticipated that Children's Centres can provide a route for the sharing of good practice between the private, voluntary and independent early years settings (Dennis, 2004). As such, Children's Centres now also provide external support services with a link to the voluntary, private and independent settings that are within their 'footprint'. Dennis (2004) argues that the changes in use and expectations of voluntary and private settings mean that an increasing number of children are attending, including children with additional and complex needs. It is likely that Children's Centres are key in ensuring the effective sharing of information to all settings and in ensuring that practitioners working in any early years settings are able to consult with external support services regarding special educational needs and inclusion. Dennis (2004) suggests that the time is 'ripe' to evaluate current service delivery models to schools and identify and extend the elements which are effective to work in this new and developing area.

3. The current role of the Educational Psychologist in Early Years and Children's Centres

There is limited research currently available regarding the role of the Educational Psychologist in Children's Centres and in early years more generally (Shannon & Posada, 2007). However, recent reports on the changing role of the Educational Psychologist repeatedly point to the need for them to be involved in early years work and more work at a community level (Stoker et al, 2003; Farrell et al, 2006). Shannon & Posada (2007) conducted a small scale research project looking into current models of Educational Psychology Service delivery within the early years and

Educational Psychologist's attitudes towards these. Although the study only gained the perspectives of 32 Educational Psychologists they were from 28 Local Authorities, so a wide range of services were covered. The sample of 32 included both early years specialist and generic Educational Psychologists, all of whom were members of an early years interest group, suggesting they were interested in engaging in early years work. They cited and agreed with the views of Wolfendale (1997) in their report, that the range of skills Educational Psychologists have mean that they have a key role to play in the early years, beyond one of individual assessment and intervention, to involvement in organisational and strategic work. However, the information they gathered from the 32 practising Educational Psychologists involved in the study suggests that work with individuals in the early years is still given a greater priority than work at an organisational level.

So Educational Psychologists, or at the least, Educational Psychologists with an interest in early years, are interested in exploring potential ways of working with Children's Centres. None of the studies identified through this literature search gathered the views of Principal Educational Psychologists as a group who are likely to have an influence on guiding the direction of future work. It would perhaps be an area worthy of further study and would provide information as to whether work with Children's Centres is high on service priorities. Commitment at a service level would perhaps lead to a more robust and systematic approach to exploring viable and effective roles for Educational Psychologists in Children's Centres, rather than an ad hoc approach led by personal professional interest and opportunistic explorations.

Dennis (2004) warns of the 'logistical and philosophical conundrums' (p.26) associated with work in the voluntary and private sector within early years. She provides an account of a service delivery model which involves the allocation of a link Educational Psychologist to clusters of settings, including Children's Centres and voluntary, private and independent early years settings. It is anticipated that regular meetings between SENCo's (from across settings within a Children's Centre 'footprint') and Educational Psychologists can promote problem solving and develop the skills of staff through information sharing and guidance. Conclusions suggest that the sessions were well received and practitioners found it useful to have regular opportunities to discuss concerns with an external professional. Dennis (2004) concluded that although this model of delivery was effective, it was important for the model to be discussed with other support services to ensure a shared understanding of its aims and to prevent inconsistencies. It would also be useful if further evaluations considered the impact of the service delivery model on practice as well as practitioners' perceptions of support.

The 'Children's Centre Practice Guidance' (DfES, 2006) states that 'well qualified and trained staff make the biggest difference to the effectiveness of services for both parents and children' (p.9). This therefore highlights a potential role for external support services, particularly Educational Psychologists in supporting staff development to promote the successful inclusion of all children. The guidance also states that there should be 'regular opportunities for the whole [Children's Centre staff] team to meet together to review progress, share experiences and discuss closer working' (p.17). Although the practical co-ordination of whole staff meetings is

a difficulty cited in the literature (Whalley, 2006; Clark & Hall, 2008), the Children's Centre practice guidance (DFES, 2006) emphasises the importance of it. A range of shift patterns and multi-agency commitments means that staff meetings and opportunities to share discussions are difficult to plan and implement. Therefore, there appears to be a need for external support services to be flexible in their approach to offering support to these settings and the staff within them. As Dennis (2004) suggests, although Educational Psychologists can learn from reviewing their service delivery to school settings, service delivery to Children's Centres may need to follow a very different pattern.

A study that has yet to be published has explored a potential role for Educational Psychologists in working with Children's Centres specifically. Soni's study (in press) focuses on developing support for Family Support Workers as front line workers facing challenging situations. Soni is an Educational Psychologist with a specialist role for early years and is facilitating the use of a group supervision framework to support Family Support Workers. The initial reports suggest that this is a useful way for Educational Psychologists to support Children's Centres and the research also highlights that, as Children's Centres have a limited knowledge of our role currently, it is an ideal time to trial innovative and creative ways of working (Dennis, 2004).

Although research regarding the role of the Educational Psychologist within early years settings remains limited, in depth, methodologically robust, longitudinal studies have shown that quality early years provision has a significant positive impact on

children's progress, over and above important family influences. High quality provision has also been highlighted as an effective intervention to improve children's cognitive development and decrease risk factors for special educational needs (Sammons et al, 2003; Sylva et al, 2004). Studies exploring high quality early years provision have found that the skills and qualities of staff have a significant impact on the quality of the provision (Sylva et al, 2004). It may therefore be important for Educational Psychologists to invest time and effort in supporting Children's Centres and associated voluntary, private and independent settings and explore ways of effectively enhancing the quality of provision and skills of staff.

4. Conceptualising organisations and implications for Educational Psychologists supporting organisational change

It is beyond the scope of this literature review to provide a comprehensive critical review of the broad and complex domain of organisational change and development. Rather, a brief summary of perspectives for understanding organisational change and development is provided with a critical discussion regarding the implications these models have in terms of the role of Educational Psychologists in supporting the professional development of practitioners within educational settings.

Fox & Sigston (1992) propose different models of organisation or ways to perceive them including mechanistic models, cultural approaches, political models, subjective models and ambiguity models. What they highlight, through exploring a range of contrasting models, is that no single model can fully explain the complexities of a

range of changeable organisations. They conclude that it is useful to take a multiple perspective approach to understanding organisations and to view the complexities of organisations in different ways. Depending on the perspective that is taken to understand organisations, differing models of intervening in the organisation will need to be applied. The different modes have different ontological and epistemological underpinnings which will be explored further below.

A mechanistic or positivist model for understanding organisations would promote the use of direct delivery of training to develop the skills of the practitioners and hence increase the quality of provision. This is related to a mechanistic model of teaching and education. This model views teachers as technicians (Campbell et al, 2004) and draws on a positivist perspective on teaching and learning (Fox & Sigston, 1992). This perspective does not account for the huge variations in practice across different schools and does not acknowledge the influence of the physical and social environment in which the school and staff are situated. This is a rather outdated view of schools as organisations and much of the literature documenting attempts to change practice in schools reinforces a view that schools are very complex changeable organisations with individual staff holding views that may be independent to and different from that of the organisation. Therefore, direct training that does not stem from a recognised need for development within the organisation, or is not tailored to meet the specific needs of the organisation, is likely to be ineffective (Bolam, 1993).

A more social constructivist approach to organisations is associated with the organic model (Fox & Sigston, 1992) which suggests that organisations are changeable entities which are shaped and influenced by the people within them and the social context. This model highlights the influence individuals have over the organisation and the difficulties of developing shared meaning in groups. External professionals who take this view when supporting change in organisations are likely to place emphasis on the social dynamics and relationships within the group and the power this has to support or inhibit change processes (Fox & Sigston, 1992). Educational Psychologists, with their knowledge of group dynamics and processes, are well placed to support change in organisations if this model of understanding them is employed. Consultation could be viewed as an effective method for supporting development if organisations are viewed from the organic or social constructivist perspective (Wagner, 1995, 2000).

Barber (2002) (cited in Forde et al, 2006) presents a four stage model of the changing relationship between teachers and the government. The first stage refers to practice guided by 'uninformed professional judgement' which would be associated with times during which teachers have had free rein to make their own judgements about best practice. The second stage refers to practice guided by 'uninformed prescription' related to periods when top down strategies have dominated, providing consistency across settings but paying little attention to research evidence. The third stage is concerned with a shift in practice to be guided by 'informed prescription' with a focus on evidence based practice but applied rigidly with little consideration of contextual factors. The final stage is 'informed professional judgement', which

Barber (2002) suggests is the current stage in the relationship between teachers and the government, with teachers and schools being increasingly accountable for the achievement and attainment of pupils. According to Barber (2002) teachers are now required to be researchers and practitioners, taking account of research evidence and their knowledge of the pupils in context. This perhaps relates to Schon's (1983) notion of reflective practice and the need for professionals to develop their skills through reflecting on their practice in context. Barber (2002) talks of an era of 'informed professional judgement', taking a realistic position and emphasising the need to take a balanced approach. He suggests there is a need for teachers to consider research findings and data in addition to reflecting on the context, hence linking professional practice and research (Forde et al, 2006). Educational Psychologists with their expertise in research methodology, evaluation and evidence based practice could be key agents in supporting schools to make developments in this area (MacKay, 2002).

Fielding et al (2005) also describe a 'practice creation mode' in which there is equal status between two settings which work together on a shared focus: that shared focus being to develop best practice. They suggest that the 'shared practice develops and extends itself over time through mutual interplay and reflection' (p.103). This relates to other methods for promoting organisational change and development from a constructivist perspective, including the use of Action Research (Reason & Bradbury, 2006), teacher inquiry and collaborative research (Sachs, 1999). Negotiating a shared focus for collaborative research or development attempts can be difficult. As a result, models such as the RADIO model (Timmins et al, 2003) for

supporting research and development in organisations (such as schools) have been developed to support the negotiation of development attempts between researchers (or other external professionals) and organisations (such as schools).

In summary, it appears that Educational Psychologists involved in supporting organisational change and development need to consider their epistemological position and hence their approach to understanding the complexities of organisations and how they develop. Viewing organisations from a constructivist perspective would suggest that Educational Psychologists need to consider the characteristics of the setting, the professionals within it and the context in which it is located. Research regarding change processes suggests that individuals are most supportive of change when they are fully involved in the process and perceive a need for change (Buchanan & Huczynski, 2004). So prior to change efforts being initiated there is a need to involve practitioners in identifying a need for development. Providing support for RP is considered to be a potential role for Educational Psychologists working in the early years that is worthy of further exploration for three reasons. Firstly, supporting RP may be one way in which Educational Psychologists could support development at the organisational level, support practitioners to actively engage in the development process and encourage them to identify their own needs for development. Secondly, RP is cited in research regarding effective practice in the early years (Moyle et al, 2002) and in professional guidance (DfES, 2006; DCSF, 2008). Thirdly, the training and skill level of practitioners has been found to have a significant impact on the quality of early years provision and outcomes for young

children (Sylva et al, 2004). Definitions and conceptualisations of RP are considered in the following section.

5. Reflective practice; definitions and conceptualisations

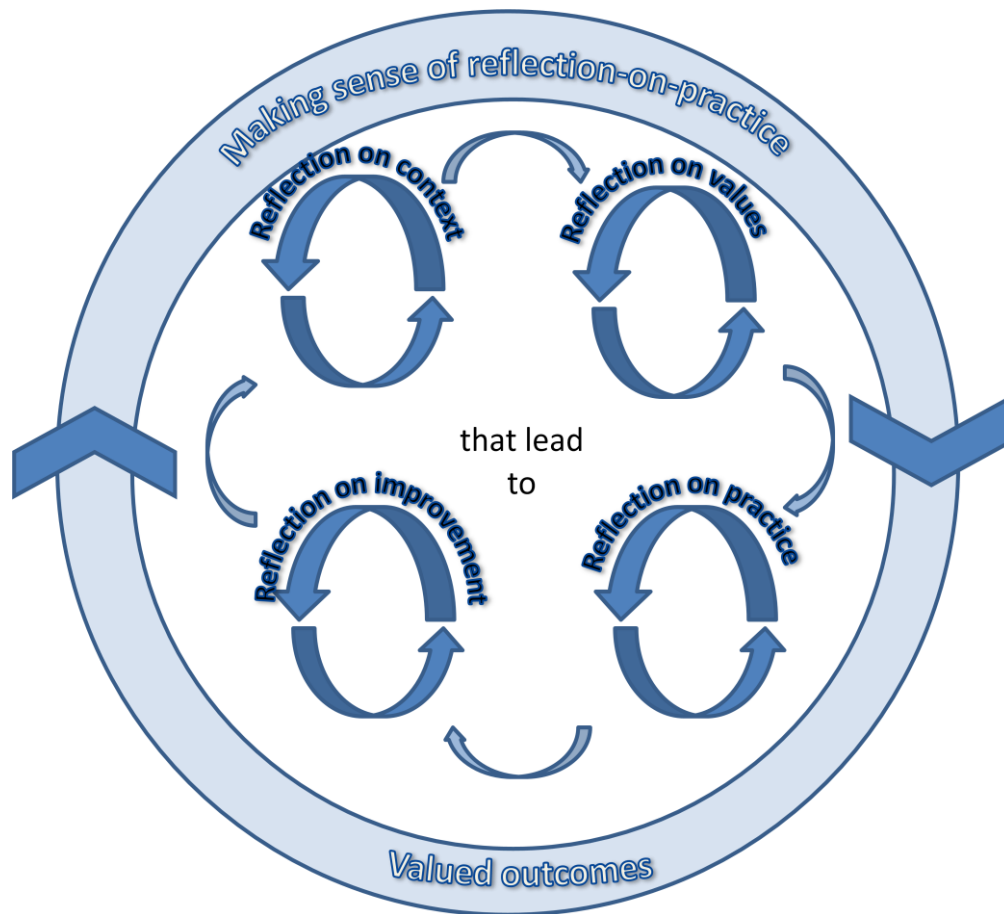
Although references to RP are numerous, there remains great controversy as to what the term actually means. Forde et al (2006) in their book entitled 'Professional Development, Reflection and Enquiry' note that RP is particularly difficult to define conceptually and suggest that it is perhaps 'easier to say what reflective practice is meant to do than to say what it is' (p.68). Although many models of RP exist they tend to converge in their emphasis on reflection on and in action, and an emphasis on reflection being the ability to adopt a critical stance leading to practice change (Forde et al, 2006). Mezirow (1981) gave an early definition of RP, suggesting it is a process of constructing meaning from experience through reflection and comparison with previously held beliefs, values and schemata. Mezirow (1981) also went on to define three levels of reflection. He believed that practitioners could either not reflect at all, reflect at a basic level where they are aware of the judgements they make, or could reflect at a higher level where they are aware of judgements and in doing this also assess the need for further learning.

Schon (1983) is perhaps one of the most widely cited and referenced researchers in the field of RP. Schon's ideas stemmed from the positivist perspective of 'technical rationality' which was then the dominant way of viewing the relationship between knowledge and practice. Schon (1983) argued that this perception of teachers as

technicians, who implement practice without questioning it, was not wholly accurate. Schon (1983) argued that practitioners often involve themselves in 'messy' problems which they are not able to solve by applying the 'scientific method' emphasised in 'technical rationality'. He therefore sought to develop an alternative perspective on professional practice that accounted for the often intuitive knowledge that supported practitioners in adapting their practice in light of these messy situations. Schon (1983) outlined two aspects of reflection; reflection in action (reflecting in context and whilst acting) and reflection on action (reflecting out of the context after an event). Schon (1983) suggested that when we are presented with a problematic situation we become aware that our current knowledge is no longer adequate and so we reflect on our actions in an attempt to generate new knowledge (Evans, 1995). Reflection on action is deliberate and conscious and serves to improve future action.

More recently Hart (1996), a teacher researcher, criticised Schon's account of RP suggesting that he provided little reference to how practitioners incorporate the ideas of others into the reflective process. Despite this limitation, Schon's (1983) understanding of RP remains influential and many of the more recent definitions or conceptualisations of what it means to be reflective or to be a reflective practitioner are based on the core ideas of reflection in action and reflection on action. Ghaye & Ghaye (1998) introduced an 'enabling model of reflection on practice', specifically developed for education professionals, and emphasised their view that RP is a research process and a tool for challenging and reconstructing current action.

Figure 1: Enabling model of reflection on practice (Ghaye & Ghaye, 1998, p.7)



Ghaye & Ghaye (1998) emphasise the importance of reflecting not only on the practice and the context but also on values surrounding the practice and the improvement evidenced. Ghaye & Ghaye (1998) frame RP as a cyclical and repeating process where prior reflections feed into current and future reflections. They also acknowledge the need for a flexible model that allows for different starting points or triggers for the reflective process. Whereas Schon (1998) would suggest that a 'problem' situation in which usual practice is not adequate to meet needs is the trigger for reflection, Ghaye & Ghaye (1998) suggest that a practitioner may reflect on their values before reflecting on their practice or context. An advantage of this model may be that it takes a holistic approach to teaching and learning, realising that

none of the aspects can operate in isolation. It also develops Schon's (1998) approach to incorporate the social context and social values surrounding people's actions which was criticised as lacking by Hart (1996). Ghaye & Ghaye (1998) highlight the difference between change and improvement, recognising the need for careful reflection on levels of improvement to ensure that changes are worthwhile. Ghaye & Ghaye (1998) provide further information regarding their model and understanding of RP through the proposal of ten principles of reflection on action (Table 1).

Table 1: Principles of reflection-on-action (adapted from Ghaye & Ghaye, 1998, p.16, 17, 18)

Principles:	Description:
Reflective practice is a discourse	Reflective practice requires us to ask probing and challenging questions about all aspects of what we do.
Reflective practice is fuelled by experience	It is our experience that we reflect on so we cannot reflect without experience.
Reflective practice is a 'reflective turn'	Reflective practice requires us to look back again at all our taken for granted values, understandings and practices.
Reflective practice is concerned with learning how to account for ourselves	Reflective practice requires us to describe, explain and justify our practice.
Reflective practice should be understood as a disposition to inquiry	Reflective practice is a process of enquiry. We need a 'toolbox' of methods of inquiry and an understanding of their use but reflective practice is

	more than just a 'toolbox' of methods, it is a way of seeing and being.
Reflective practice is interest serving	Reflective practice is a process of knowledge creation. The new knowledge is then used to achieve a desired state (improvement).
Reflective practice is enacted by those who are critical thinkers	Reflective practice requires us to ask probing and challenging questions about all aspects of what we do.
Reflective practice is a way of decoding a symbolic landscape	Without asking these challenging questions and looking closely at our practice we do not see or do not understand the meaning of many of the features of the classroom or the school or our practice. The 'symbolic landscape' has a significant influence on teaching and learning but without reflective practice this cannot be fully understood.
Reflective practice sits at the interface between notions of practice and theory	Reflective practice is a creative process which links theory to practice. Through reflection we create meaningful theories about teaching and learning in context which then influences future practice.
Reflective practice is at the intersection of a number of ways of knowing	Reflective practice is located within the postmodernist view of the world and is based on the premise that knowledge is socially constructed. Reflective practice draws on our understanding of the world and the understandings we develop through our interactions with others.

At around the same time as Ghaye & Ghaye (1998), Reynolds (1998) documented his interest in critical reflection specifically, and went on to present four characteristics of critical reflection (questioning of assumptions, social rather than individual focus, attention to the analysis of power relations and a concern for emancipation). Reynolds (1998) argued that unless all four characteristics were

present, reflection would not be critical and so positive changes in practice would not be as great. However, Forde et al (2006) have more recently warned of the unfounded assumption that reflection necessarily leads to change in practice. They state that there is little research evidence demonstrating lasting positive change as a result of reflection. However, they do acknowledge that there is evidence to suggest that practitioners consider it to be beneficial despite the lack of objective measures.

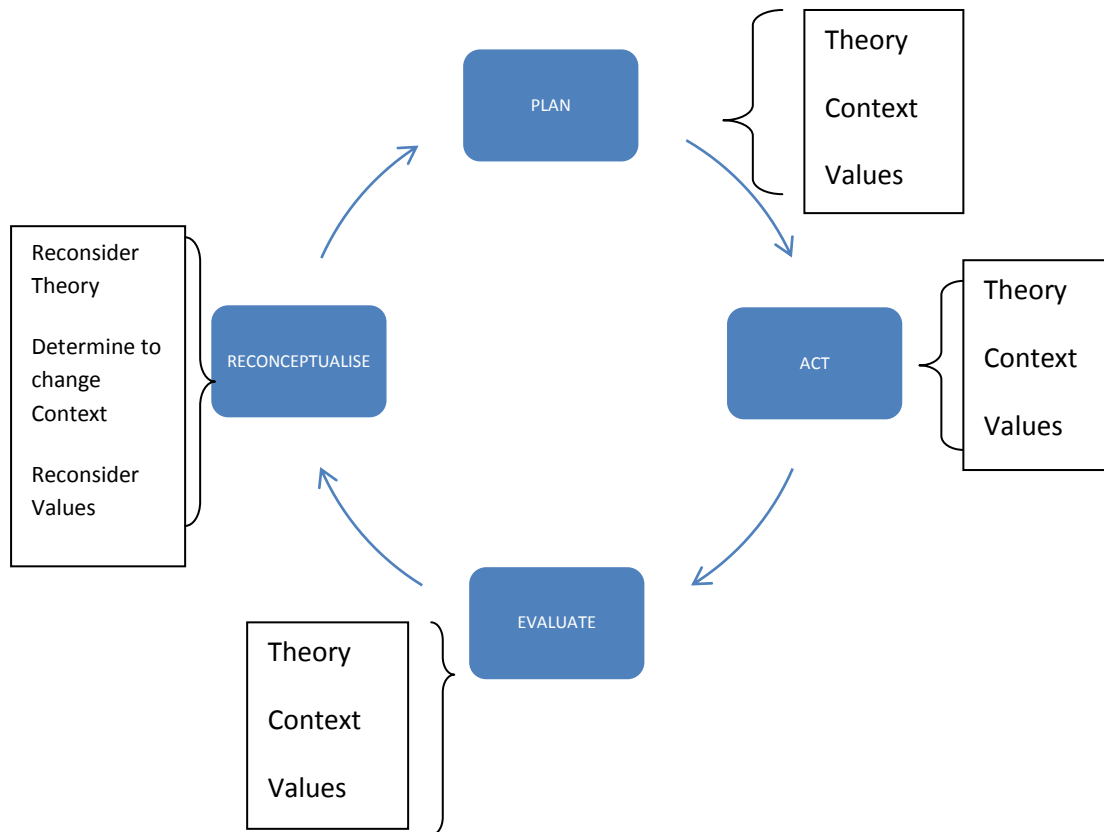
Haggarty & Postlethwaite (2003) present a simplified model of RP but highlight the importance of considering theory in addition to context and values at each stage of the reflection cycle. The model, presented in Figure 2, comprises a four stage cyclical process, involving a planning phase, an acting phase and an evaluation of action leading to reconceptualisation of the situation under reflection. At each of the four stages, theory, context and values are considered.

In conclusion, there are many models of RP but all have the central premise that...

...‘reflective practice is meant to promote analysis of underlying beliefs and assumptions that practitioners might hold without having a full appreciation of why they hold them and what alternate beliefs might have equal credence’ (Forde et al, 2006, p.67).

These underlying beliefs and assumptions have a powerful influence on practice so it is therefore important for any change to come from a change in these underlying beliefs rather than being at a surface level (Cox, 2005).

Figure 2: Model of reflective practice (Haggarty & Postlethwaite, 2003, p.444)



However, Forde et al (2006) pose some limitations at a philosophical level and discuss the ontological and epistemological underpinnings of RP. They perceive that RP correlates with a constructivist perspective suggesting that individual's have a degree of autonomy and are able to construct and shape their world and indeed their professional world. As Paige-Smith & Craft (2008) point out, it requires them to question, listen and respond rather than routinely implementing prescribed practices.

'[Reflective practice] means more than adding another technology to the repertoire of workers-as-technicians' (Paige-Smith & Craft, 2008, p.xvi).

Forde et al (2006) question whether it is realistic to assign a sense of agency to professionals, particularly within certain social and political contexts. However, it could perhaps be argued that this is only a valid criticism if you subscribe to a positivist view of professionals and organisations. Taking a more constructivist perspective it would be argued that professionals, indeed all individuals, have a sense of agency and can act to influence events and situations. However, social constructions and influences must also be considered, meaning that social contexts could perhaps inhibit individual's perceptions of their sense of agency. Forde et al (2006) argue that 'using critical reflection will allow teachers to identify what they do well and what they need to do to improve their practice' (p.66). Forde et al (2006) recognise the lack of consensus in the literature regarding definitive definitions or conceptualisations of RP. They therefore suggest that perhaps a definitive model is neither possible nor necessary. They argue that as there are many different ways to reflect and many different starting points for reflection, it is maybe more useful for individuals or groups to work with or develop a model that suits their context.

Larrivee (2008) also acknowledged the lack of a shared language regarding RP and argued for the need to develop a measure of RP so that progress could be evaluated. Larrivee (2008) reviewed the extensive literature and found that three levels of RP are commonly used, alongside an assumption that a practitioner can be non-reflective, therefore creating a fourth level. The four levels used by Larrivee (2008) are summarised in Table 2 below.

Table 2: Four levels of reflective practice taken from Larrivee (2008, p.342)

Level of reflection:	Description:
Pre-reflection	Teachers react to situations automatically without conscious consideration of alternative responses.
Surface reflection	Teachers' reflections focus on strategies and methods used to reach predetermined goals. Teachers are concerned with what works rather than with any consideration of the value of goals as ends in themselves.
Pedagogical reflection	Teachers apply the field's knowledge base and current beliefs about what represents quality practices. Teachers reflect on educational goals, the theories underlying approaches, and the connections between theoretical principles and practice.
Critical reflection	Teachers reflect on the moral and ethical implications of their classroom practices on students. Critical reflection involves examination of both personal and professional belief systems. It also involves the examination of the ethical, social and political consequences of one's practice.

Larrivee (2008) engaged in a lengthy process to develop the RP scale based on a review of the previous literature. The scale was produced in two forms, one for the individual to rate themselves and one for an observer to rate the individual. In addition an action plan was included to support further development. This was the only comprehensive scale found within this literature search, suggesting that this could be an area of research worthy of further investigation. In addition, as Forde et al (2006) suggest, it may also be important to consider the views of the practitioners and develop context specific models of RP that are meaningful to them. If this is the case then perhaps evaluation needs to focus on movement towards context specific

models, rather than progress towards items on a scale constructed from research placed outside the context.

So, in summary, the research demonstrates a lack of consensus regarding definitions and conceptualisations of RP. Some authors provide interactive models of RP which emphasise reflection on the context, values, practice and improvement (Ghaye & Ghaye, 1998), some authors propose cyclical models with a focus on considering theory in addition to the context and values (Haggarty & Postlethwaite, 2003), and some authors present a progressive account of RP assuming that practitioners can become increasingly critically reflective (Larrivee, 2008). In account of the variation in definitions and models of RP Forde et al (2006) suggest that it is perhaps important for context specific models to be developed which are meaningful and have ecological validity for the practitioners in the setting. Potential ways of supporting developments in RP are discussed below with reference to studies related to RP and education.

6. Developing reflective practice in educational settings, particularly Children's Centres

‘Reflective practice is a complex intellectually challenging activity. Its success is dependent on the skills of the reflective practitioner and on the quality of support afforded by fellow professionals (Moran & Dallot, 1995, p.22).

Although Moran & Dallot (1995) assert that RP is dependent upon the support provided in addition to the skills of the practitioner, they do not suggest what form this

support should take. Day (1993) suggests that there is not a dichotomy between teachers that are reflective and those that are not, but instead suggests that there is a continuum along which practitioners can be supported. Research regarding RP identifies several mechanisms, factors or processes that support the development of RP along this continuum. Although there is a growing body of research related to RP across disciplines, what is of interest here, although not exclusively, is the literature related to educational contexts.

Lieberman & Wood (2002) highlight the need to support social relationships and group dynamics in settings in order to promote improvements in practice (Fox & Sigston, 1992). They suggest that practitioners need to be located within supportive and trusting contexts for them to be able to continue to develop their practice. Larrivee (2008) suggests that a pre-requisite for developing RP is the ability 'to let go of the need to be right' (p.346) and that this requires a supportive context. It could be suggested that supportive contexts enable practitioners to evaluate their practice honestly in a way that can support them in moving forward. Ghaye & Ghaye (1998) argue that RP in itself requires individuals to share experiences and reflections, stating that ... 'making sense is not just a process of having a private conversation with yourself about your teaching, it also involves coming to know through teacher talk and the sharing of experiences' (p.6). Reynolds (1998) supports this assertion, suggesting that there is a need to explore practice in a group context where reflections can be vocalised and thinking made explicit. This links in with Schon's (1983) notion of tacit or implicit knowledge and the need to make it explicit so that it can be shared with others and objectively investigated.

Ng & Tan (2009) suggest that communities of practice support tacit knowledge in becoming explicit and available for critical reflection, hence moving from single loop learning to double loop learning (Argyris & Schon, 1974). RP, or critically reflective learning, Ng and Tan (2009) suggest, requires consciously structured processes to support professionals in moving away from sense making and towards the critical reflection and examination of broad issues, values and goals. So, there appear to be two implications for reflection as a social activity; the search to make knowledge and thinking about practice explicit so it can be shared and reflected on, and the need for socially supportive contexts that enable practitioners to reflect honestly on their practice and acknowledge areas for development and provide support for changes to be implemented.

Marsick & Watkins (2001) make links between RP and informal or incidental learning. They have developed a model of informal and incidental learning which highlights the importance of the context in which experiences occur and the particular 'world view' which is taken by the individual. They suggest that learning begins with a trigger which can be an internal or external stimulus that 'signals dissatisfaction with current ways of thinking or being' (p.29). The world view that is taken dictates what is paid attention to and how the trigger is perceived. However, the outcome of the learning ultimately influences the world view and, hence, future perceptions. Marsick & Watkins (2001) state that informal and incidental learning generally take place without much external facilitation or structure' (p.30). Although, they do suggest that strategies need to be put in place to support individuals in becoming more reflective, to question their own and others' views and to make the learning more visible and

rigorous. However, they do not suggest what these strategies might look like in practice.

Kotkamp (1990) provided an early account of the range of methods used to support RP across professions. He constructed several dimensions of reflective strategies; medium (referring to the method used to support reflection, for example writing, talking, observing); number (referring to whether the strategies involved individual reflection or reflection in groups); locus of initiation (referring to whether the strategy was self initiated, suggested or facilitated by another); and reality (referring to whether the strategy referred to reflection on actual experience or a scenario). Kotkamp (1990) argued that strategies could be informed by different aspects of different dimensions. He went on to provide an overview of the main strategies used to develop RP that were reflected in the early literature. These were categorised into strategies utilising: writing as a form of reflection (for example story writing and reflective journals); scenarios (discussing examples of practice rather than actual experiences); electronic feedback (for example use of audio and visual recording); instrument feedback (use of measures to provide feedback to professionals on their actions and thinking about practice); platforms (where professionals are encouraged to express their espoused theories and compare this to their actual practice or theories in use), and the use of shadowing and reflective interviewing (where professionals are paired and provide feedback to each other and develop practice through questioning).

The literature already reviewed suggests that reflection on practice in a group context is important as it provides an arena for making tacit knowledge explicit through discussion (Schon , 1983; Ghaye & Ghaye, 1998; Reynolds, 1998) and also provides a supportive context in which professionals can reflect openly and honestly on their practice and needs for development (Lieberman & Wood, 2002; Larrivee, 2008). In addition, although the literature regarding the use of technology to support RP is growing, studies have highlighted the practical difficulties associated with it (L'Anson et al, 2003) and also highlight that interventions using online or remote reflections lack the social support element that is considered to be important (Galanouli & Collins, 2000). Although Marsick & Watkins (2001) suggest that a proportion of work place and professional learning occurs informally or incidentally, research regarding RP specifically tends to suggest that there is a need for external facilitation and support (Moran & Dallot, 1995; James et al, 2007). Therefore, studies reviewed here will focus on the application of externally initiated and facilitated interventions which involve a group process and limited use of technology to support RP.

Hart (1996) proposed a model of 'Innovative Thinking' to be used by teachers as a way of supporting professional development and reflection to support improvements in practice. The model comprised five 'moves' (making connections, contradicting, taking the child's eye view, noting the impact of feelings and suspending judgement) which she anticipated would encourage teachers to reflect on practice and adopt different perspectives on situations. Hart (1996) proposed that this would support teachers to move from a within child model of difficulties and consider the impact of wider environmental influences on learning. Hart (1996) suggests the 'moves' within

the model are not new but the way in which they are combined encourages more systematic and rigorous reflection on practice.

Burchell & Dyson (2005) presented a study which aimed to develop University supervision processes through supporting tutors to engage in reflection on practice. Interviews and group meetings were used as vehicles to support RP over an extended period. They believed that questioning of practice and an opportunity for tutors to verbalise their thinking were key processes within the interviews that supported RP. Group meetings were considered to provide social support and dedicated space for reflection as well as support 'exploratory discussion' through collaborative dialogue, where tutors were able to learn from and extend each other's experiences and perspectives. Burchell & Dyson (2005) concluded that the interviews and group meetings were useful strategies to support RP and developments in practice but argued that there was a need to develop a culture of RP within the organisation for RP to continue.

Morley (2007) designed and implemented an intervention aimed at supporting the RP of school nurses. The intervention was delivered as a three and a half day course during which practitioners were firstly introduced to the theory and purpose of RP, before deconstructing and finally reconstructing 'critical incidents' that had challenged their practice. This draws on the earlier work of Schon (1983) and Evans (1995) who suggested that challenge to existing practice or surprising situations trigger reflection on practice. The process of deconstructing experiences aimed to identify the values

and beliefs underpinning current practice and support alternative perspectives to be developed. Morley (2009) concluded that there is a need for a skilled facilitator to support RP and a need for managers to support organisational change arising from RP, however, the evaluation of the intervention was limited and was based on the author's reflections.

Bold (2008) conducted a study which explored the use of peer support groups in developing the RP of University students. The intervention used group discussions focussed on Ghaye & Ghaye's (1998) ten principles of RP, conducted over a ten week period. The discussions aimed to support students to: recognise their existing frameworks (underlying beliefs and assumptions); question and interrogate their own and others experiences; view situations problematically and question their values beliefs and assumptions in group context. Bold (2008) evaluated the effectiveness of the intervention through use of narratives, written by the author but informed by data triangulated from different sources (researcher diary, tutor observation records and student reflective records). Bold (2008) concluded that questioning practice in a group context and encouraging students to view situations problematically supported deeper learning and reflection.

Santaro & Allard (2008) explored the use of scenarios as springboards for RP with student and experienced teachers. They concluded that scenarios are supportive of RP and suggest that they have benefits over the discussion of real situations as a strategy for supporting RP. Santaro & Allard (2008) suggest that teachers can feel

that their professional competence is threatened when asked to discuss real situations that they have found difficult or challenging. Evidence of developments in RP was provided through the transcription and analysis of group discussions which were coded based on Bloom's revised taxonomy of the thinking or cognitive domain (Anderson & Krathwohl, 2001), which is a development of Bloom's taxonomy of educational objectives (Bloom, 1956). Although Santaro & Allard (2008) suggest that their study provides support for the use of scenarios as a method for developing RP, the analysis of the transcriptions is subjective and the evaluation does not attempt to identify or measure changes in actual practice or long term changes in thinking about practice.

Gardner (2009) presented a study which aimed to explore the use of an intervention in supporting the professional development of professionals through RP. Gardner (2009) provided an outline of a three day course during which professionals are firstly introduced to the theory regarding RP so that a shared understanding can be developed, before exploring real experiences to identify underlying assumptions and values. Through discussion professionals are supported to develop new understandings which can lead to change and improvements in practice. Gardner (2009) presented experiences of individual professionals and identified processes that were important in supporting their RP. The processes which Gardner (2009) identified as being supportive of RP are summarised in Table 3 below.

Table 3: Processes identified as being supportive of reflective practice (taken from Gardner, 2009, p.186)

- Exploring real situations that were presenting discomfort in some way
- Recognising emotional response to situations (professionals need to initially have their feelings about a situation acknowledged before they are able to move forward)
- Unearthing assumptions and values (need support to identify these through collaborative discussion as professionals are often not aware of these)
- Unsettling assumptions and values (hold up to scrutiny as part of group so group members can provide different perspectives on situations)
- Articulating new assumptions and values to inform practice (identifying ideal values that should inform practice)
- Identifying changes to practice to bring in line with values (identifying actions which can bring practice in line with ideal values)

Gardner (2009) suggests that reflection needs to be actively supported in organisations and proposes that this could be through the development of project groups where professionals collaboratively discuss and reflect on practice, or through supervision processes in addition to the process she describes.

The majority of research relating to RP in educational contexts is focussed on the development of teachers (Potter & Hodgson, 2007). However, when considering a potential role for Educational Psychologists in supporting the development of RP in Children's Centres it is important to note that many of the practitioners are not qualified teachers. It cannot necessarily be assumed that the same findings apply to work with a different professional group with different backgrounds, experiences and

qualifications. Only two studies were identified that explored developments in the RP of early years practitioners. Firstly, Fisher (1993), in a paper presented at the European Conference on the Quality of Early Childhood Education, highlighted the importance of practitioners engaging in RP and suggested four processes that could support it. These share many similarities with the supportive processes identified by Gardner (2009) and are presented in Table 4 below.

Table 4: Processes that Fisher (1993) proposed were supportive of reflective practice.

- | |
|--|
| <ul style="list-style-type: none"> • Discussing practice with others who have an understanding of the topic • Identifying discrepancies between principles/values and practice • Planning actions to reduce the gap between principles and practice • Considering theory related to practice |
|--|

Secondly, Potter & Hodgson (2007) reported a project aimed at developing the RP of five nursery nurses through a 12 week course, delivered by a Speech and Language Therapist, providing opportunities for reflection supported by video clips and work based support sessions. Potter & Hodgson (2007) stated that the video clips acted as a 'vital catalyst' (p.501) during the sessions and supported high levels of critical reflection and improvements in practice. They also state that 'a supportive environment in which nursery nurses could trust each other' (p.501) was a vital prerequisite for the effective use of video recordings to promote reflection. The impact of the use of video clips and work based support sessions was evaluated through the use of pre and post intervention video clips of practice, a focus group

conducted with the participants before the intervention and individual semi-structured interviews conducted after the intervention. Although this is one of the few studies that attempted to measure changes in practice in addition to documenting the reflective process, the measures for improvements in practice remain largely subjective.

Potter & Hodgson (2007) in their study also highlight potential barriers to developing RP, particularly the poor staffing ratios and time constraints inherent in work in the early years sector. Other potential barriers have been surfaced through research, including a high level of satisfaction with current performance (Heath, 1998) and settings being unused to professional dialogue, having rigid status hierarchies, and the presence of professional rivalries limiting organisational development (Hanko, 1999). In addition, Christie (2007) acknowledges the difficulty of securing investment in longer term interventions when individuals in leadership roles are looking for a 'quick fix'.

Hobbs (2007) wrote about the use of reflective journals and reflective assignments in supporting the development of RP in students teaching English as a foreign language. She argued that forced reflection on practice is unhelpful and can often lead to false reflection in order to provide the response that is thought to be expected. She also argues from her experience of working with students that RP should not be assessed or evaluated until the participants are confident and experienced. This poses questions about the validity of data gathered from the

studies already discussed as most involved the introduction and short term evaluation of RP to different professional groups. Whilst Hobbs (2007) may have a valid argument, it is important to continue to incorporate immediate post-intervention evaluations so that practitioner views regarding the perceived usefulness of particular strategies and interventions and their views on how it might support their future and ongoing development are gathered.

The studies reviewed above clearly highlight many processes that are considered to be supportive of RP in different contexts but many of the evaluations are methodologically weak and provide limited support for the future development of interventions. Table 5 identifies many of the processes and contextual factors that are suggested to be supportive of developments in RP.

Table 5: Summary of findings from the studies reviewed in terms of factors supporting the effective development of reflective practice in settings

Factor, process or context:	Supporting research:
Discussion of real situations/experiences, or realistic scenarios as a tool to promote reflection on practice	Fisher (1993) Marsick & Watkins (2001) Morley (2007) Potter & Hodgson (2007) Bold (2008) Santaro & Allard (2008)

Consideration of values and assumptions underpinning practice important in reflective practice	Fisher (1993) Hart (1996) Gardner (2009)
Consideration of different perspectives important in reflecting on practice	Hart (1996) Burchell & Dyson (2005)
Reflecting on experience/practice in a group context to make tacit knowledge explicit	Schon (1983) Ghaye & Ghaye (1998) Reynolds (1998) Burchell & Dyson (2005) Fazio (2009) Ng & Tan (2009)
Support/challenge from an external professional	Morley (2007)
Time committed to reflective practice	Potter & Hodgson (2007)
The need for a supportive context	Fisher (1993) Lieberman & Wood (2002) Burchell & Dyson (2005) Morley (2007) Potter & Hodgson (2007) Larrivee (2008) Fazio (2009)
Developing a shared understanding of reflective practice and its purpose	Morley (2007) Gardner (2009)
Management involved in discussions about practice/reflective process	Morley (2007) Gardner (2009)

6.1 Implications for the role of the Educational Psychologist

It is clear that Educational Psychologists may be in a position to contribute to organisational change and development and that investment of time in this area of

work is likely to have a positive impact on outcomes for all children and young people including the most vulnerable. RP has been highlighted as one way in which external professionals might support the development of practice in educational settings. Many of the studies reviewed above provide an insight into processes and factors that may support RP, however, very few objectively measure the impact of these processes or factors on developing RP or provide information about why and how these processes/factors might be supportive, to whom and when. It is clear from the literature on organisational change and development that one size does not fit all and, when considering the varied contexts of Children's Centres, it is perhaps crucial to further develop the research literature by providing detailed illuminative accounts of interventions in context. Although studies have highlighted the need for external facilitation of processes designed to support RP (Moran & Dallot, 1995; James et al, 2007), evaluations need to identify whether the facilitation role is an effective use of Educational Psychologist's time or whether another professional could take this role. Educational Psychologists with skills and knowledge in research methodology may be well placed to support the design of future evaluations so that this detailed information is gathered.

When considering a possible role for Educational Psychologists in supporting the development of RP in settings it is important to note that much of the research has focussed on voluntary involvement in interventions, therefore findings cannot necessarily be generalised to contexts in which practitioners are 'forced' into being involved. There is a need for practitioners to perceive the benefits of reflecting on practice in order for them to engage in this activity (Corley & Eades, 2004). In

addition, Cox (2005) asserts that 'knowing what reflection is does not necessarily enable practitioners to use reflection in meaningful ways to improve their practice' (p.470). This suggests that it is not enough for Educational Psychologists or other external professionals to simply educate practitioners about RP, but rather there is a need for ongoing support to educate practitioners about the benefits and purpose of RP, support them to develop a shared understanding of what it means to them in their role and identify how it can support developments and improvements in practice.

7. Implications for future research

Many different factors or processes have been highlighted in the literature to be supportive of RP. However, there remains a need to identify which are the most powerful mechanisms or processes which support RP and in which contexts these are effective. Evaluations also need to consider whether these are mechanisms or contextual factors which settings can develop themselves, or whether they require support from external professionals. It is also important to consider whether the resulting changes in thinking and practice have a significant positive impact on outcomes for children and young people. Baxter & Frederickson (2005) highlight the need for services to identify 'value added' and consider what the service users value. Therefore future research might usefully evaluate the perceived usefulness of support in this area in addition to the impact it has on practice. It is suggested that program theory based evaluations, such as Realistic Evaluation (Pawson & Tilley,

2001), may provide a useful framework for systematically evaluating the particular processes that are most supportive of RP in particular contexts (Hansen, 2005).

8. Conclusions

So, in conclusion it appears that there is little literature available regarding the role of the Educational Psychologist in early years settings, and particularly Children's Centres. Children's Centres are held up as the cornerstone of innovative practice (DfES, 2001; DCSF, 2009) and are key in providing support to an increasing number of voluntary, private and independent early years settings, which are supporting an increasing number of children with complex needs (Dennis, 2004). Methodologically robust studies have consistently highlighted the long term positive impact of high quality early years provision on later outcomes for children and young people (Sammons et al, 2003; Sylva et al, 2004). It is therefore essential for Educational Psychologists to begin to explore effective ways to support the development of practice in these early years settings. The literature reviewed on organisational change and development suggests that Educational Psychologists are well placed to support development at the systems level, but highlights the need to consider their epistemological position in order to inform the approach taken. It is suggested that supporting developments in RP in educational settings may have a positive impact on the quality of provision and hence outcomes for all children and young people.

RP is documented in the guidance within early years education and care and particularly within the Children's Centre Practice Guidance (DfES, 2006) and the

Early Years Foundation Stage Guidance (DCSF, 2008). However, literature regarding RP suggests that there are many different definitions and conceptualisations of it, with Forde et al (2006) suggesting that it is perhaps important for context specific models to be developed which are meaningful and have ecological validity for the practitioners in the setting. Many factors have been highlighted to support the development of RP but there is a lack of evaluation data giving in depth accounts of what works, when and for whom. Findings to date suggest that the development of RP has a positive impact on practitioners' sense of competence, on their ability to problem solve and find new ways forward in problematic situations, and on their ability to meet the needs of children and young people with an increasingly diverse range of needs (Haggarty and Postlethwaite, 2003; Murph & Timmins, 2009). It is proposed that developing RP helps to develop practitioner's learning skills which then has a positive impact on their teaching skills (Poulou, 2005). The wide implications and potential positive benefits of this work mean that it is a potential area of Educational Psychology practice that warrants further exploration. A review of the literature regarding attempts to support developments in RP has highlighted several processes and contexts that may be supportive of RP but has also highlighted limitations in the evaluation methodology utilised in the field to date. It is suggested that evaluations informed by program theory approaches (Hansen, 2005) would be useful in informing the design of future interventions aimed at supporting developments in RP in settings.

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Appendix 1 – Search strategy

The literature reviewed was identified through a systematic search of the ASSIA, ERIC, Social Services Abstracts and Sociological Abstracts databases using specific search terms related to the questions. From this, further literature was identified through following up references identified by authors in earlier papers read. Details of the search terms used to identify literature related to each question is given in the table below.

Question:	Search terms used:
2	education* psycholog* <i>and</i> early years education* psycholog* <i>and</i> nursery education* psycholog* <i>and</i> children centre
3	organisation* change <i>and</i> education organisation* change <i>and</i> school organisation* development organisation* change <i>and</i> models professional development <i>and</i> teachers <i>and</i> educational psychology
4	reflective practice reflective practitioner reflect* practi* <i>and</i> models reflect* practi* <i>and</i> definitions reflect* practi* <i>and</i> measure
5	reflect* practi* <i>and</i> education

	<p>reflect* practi* <i>and</i> develop</p> <p>reflect* practi* <i>and</i> education* psycholog*</p> <p>reflect* pract* <i>and</i> teaching</p> <p>reflect* pract* <i>and</i> strategies</p>
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CHAPTER THREE

**USING REALISTIC EVALUATION PRINCIPLES TO EVALUATE AN
INTERVENTION, UTILISING A COLLABORATIVE PROBLEM SOLVING
FRAMEWORK, AIMED AT SUPPORTING THE REFLECTIVE PRACTICE OF
MULTI-PROFESSIONAL GROUPS OF PRACTITIONERS IN TWO CHILDREN'S
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Abstract

Promoting reflective practice (RP) is considered to be supportive of professional development (Schon, 1983; Moran & Dallat, 1995; Campbell et al, 2004; Hargreaves, 2004; James et al, 2007; Murphy & Timmins, 2009). This paper provides an account of the design, implementation and evaluation of an intervention, facilitated by a Trainee Educational Psychologist, aimed at developing the RP of practitioners in two Children's Centres. Literature regarding attempts to support RP within educational contexts is reviewed in relation to Realistic Evaluation (RE) principles. This review informed the design of an innovative intervention, utilising a collaborative problem solving framework (adapted from Stringer et al, 1992) to support the development of RP through problem solving centred on difficult situations. An evaluation methodology informed by RE principles (Pawson & Tilley, 2001) was used to identify which mechanisms in the intervention supported developments in RP and in which contexts these mechanisms were thought to be effective. Data gathering in the study was based on questionnaires, group feedback and practitioner's individual scaling of perceived progress in RP. The results from the evaluation based on the experience of practitioners (n=10) within two Children's Centres are provided. The findings from

this study suggest that the intervention did support developments in RP overall and highlighted particular processes and contexts as being highly significant to perceived developments. This evaluation contributes to the knowledge of what works, for whom and in what contexts in relation to RP and highlights implications for future research and a potential role for Educational Psychologists in supporting Children's Centres.

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1. Introduction

A social constructivist perspective on professional development would suggest that practitioners should be encouraged to develop their skills and expertise through acquiring and generating practical knowledge in context (Bauer & Gruber, 2007; Kinsella, 2009; Walkerden, 2009). This is in contrast to a positivist perspective on professional development which would advocate theory and knowledge development through scientific research applied to social contexts (Kinsella, 2009). Schon (1983) is frequently cited in the literature as articulating the limitations of the positivist view of learning and the view of teachers as 'technicians', who learn strategies and implement them in a standardised way. Schon (1983) argues that this perspective does not account for the intuitive and experience based knowledge that teachers use to flexibly solve complex and 'messy' problems. Whilst a positivist approach to organisational change and professional development would promote the use of training (to add to the technician's 'toolkit' of strategies) and the imparting of knowledge from 'expert' to 'novice' (Campbell et al, 2004), a constructivist approach supports the notion of a reflective practitioner (Schon, 1983; Moran & Dallat, 1995; Campbell et al, 2004; Hargreaves, 2004; James et al, 2007; Murphy & Timmins,

2009), who is supported to develop their skills through reflection on previous and current practice (Schon, 1983).

Educational Psychologists work with a range of educational settings to support the needs of children and young people with special educational needs and other vulnerable groups. Educational Psychologists provide support through work both at the individual level (for example, supporting the needs of an individual through direct work or support through consultation) and at the organisational level (for example, providing support through training or through facilitation of development or research projects). It is suggested that support at the organisational level, with a focus on supporting developments in reflective practice (RP), could be a potential role for Educational Psychologists in supporting Children's Centres. Findings from the research suggest that the development of RP has a positive impact on practitioner's sense of competence, on their ability to problem solve and find new ways forward in problematic situations, and on their ability to support children with an increasingly diverse range of needs (Haggarty and Postlethwaite, 2003; Murphy & Timmins, 2009). The wide implications and potential positive benefits of this work mean that it is a possible area of Educational Psychology practice that warrants further exploration.

RP is highly documented in the guidance within early years education and care, particularly within the Children's Centre Practice Guidance (DfES, 2006) and the Early Years Foundation Stage Guidance (DCSF, 2008). However, literature

regarding RP suggests that there are many different definitions and conceptualisations of it. Ghaye & Ghaye (1998) proposed an interactive model of RP which emphasises reflection on practice in addition to reflection on the context in which practice occurs, the values informing it, and on any improvements in practice. Haggarty & Postlethwaite (2003) proposed a cyclical model of reflective practice, with a focus on considering the influence of theory in addition to the influence that the context and values have on practice. More recently, Larrivee (2008) has presented a progressive account of RP, which assumes that practitioners can become increasingly critically reflective, providing details of what practitioners might be doing at four different levels of reflection (Larrivee, 2008). As a result of the variation in definitions and models of RP, Forde et al (2006) suggest that it is perhaps important for context specific models to be developed which are meaningful and have ecological validity for the practitioners in the setting.

This paper now goes on to review research exploring the development and implementation of strategies to support RP. Following this, RE is introduced as a framework for supporting the design of an intervention aimed at developing RP in Children's Centres, drawing on findings from the studies reviewed here. Information is provided regarding the design, implementation and evaluation of the intervention in relation to RE principles. The findings are then presented and discussed, highlighting contributions to knowledge in the field of RP and outlining considerations for future research.

1.1 Supporting the development of reflective practice

As this study aims to develop an intervention to support the RP of practitioners in Children's Centres, relevant literature is first reviewed in an attempt to identify what has been learned about effective ways to support RP. Kottkamp (1990) provided an early account of the range of methods used to support RP across professions. These are summarised in Table 1 below, alongside more recent studies which have utilised or provided support for the use of the methods discussed.

Table 1: Methods used to support reflective practice across professions (informed by Kottkamp, 1990)

Method	Description	Recent studies which have utilised/supported the method
Reflective journals	Journals for professionals to record their individual reflections on practice	Epp (2008)
Scenarios	Use of scenarios, related to practice, as a stimulus for discussion and reflection	Santaro & Allard (2008)
Technology	Includes the use of visual recording audio recording and online blogs/forums for reflecting on practice	Galanouli (2000) L'Anson et al (2003) Potter & Hodgson (2007) Hartford & MacRuairc (2008) Aubusson et al (2009) Calandra et al (2009)
Platform	Professionals to express their espoused theories, values and beliefs so that their	Fisher (1993) Hart (1996) Burchell & Dyson (2005)

	actual practice can be compared to this and inconsistencies reflected on	Morley (2007) Potter & Hodgson (2007) Bold (2008) Fazio (2009) Gardner (2009)
Instrument feedback	Professionals gaining feedback regarding their practice through use of assessment tools and observation schedules to support reflection on practice	No recent studies found which utilised/supported this method
Shadowing	Professionals observing each other's practice and providing feedback and posing questions to stimulate reflection on practice	No recent studies found which utilised/supported this method

The use of reflective journals, scenarios, technology and a platform continue to be well documented in the literature, with the use of instrument feedback and shadowing receiving little recent attention. Although there are advantages, there are also well documented difficulties associated with the use of journaling (Epp, 2008) and technology (Kottkamp, 1990) to support RP and so the studies reviewed here involve the use of scenarios, platforms and group based interventions.

Hart (1996) developed a model named 'Innovative Thinking' to support RP, professional development and improvements in provision. The model was informed by the work of Schon (1983) but Hart (1996) recognised a limitation of Schon's work

in that it made little reference to how practitioners incorporated the ideas of others into the reflective process. Hart (1996) incorporated external ideas into the reflective process and emphasised the need to draw on as many sources as possible to inform thinking, although the model she proposes is intended to be used by individual teachers on their own initiative. Hart (1996) suggests there is a need to explore or 'open up' taken for granted assumptions about existing practice, interpretations of situations, and the values informing practice. This model suggests that: understanding factors reinforcing the situation; considering situations from different perspectives; identifying assumptions and norms underpinning practice; understanding the impact of feelings on practice, and using maximum resources to inform actions are outcomes associated with RP. However, Hart (1996) does not explicitly suggest processes that are supportive of these outcomes. Hart's (1996) model was developed through two detailed studies of children's learning and, although descriptions of practice and learning are used to illustrate the 'moves' in the model, no information is provided regarding an evaluation of the validity of the model and the impact it has on changes in practice or children's learning.

Burchell & Dyson (2005) presented a study which aimed to develop University supervision processes through supporting tutors to engage in reflection on practice. Interviews and group meetings were used as vehicles to support RP over an extended period. Burchell & Dyson (2005) believed that questioning of practice with others, opportunities to verbalise thinking and the provision of time, space and support were key processes and contexts that supported RP. Burchell & Dyson (2005) evaluated the impact of interviews and group meetings on RP through

exploring changes in the supervisors thinking about practice in the meetings and through presentation of the researchers' reflections on the process. This again is a highly subjective approach to evaluation but suggests some processes and contexts which may be supportive of RP.

Morley (2007), a social work educator, worked with a group of school nurses to support their critically reflective learning. She stated that 'one of the main goals of critical reflection is to assist practitioners to bring their practice more in line with their espoused values' (p.69). Morley reviewed the efficacy of her three and a half day program (carried out over several weeks) aimed at developing the RP of school nurses. It involved an initial focus on the theoretical underpinnings and purpose of critical reflection before moving on to allow for experiential learning about critical reflection in groups facilitated through the presentation, deconstruction and reconstruction of 'critical incidents' that the participants had experienced in their role. Morley (2007) raises several points for reflection that could be used to inform future practice (see Table 2).

The recommendations for future research drawn from the work of Morley (2007) (Table 2) would enhance the ecological validity (Cohen et al, 2000) of future efforts to develop RP, through an increased focus on the contextual factors which are considered to be important. Morley (2007) does not evaluate her intervention explicitly in terms of processes and contexts which are supportive of RP; this tends to be a trend in the research with authors providing their perspective on the factors

(processes and contexts) that were important in securing developments in RP in the absence of a systematic evaluation of their impact.

Table 2: Implications for future practice generated by discussions in study presented by Morley (2007)

Recommendations for future practice:
<ul style="list-style-type: none"> • a need for facilitators to meet with participants before the program begins to ensure they are fully informed. • a need for participants to feel that their involvement in the program was voluntary rather than mandatory, as this is then at odds with the emancipatory potential of critical reflection. • a need to clarify definitions and meanings so that there is a shared understanding of reflective practice • a need to ensure that the participants felt heard and supported before their experiences were deconstructed. • external facilitation of process and a need for managers to be involved in reflective discussions

Potter & Hodgson (2007) reported a project aimed at developing the RP of five nursery nurses through a 12 week course, delivered by a speech and language therapist, providing opportunities for reflection supported by video clips and work based support sessions. Potter & Hodgson (2007) stated that 'a supportive environment in which nursery nurses could trust each other' (p.501) was a vital prerequisite for the effective use of video recordings to promote reflection. The impact of the use of video clips and work based support sessions on RP was evaluated through the use of pre and post intervention video clips of practice, a focus group conducted with the participants before the intervention and individual semi-

structured interviews conducted after the intervention. The findings suggest that the strategies used in this study were effective in supporting high levels of critical reflection and improvements in practice. However, the authors do recognise that the participants willingness to review their own practice and challenge their assumptions were central contextual factors in the success of the intervention. Like Morley (2007) they agree that the use of group reflection was effective and that this was dependent on 'skilful facilitation on the part of the trainer' (p.506).

Bold (2008) evaluated an intervention aimed at developing students' reflection on practice through the use of peer support groups facilitated by a tutor. Students were supported in 'reflective conversations' designed to develop the skills and attributes that Ghaye & Ghaye (1998) outlined as 10 principles for RP. Bold (2008) reviewed the use of a 10 week program, where each week the focus of discussions was one of Ghaye & Ghaye's 10 principles. Bold (2008) suggests that 'reflective conversations' were supportive of many outcomes related to RP, which are summarised in Table 3a below.

Table 3a: Outcomes considered to be related to reflective practice (Bold, 2008).

Outcomes considered to be related to reflective practice
<ul style="list-style-type: none"> • ability to interrogate others' and own experience • able to ask probing questions about practice • able to identify problematic situations and areas for development • able to identify values, beliefs and assumptions underpinning practice

Fictional narratives, constructed from data sources (researcher's diary, tutor observations and students' reflective records), written by Bold as a tutor-researcher but incorporating the perspectives of all participants, evidenced some developments in thinking about practice in line with Ghaye & Ghaye's (1998) principles of RP. However, these findings are again based on a subjective approach to evaluation. Bold (2008) does not explicitly identify processes within the intervention which were supportive of the outcomes but some are implicitly highlighted (see Table 3b below).

Table 3b: Processes implicitly identified as being supportive of reflective practice (Bold, 2008).

Mechanisms implicitly identified as being supportive of reflective practice:
<ul style="list-style-type: none"> • discussion of real situations/experience in group context • guidance from a tutor • introduction of theory regarding reflective practice

Unlike Bold (2008), Santoro & Allard (2008) argue that scenarios are effective springboards for reflection on practice and suggest that they could be used with both experienced or novice teachers. Santaro & Allard (2008) specify that scenarios are helpful tools to promote RP if they: are realistic and represent experiences that the participants are likely to encounter; are sufficiently removed from the participant's personal contexts so that they do not feel threatened; represent multiple perspectives with opportunity for contradictions and are either based on examples of successful practice or examples of problematic situations. This is a refreshing finding as many of the studies previously discussed have solely focussed on problematic situations

(Hart, 1996; Morley, 2007) and have recognised that this is sometimes perceived as 'threatening' by the participants. However, other research does continue to suggest that it is the problematic situations and situations in which there are inconsistencies between espoused values and values in practice and desired practice and current action that stimulates reflection (Schon, 1983; Evans, 1995). Again, Santaro & Allard (2008) presented a subjective approach to evaluating the data, reducing the validity of their findings.

Gardner (2009) proposes a simple three stage model for supporting developments in RP and emphasises the need for practitioners to understand the influence of values on practice. Gardner (2009), like many other researchers in this field, presented a reflection on her experience and awareness of what RP might be rather than providing a methodologically robust study which could highlight generalisable findings. Evidence of developments in practitioners' understanding of values and the implications for practice was highlighted through narrative case studies. The study implicitly identifies mechanisms (consideration of values and assumptions underpinning practice, development of a shared understanding of RP through considering theory related to RP, and the involvement of management in the reflective process) important in supporting RP but does not highlight any important contextual factors.

In general the studies reviewed tend to implicitly highlight processes and contexts that are supportive of RP. As evidenced in the discussion above, these evaluations

fail to systematically identify or test the processes and contextual factors that are proposed to be supportive of RP. As a result these studies have limited capacity to inform the design of future interventions aimed at supporting RP in settings. Evaluations tend to utilise subjective outcomes based approaches and so are not able to identify the impact of the social context or other variables on the implementation and impact of interventions as process or theory based evaluations would be able to (Birckmayer & Weiss, 2000; Hansen, 2005). Perhaps one reason for the use of subjective outcomes measures is the lack of objective measures available in the research.

1.2 Measures of reflective practice

One of the key difficulties regarding the evaluation of progress in RP is the lack of valid measures. Larrivee (2008) has acknowledged the lack of a shared definition of RP and argued for the need to develop a measure of RP so that progress could be evaluated. Larrivee (2008) used the existing literature to develop a self rating and observer rated scale to identify what level of RP a practitioner engaged in. As there continues to be a lack of consensus in the literature regarding definitions of RP and whether or not it is an incremental skill, the scale is likely to represent a best fit approach to measuring RP rather than an accurate measure. Through use of a self report alongside an observer report the measure does address the concern that espoused theories about practice (as would be captured through a self report) do not necessarily correspond to theories in action (actual practice) (Schon, 1983). However, it does not suggest a way forward if there is a lack of agreement between

the two ratings and it does not address the concern that part of reflection is related to changes in thinking which may not be accessible to an external observer. In addition, as Forde et al (2006) suggest, it may also be important to consider the views of the practitioners and develop context specific models of RP. If a context specific model is developed then evidence of RP and developments should be considered in relation to this, so as to increase ecological validity.

The previous sections have reviewed relevant research and highlighted the lack of systematic evaluation of the processes and contexts that are presumed to be supportive of RP. Realistic approaches to evaluation are discussed below and are presented as methods which allow for a more systematic evaluation and identification of the processes and contexts which are supportive of RP.

2. Realistic Evaluation

Realistic Evaluation (RE) is a type of theory based (or program theory) evaluation. It aims to test and refine the theory that has informed the development of a program or intervention of any kind (Pawson & Tilley, 2001). Theory based evaluations, unlike results models and process models of evaluation, are interested in measuring outcomes in addition to identifying the processes and contexts that support those outcomes (Hansen, 2005). RE is an approach to evaluation that is rooted in a realist epistemology (Pawson & Tilley, 2001), placing importance on providing explanations for phenomena and suggesting that knowledge can be developed from combining such explanations. RE acknowledges the complexities of the social world and

attempts to highlight the impact that social interactions and context have on an intervention's effectiveness (Tolsen et al, 2007). This is thought to be particularly important here as educational contexts are varied and influenced by multiple factors and systems (for example, the influence of the local community, government initiatives, staffing and funding).

A RE is based on a program specification which is expressed in terms of the expected relationships between contexts (C) (defined as the social and cultural conditions in which an program is applied), mechanisms (M) (defined as the ideas and opportunities which are introduced through the program) and outcomes (O) (the outcomes experienced as a result of the program mechanisms applied in the specific context); a CMO configuration. The program specification is informed by the study of similar and previous interventions as well as more abstract social science theory (Pawson & Tilley, 2001). The RE approach attempts to identify the extent to which contexts and mechanisms (processes introduced within a program) interact to produce the expected outcomes. The views of program participants and designers are sought to help develop and validate the CMO configurations that underpin an effective program, in this instance, the promotion of RP.

'The realistic explanation of programs involves an understanding of their mechanisms, contexts and outcomes, and so requires asking questions about the reasoning and resources of those involved in the initiative, the social and cultural conditions necessary to sustain change, and the extent to which one behavioural regularity is exchanged for another' (Pawson & Tilley, 2001, p.154).

Within the research regarding attempts to support RP in educational settings (as discussed in previous sections) several processes (mechanisms) have been

suggested to be supportive of outcomes related to RP and several studies have highlighted particular contexts that are also thought to be important. These findings could combine to support the development of a program specification which could then be evaluated through use of a RE informed approach. Table 4 highlights the value of an RE perspective in terms of exposing the weaknesses evident in existing evaluations and demonstrating how researchers can use findings from previous studies to inform the development of similar programs using a RE approach.

Table 4: A summary of research related to supporting reflective practice and implications for the development of a program specification

Study focus/design:	Findings:	Limitations of evaluation methodology:	Implications for future Program Specification:
Hart (1996) 'Innovative thinking' model used to support RP of teachers.	Important elements of RP: Explore assumptions underpinning practice, consider different interpretations of practice and explore values underpinning practice.	No evaluation discussed. Model developed from Hart's teaching experience and research experience, working alongside teachers and children in schools.	Outcomes related to RP: Ability to explore assumptions and values underpinning practice. Ability to consider different interpretations of situations.
	Important mechanisms: Questioning and discussing problematic practice.		Mechanisms expected to support RP: Discussion of real and problematic experiences. Questioning practice from different perspectives.
	Important contexts: None implied/stated.		Contexts expected to support RP: None implied/stated
Burchell & Dyson (2005) Intervention over 1 year to support University supervisors	Important elements of RP: Being able to identify the tacit assumptions underpinning practice.	Limited evaluation based on subjective analysis of group discussions. Researchers present reflection on impact of intervention.	Outcomes related to RP: Ability to explore assumptions underpinning practice.
	Important mechanisms: Questioning practice in structured group situation so supervisors could hear their thinking out loud.		Mechanisms expected to support RP: Questioning practice to explore assumptions.

to develop their supervision processes through RP	Important contexts: Supportive culture – supports questioning of practice. Time protected for RP.		Contexts expected to support RP: Supportive group context. Time protected for RP.
Morley (2007) 3 ½ day intervention aimed at supporting development of RP of school nurses.	Important elements of RP: Development of shared understanding of RP and its purpose.	Evaluation consisted of Morley's reflections on her experience of facilitating the intervention.	Outcomes related to RP: Shared understanding of RP.
	Important mechanisms: Opportunity to consider theory related to RP. Discussion of real experiences. Identifying strengths in addition to difficulties. Facilitation of structured process by external professional.		Mechanisms expected to support RP: Sharing of literature related to RP. Discussion of real experiences. Structure to support discussions. Identification of positive aspects of practice in addition to problematic situations. Reflective process facilitated by external professional who ensures practitioners are fully informed about process.
	Important contexts: Context in which practitioners felt heard and supported. Management involved in discussions or supportive of changes in policy and practice.		Contexts expected to support RP: Management that are supportive of reflective practice and implications of this. Supportive group context.
Potter & Hodgson (2007) Aimed to develop the RP of nursery	Important elements of RP: Ability to identify positive and negative aspects of practice and plan changes needed to support improvements in practice.	Developments in RP measured through use of pre and post observations of practice, a pre intervention focus group and post intervention semi-structured interviews. Interpretation of	Outcomes supporting reflective practice: Ability to identify areas of practice for further development. Able to plan changes to support improvements in practice and review the impact of changes.

nurses through a 12 week course delivered by a speech and language therapist.	Important mechanisms: Use of video clips of practice to stimulate reflection. Use of structured, regular group sessions to discuss observations of practice.	the evidence of RP gathered through interviews and observations was subjective.	Mechanisms expected to support RP: Discussion of practice in group context supported by video clips. Regular structured sessions.
	Important contexts: Supportive environment to support honest reflections on practice and identification of areas for development. Practitioners perceive benefit of identifying areas for development. Time available for RP.		Contexts expected to support RP: Practitioners who perceive benefit of RP. Supportive context. Time available to reflect on practice.
Bold (2008) Use of 'reflective conversations' to support RP of students, based on Ghaye & Ghaye's (1998) principles of RP.	Important elements of RP: Interrogation of own and others' experience. Asking of probing questions to find out more about practice. Viewing situations problematically. Exploring assumptions, values and beliefs underpinning practice.	Evidenced student developments in reflective practice through use of narratives and compared practice to principles of reflective practice proposed by Ghaye & Ghaye (1998). Not able to identify what it was about the 'reflective conversations' that supported developments in RP. Progress measured through subjective use of theory.	Outcomes related to RP: Ability to question own and others' practice. Ability to ask probing questions to find out more about practice. Able to identify problematic aspects of practice. Ability to explore assumptions, values and beliefs underpinning practice.
	Important mechanisms: Discussion of problematic practice through 'reflective conversation'. Discussion of practice in relation to theory about RP.		Mechanisms expected to support RP: Discussion of problematic practice. Discussion of theory related to RP in group context and use this to measure progress.
	Important contexts: Discussions in a supportive group.		Contexts expected to support RP: Supportive group context.

Santaro & Allard (2008) Aimed to support RP of student teachers through use of scenarios as springboards .	Important elements of RP: Considering different perspectives on situations. Identifying ways forward as a group.	Group discussion transcripts were qualitatively analysed to evidence developments in RP. This is a subjective approach to evaluation and does not identify whether changes in thinking about practice transcend to changes in actual practice or whether developments were maintained over time.	Outcomes related to RP: Ability to identify positive ways forward in realistic situations. Ability to consider different perspectives.
	Important mechanisms: Discussion of realistic scenarios (positive or problematic) closely related to practice.		Mechanisms expected to support RP: Discussion of scenarios related to practice.
	Important contexts: Supportive context to reduce threat.		Contexts expected to support RP: Supportive group context.
Gardner (2009) Proposed three stage model for supporting RP.	Important elements of RP: Developing a shared understanding of RP. Exploration of values and assumptions underpinning practice. Developing new understandings that lead to positive change.	Reflections on personal experience presented as evidence in support of model. No objective measures of progress. Does not gain the views of practitioners on the specific processes that supported perceived developments in their RP.	Outcomes related to RP: A shared understanding of purpose and model for understanding RP. Ability to identify and explore values and assumptions underpinning practice. Ability to agree new ways forward as a result of exploring practice further.
	Important mechanisms: Use of a structured model. Discussion of practice. Consideration of influence of organisational structures on practice.		Mechanisms expected to support RP: Structured process to support discussion of real experiences. Opportunity to discuss influence of organisational structures on practice.
	Important contexts: Management involved in reflective discussions.		Contexts expected to support RP: Management involved in reflective discussions.

<p>Larrivee (2008) Developed scale to measure RP and to be used as a tool to identify next steps for development.</p>	<p>Need to measure level of RP objectively and identify next steps for development. Consideration of practice in relation to theory based measure.</p>	<p>Scale developed based on wide range of research literature regarding definitions of RP and descriptions of practice. Development promoted reliability of scale but no reports of its application in practice. Does not acknowledge the need to develop a shared understanding of RP in context.</p>	<p>Need to develop methods of measuring progress based on research literature and theory in addition to practitioner perceptions of what RP means to them in context.</p>
<p>Forde et al (2006) Provides critique of definitions and models of RP in literature.</p>	<p>Suggests that there is a lack of consensus regarding definitions and conceptualisations of RP. Argues for the need to develop a shared understanding of RP in context. Suggests that the development of context specific models of RP in settings may be useful in helping practitioners to understand the process of RP and support further development.</p>	<p>Does not suggest what mechanisms might support the development of a context specific model of RP. Use of a context specific model of RP is likely to have high ecological validity and is likely to be more meaningful to practitioners but would reduce the ability to compare progress across settings. However, the need for this is questionable.</p>	<p>The development of a context specific model of RP is likely to be a useful and valid method of supporting a shared understanding of the process and purpose of RP which is cited as being important by other researchers. The presentation of a range of definitions and models from the literature is likely to stimulate discussion which could support the development of a centre specific model.</p>

Information from previous studies has been used to inform the development of a program specification to support the development of RP in educational contexts. This is detailed in Appendix 1. The outcomes specified in the table are all related to actions or cognitions identified as being related to RP in the literature. The mechanisms and contexts that are suggested in the literature to support a practitioner's experience of these outcomes are also included. Where mechanisms and contexts have not been identified, general theory and practice experience has informed the specification of them. The researchers that have informed the outcomes, mechanisms and contexts are stated in Appendix 1.

3. Implications of group consultation and collaborative problem solving for reflective practice

Increasingly Educational Psychology services are using consultation as a model of service delivery and more recently research has been focussed on the use of group consultation as a vehicle for promoting collaborative problem solving to find new ways forward in difficult situations (Bozic & Carter, 2002). Group consultation or collaborative problem solving may be a process which supports the development of RP, as it combines many of the factors cited as being important in the literature previously reviewed (discussion in a group context, consideration of different perspectives, discussion of a real situation/experience, see Table 4). In addition, the facilitation of consultation groups by an Educational Psychologist may provide a source of external support which, again, is thought by some researchers to be important in stimulating RP (Morley, 2007).

Many similar models and frameworks for group consultation or problem solving processes exist in the literature. Appendix 2 provides an overview of the findings and limitations of models presented in the literature and highlights implications for future research. The models tend to share a focus on discussion of problematic situations, questioning by the group to gather further information, developing possible ways forward based on information gathered and action planning. In addition, the literature tends to suggest that a group size of six to eight individuals is ideal and suggests that the process is repeated (ideally fortnightly) so that actions and impact can be reviewed (Hawkins & Shohet, 1996). In addition, research regarding group supervision suggests that groups should contain individuals from similar theoretical perspectives but with differences in roles and experiences so that different perspectives on situations can be explored (Hawkins & Shohet, 1996).

The evaluation of the efficacy or effectiveness of group consultation models or collaborative problem solving models presented in the literature is variable. Some authors proposed models with no account of its application or an evaluation of its impact or effectiveness (Forest & Pearpoint, 1995; Bahr et al, 2006). Some authors did evaluate and comment on short term changes in practice as a result of participation in a group (Stringer et al, 1992; Bozic & Carter, 2002; Dowd & Thorn, 2007). However, evaluations were not found to consider whether these groups support a change in thinking about practice outside of the group context and how this was encouraged via the intervention. If changes in thinking in addition to practice are evidenced it may be that these processes could usefully support developments in RP.

4. Aims of current study

The focus of the current study is on the design, implementation and evaluation of an innovative intervention aimed at supporting the RP of multi-professional staff groups in two Children's Centres. The approach to design, implementation and evaluation has been informed by RE principles. Alternative outcome oriented approaches to evaluation were considered (Hansen, 2005), but as can be seen from the discussion of characteristic evaluation designs within the RP literature, these are not best suited to the development of a program specification, in RE terms. The design of the intervention has been informed by the program specification (expressed as multiple CMO configurations in Appendix 1).

The program specification was developed using findings from a review of previous studies (see Table 4) in addition to general theory and practice (as discussed above), as is suggested by Pawson & Tilley (2001). The program specification has several links to the outcomes, processes and contexts related to group consultation and collaborative problem solving frameworks, as well as factors thought to be associated with the effective development of RP (see Table 4). The intervention in the current study therefore comprises the use of a collaborative problem solving framework (influenced by the model proposed by Stringer et al, 1992) in addition to two 'Introductory Sessions' (focussed on sharing information regarding the focus of the research, sharing literature regarding models of RP, developing a context specific model of RP and agreeing a set of shared core values) in order to address all aspects of the program specification. Further details regarding participants, the

intervention design and data gathering methods are provided in subsequent sections. It is suggested that findings from an evaluation of the practitioners' experience of the intervention will contribute to knowledge in the field of RP, regarding the processes and contexts which are supportive of outcomes related to RP.

This aims of this current research study are detailed in Table 5 below.

Table 5: Aims of current study

Study aims:	Data gathering:
1. To identify the outcomes experienced by the practitioners involved in the program	<ul style="list-style-type: none"> • expected outcomes are listed within the CMO configuration table (Appendix 1) • practitioners' progress against the expected program outcomes was evaluated through pre and post intervention ratings on the CMO questionnaire (see Appendix 3) • progress against context specific model of RP was also measured using a scaling evaluation (see Appendix 11a for Centre A and 11b for Centre B)
2. To describe the extent to which practitioners perceive the mechanisms embodied within the RP program contribute to	<ul style="list-style-type: none"> • mechanisms within the program are listed in the CMO configuration table (Appendix 1) • data to be gathered through use of a post intervention CMO questionnaire (Appendix 3) completed by all practitioners involved in the intervention in two Children's Centres. Practitioners to rate extent to which outcome achieved prior to and post intervention and rate extent to which mechanisms have supported outcomes. • data also gathered through use of group feedback (see

<p>the promotion of RP</p>	<p>Appendix 4 for recording proforma) provided during group sessions in relation to factors (mechanisms or contexts) that practitioners perceive to have inhibited or enabled developments in RP. Information will be presented at a Centre level rather than at an individual level</p>
<p>3. To identify the contexts which practitioners perceive to impact significantly on their development of RP</p>	<ul style="list-style-type: none"> • contexts expected to influence practitioners' experience of the mechanisms and outcomes are listed in the CMO configuration table (Appendix 1) • data to be gathered through use of CMO questionnaire (Appendix 3) completed by all practitioners involved in the intervention in two Children's Centres. Practitioners to rate extent to which context influenced their experience of the mechanisms and outcomes. • data also gathered through use of group feedback (see Appendix 4 for recording proforma) provided during group sessions in relation to factors (mechanisms or contexts) that practitioners perceive to have inhibited or enabled developments in RP. Information will be presented at a Centre level rather than at an individual level.

5. Methodology

5.1 Rationale for use of evaluation methodology informed by Realistic Evaluation principles

This study utilised evaluation methodology, informed by RE principles, to explore the effectiveness of an intervention in supporting the development of RP amongst multi-

professional groups of staff within two Children's Centres. The literature regarding effective ways to support RP is found to be methodologically weak, as discussed above and summarised in Table 4. Therefore, there is a lack of coherent knowledge that can inform the planning and implementation of future interventions to support developments in this field. This study aimed to contribute to an understanding of what processes are supportive of RP, for whom and in what contexts. Evaluations informed by RE principles address the multi-faceted complexity of complex programs being implemented in complex social contexts. It allows theory to be tested and refined and ultimately aims to generate new knowledge about what works, for whom and in what contexts (Pawson & Tilley, 2001). Therefore, evaluation methodology informed by RE principles was considered to be able to address the gap that had been identified in the literature, that had so far been focussed largely on process models or subjective outcome models of evaluation (Hansen, 2005).

It was also particularly important that an evaluation methodology was selected that was sensitive to the contextual factors which influence a program's effectiveness as Children's Centres are known to be very complex and heterogeneous in nature (Dennis, 2004). Therefore an evaluation focussing on outcomes alone is likely to be a poor predictor of what would be effective in another Centre and would not highlight what processes might be effective in which types of contexts, whereas a Realistic approach to evaluation would.

5.2 Participants

15 Children's Centre managers (all Children's Centres) were given a written overview of the project (see Appendix 5) in the term before the project started. Selection of Children's Centres was based on the Centre Managers volunteering on behalf of their Centre. Centres were selected that were able to commit the necessary staff time, and were able to arrange dates for group sessions within the specified period for the project. Ethical considerations regarding the selection of Children's Centres are discussed further in subsequent sections. Although three Children's Centres were selected initially, one of these was not able to complete all sessions within the planned timescale for the study and so their details and results are not included in this report. Details and contextual information regarding the two Children's Centres that completed the project within the planned timescale are summarised in Table 6. It was initially planned for Centre A to act as a pilot study but, due to the need to rearrange the initial sessions with Centre A, and the loss of the third centre, the implementation of the intervention was no longer staggered, rather the sessions at Centre A and B were run in parallel.

Table 6: Contextual information regarding the selected Centres.

Contextual features:	Centre A:	Centre B:
Physical location	Purpose built Centre Located on school grounds in outskirts of Authority	Purpose built Centre Located off school grounds near Centre of Authority/town

Extent of previous discussions or training regarding reflective practice (reported by manager)	None	None
Extent to which centre discusses professional values	No stated centre values. Is aware of and aims to work within the Authority stated values.	No stated centre values. Is aware of and aims to work within the Authority stated values.
Salient features of local area/catchment	Located on outskirts of Authority/town. Only small proportion of local families from minority ethnic groups. Wide range in socio economic status of families using services.	Located near centre of Authority/town. Ethnically diverse location with high levels of deprivation. Most families using service are unemployed. High number of families using service being supported by social services.

Although the two Centres involved in the research project were different in some aspects (location, catchment) (see Table 6), this was not a concern as the approach to evaluation would help to identify the contextual factors which were supportive of the program mechanisms and outcomes.

Centre managers were asked to identify six practitioners to be involved in the research project, from a range of roles, professional backgrounds and levels of experience (selection criteria informed by Hawkins & Shohet, 1996). The roles of

practitioners are shown in Table 7 below. Although the direct involvement of the Centre managers was encouraged, as suggested by Gardner (2009), in both Centres A and B, they were not able to commit the time necessary. However, Centre managers were kept informed about the project and the focus of the collaborative problem solving sessions by the Trainee Educational Psychologist and by the practitioners involved in the project.

Table 7: Professional roles of staff involved in intervention

Staff involved in research project			
Centre A:		Centre B:	
a	Deputy Manager	a	Centre Teacher
b	Centre Teacher	b	SENCo
c	Childcare Practitioner Level 2	c	Family Support Worker
d	Childcare Practitioner Level 3	d	Family Support Worker
e	Senior Childcare Practitioner Level 3/SENCo	e	Childcare Officer
f	Health and Family Support Worker	f	Childcare Officer

The recruitment and selection of staff to be involved in the research project raised important ethical considerations which are discussed further in following sections (see Table 8).

5.3 Intervention design and rationale

The research project involved the selected practitioners from each centre attending two 'Introductory Sessions' focussed on developing a context specific model of RP and agreeing a set of core shared values. These were followed by six 'collaborative problem solving sessions', during which practitioners individually volunteered to donate problematic situations relating to their work in the Centre to discuss further with the group. Within these sessions a structured framework was used (Appendix 6), adapted from the model presented by Stringer et al (1992). A detailed overview of the intervention session content and details of the researchers that influenced particular aspects of the intervention design is provided in Appendix 7.

Not all staff were able to attend all sessions due to timetabling, staffing changes, sickness and leave. Only one practitioner (Centre A, practitioner b) missed one of the introductory sessions, however, the content of previous sessions was always revisited in subsequent sessions providing an opportunity for 'catch up'. The results for the individuals with multiple absences do not appear to be significantly affected by the absence, perhaps due to the 'catch up' arrangements. Appendix 8 provides information regarding the staff that attended each session for each centre.

One of the collaborative problem solving sessions at each centre had to be cancelled (session 3 in Centre A, session 5 in Centre B) and could not be rearranged with the result that the intervention consisted of two introductory sessions and five collaborative problem solving sessions.

5.4 Data collection

Data was gathered through various sources which were considered to ‘capture’ the relevant information in order to fulfil the stated aims of the research project (Pawson & Tilley, 2001). Further detail regarding the design and implementation of the data gathering methods used and information regarding rationale and limitations is provided below.

Practitioners were asked to put their name or initials on all of the evaluation data so that their responses could be collated but all data was anonymised for reporting. However, practitioners were made aware that they may be identified by colleagues working in the Authority as they would know the Centres that took part in the research project. The reader is referred to the EC2 ethics form for further information regarding use and storage of data (see Appendix 9).

5.4.1 Scaling evaluation

(see Appendix 11a for Centre A, and Appendix 11b for Centre B scaling evaluation proformas)

A scaling evaluation was used to measure progress towards what the practitioners understood to be RP. 10 point scales were assigned to each of the statements/dimensions within the context specific model of RP developed in each Centre during the Introductory sessions. See Appendix 9a for Centre A’s model of RP, and Appendix 9b for Centre B’s model of RP. The extreme points of the

evaluation scales were labelled 'I am never doing this' (1), I am always doing this' (10). Practitioners were asked to rate where they perceived they were on the scales at the end of each collaborative problem solving session (excluding the first session). Practitioners were able to demonstrate positive or negative movement along the scales as they rated their personal responses on the same evaluation scales each time.

Although practitioners recorded their personal responses on their own individual scales the activity was completed in the context of the group which may pose some threats to the validity of the data. However, practitioners were reassured that positive movement was not expected and that it was an understanding of their individual movement along the different dimensions that was of interest. The use of scales is potentially a highly subjective measure of progress, as only the end points were labelled. However, all statements had been discussed and agreed by practitioners during the Introductory sessions and the direction of movement was recorded in the results rather than numerical values.

It is suggested that measuring progress towards a context specific model of RP has greater ecological validity than the measurement of progress against a model derived from literature and research removed from the context. However, measurement against a context specific model of RP reduces the ability to generalise and compare progress across contexts, although this is not of interest here.

5.4.2 Group feedback

(see Appendix 4 for group feedback recording proforma)

Group feedback was anticipated to capture any unexpected processes or contexts practitioners perceived to enable or inhibit developments in RP (not included in the questionnaire). At the beginning of each collaborative problem solving session practitioners were asked to feedback on factors (any mechanisms or contextual factors) inside or outside of the group sessions that had inhibited or enabled their progress towards becoming increasingly reflective. The Trainee Educational Psychologist recorded the group feedback (using the proforma detailed in Appendix 4) and checked this back with the practitioners at the end of the discussion to ensure accuracy and avoid subjective interpretation on behalf of the Trainee Educational Psychologist. The feedback is presented in Table 11 in terms of contexts and mechanisms.

The process for gathering group feedback was considered to provide ongoing opportunities for practitioners to consider contexts and mechanisms that inhibited or enabled RP. It was expected that this would provide information to supplement questionnaire data and would raise practitioners' awareness of mechanisms and contexts prior to completion of the post intervention CMO questionnaire (discussed below).

Gathering of feedback in a group context required careful management to ensure that all practitioners felt able to share their individual views and to ensure that valid

data was gathered. As with focus groups, the group context can influence individual's responses (for example conforming to the majority view) and result in distorted data or an inaccurate representation of views. The range of professional roles of staff may also have an impact (for example, less qualified or experienced staff may be unsure of sharing their views with management present). Group rules were discussed and agreed during the first Introductory session and were referred to prior to gathering group feedback to support practitioners in feeling able to share their views in a secure group context.

5.4.3 CMO questionnaire

(see Appendix 3 for questionnaire)

The questionnaire was considered to be a time effective way to gather relatively rich information from practitioners regarding their experience of the intervention. A group interview or focus group was not considered to be a viable option as individual feedback on practitioners' personal experience of the intervention was required. The CMO questionnaire was based on the CMO configurations (see Appendix 1) which were informed by a review of the literature on supporting RP in educational settings. The questionnaire structure provides an innovative approach to gathering practitioners' views on their experience of the outcomes and the mechanisms and contexts that supported these.

The questionnaire design provided an opportunity for practitioners to retrospectively rate their progress towards the expected outcomes prior to and post involvement in

the intervention. This measured progress towards outcomes during the period of the project. It also required practitioners to rate the perceived usefulness of different mechanisms in supporting the outcomes and to rate the influence of certain contextual factors on the mechanisms. Space was provided for practitioners to add details of any outcomes, mechanisms or contextual factors that they had experienced but were not expected and so were not included on the questionnaire.

The questionnaire was completed by all practitioners present during the final collaborative problem solving session (session 6). Although practitioners were asked to record their responses on an individual questionnaire, the activity was completed within the group context. Again, this could result in practitioners not feeling able to record honest responses or in them being influenced by the responses of others. Practitioners were reminded that it was their individual experiences that were of interest and were reassured that there were no 'right or wrong answers'. The questionnaire was 'talked through' with the group to ensure understanding and accurate completion. This provided an opportunity for practitioners to ask questions to clarify their understanding of the evaluation format.

The questionnaire was lengthy in order to gather data regarding all of the CMO configurations and so it was expected that practitioners might rush in their completion of it and perhaps not fully consider their responses. However, there was adequate time planned within the final session in an attempt to prevent this. The use of a limited response (rating) reduced the richness of the data in comparison to the data

that could be gathered through interviews, although ratings were more specific than those used in previous studies (Tolsen et al, 2007). The reasoning behind practitioner responses was also not accessible for further exploration as it would have been in an interview, although practitioners were encouraged to annotate the questionnaire in an attempt to gather some of this additional information. Although the responses regarding supportive and unsupportive mechanisms and enabling or inhibiting contexts could be cross referenced with views gathered through the group feedback no other data sources were available for triangulation, reducing the reliability and validity of findings.

5.4.4 CMO interview

It was intended that RE informed interviews would be conducted with a purposive sample of practitioners who volunteered themselves from each Centre in order to gather richer qualitative information to further validate the program specification. No practitioners volunteered to take part in an interview. Reasons given for this were the lack of time (although Centre managers had agreed to give additional non contact time to two volunteering practitioners) and a reluctance to complete an interview informed by a RE approach after completing the questionnaire.

A RE informed interview would involve presenting the program specification (CMO configurations) to the practitioners and explaining the theory to them. Pawson & Tilley (2001) suggest that the researcher/evaluator engages in a teacher-learner process, where they 'teach' the practitioners about the theory and then invite them to

feedback on their experience of the program or intervention. This provides an insight into how the mechanisms supported the outcomes experienced by practitioners in a specific context, which is then reformulated as revised CMO configurations. These would then be presented back to the practitioners to confirm that they provide an accurate representation of how the program worked for them. Over time, and with subsequent applications of the program in context, a more detailed understanding of what works, for whom and in what contexts can be developed through gathering feedback from practitioners experiencing the program.

It was not possible to conduct interviews with all practitioners involved in this research project due to the real world limitations of time and resources (due to Centres having to cover staff and on the part of the researcher who was employed as a Trainee Educational Psychologist with a high allocation of schools to support). Therefore, volunteers were needed to form a purposive sample of practitioners who perceived they had a positive experience of the intervention (one from each Centre) and those who perceived they had a less positive experience (one from each Centre). Practitioners could not be selected during the negotiation stage as it was not known who would have a positive and less positive experience. In the case of this small scale research study it was not possible to allocate time for individual interviews with all practitioners but this may be usefully considered to increase the validity of future research findings.

5.5 Ethical considerations

This study was approved by the University's ethics board during the planning phase. Due to the nature of the research there are some ethical considerations that are worthy of discussion. These are summarised in Table 8 below. For further information regarding ethical considerations the reader is directed to Appendix 9.

Table 8: Ethical considerations and methods for addressing them.

Aspect of study	Ethical consideration	Methods for addressing ethical consideration
Recruitment of Children's Centres	Some Centres not having access to the intervention/ additional support	All centre managers had the opportunity to volunteer on behalf of their Centre. No Children's Centres were having a reduction in support, rather some were having a temporary increase so no Centres were actually 'losing out'. The findings from the study were to be used in informing the future delivery of Educational Psychology support to all Centres and so the project is anticipated to have a positive impact on all centres in the long term.
	Managers volunteering on behalf of setting	Managers who volunteered for their Centre to be involved were volunteering on behalf of the practitioners within their Centre. Although the Centre managers could provide informed consent or choose to dissent, practitioners could not. Managers were responsible for selecting practitioners to be involved in the group intervention. They were provided with information to share with them about the aims and structure of the intervention and it was agreed that involvement in all sessions would be during paid work time and would be considered to be part of professional development. It was suggested to managers that they could ask for volunteers. As practitioners did not provide truly informed consent (as they had a limited opportunity to dissent) they were informed that although they had been selected to be part of the group they could choose not to contribute to part or all of the group sessions if they wished (see Appendix 12 for script used). However, the sessions were facilitated to support maximum engagement.

Content of group sessions	Practitioners were asked to provide their opinion on practice and discuss topics which may be sensitive	It was agreed that practitioners were able to leave at any point if they did not feel comfortable taking part in the discussions and were also able to remain within the sessions but could choose not to contribute to discussions (see Appendix 12 for script used). Practitioners were encouraged to share suggestions regarding changes that could be made to the sessions to make them feel more able to contribute, using simple comment slips. No comments were made regarding changes in either Centre and in both centres all practitioners contributed to discussions (although to varying extents).
	Practitioners were encouraged to discuss aspects of their practice which were problematic, which may result in feelings of incompetence or threat.	Donation of a situation for discussion was always voluntary. Practitioners were encouraged to see the benefit of discussing problematic situations and were informed of the type of questions that would be asked before they volunteered a situation for further discussion. Discussion resulted in identifying positive ways forward so the process as a whole was considered to be empowering.
	Discussions may reveal concerns about practice in relation to safeguarding, competence or ethical practice.	Practitioners were made aware during the first session that if discussions raised concerns regarding safeguarding or ethical practice the manager would be made aware and it would be followed up in line with the Centre and Authority policy (see Appendix 12 for script used). It was agreed that individuals would be made aware through individual discussion if this was the case. This was agreed with managers.
	Discussions may involve discussion of work with colleagues or children and families.	In advance of discussions group rules were discussed and agreed so that all practitioners understood the need for confidentiality. When practitioners were discussing children and families they worked with they were asked not to disclose identifying information. Notes were made regarding the focus of discussions and agreed actions so as to support follow up discussions in subsequent sessions but no personal information was recorded on this form. Practitioners were reminded that they needed to conduct themselves in accordance with their professional guidelines throughout the sessions (see Appendix 12 for script used).

Providing feedback and completing evaluation scales/questionnaire/interview	Practitioners were asked to provide information about perceived developments and their experience of the intervention.	Completion of all evaluation methods was voluntary but time was provided for completion of all evaluation activities in sessions. Practitioners were encouraged to provide feedback and complete the questionnaires but they were informed that they could choose not to. Practitioners were given information about the safe storage of their data and were assured that they would be anonymous in the reporting of the study.
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6. Results

Results are presented below in relation to the different data gathering methods and in relation to the aims of the study.

6.1. Centre specific model of reflective practice (related to Aim 1)

During the first two introductory sessions the practitioners involved in each Centre agreed a Centre specific model of RP. At the end of the intervention, during the final collaborative problem solving session, these models were reviewed by the staff group and were amended as appropriate in line with changes in their thinking and understanding of RP. Changes and an analysis of these changes are summarised in Table 9. The initial models are presented in Appendix 10a and 10b, and the revised models are presented in Appendix 13a and 13b for Centres A and B respectively.

Table 9: Summary and analysis of the changes made to the Centre specific models of reflective practice at the end of the intervention.

	Centre A:	Centre B:
Summary of changes made to centre model post intervention	Changing of wording in existing statements to 'all individuals' instead of 'children' or 'families' to include staff in the statements. Addition of a new statement regarding effective communication between staff, children and families and the need to consider different perspectives.	No changes made
Analysis of changes made to centre model post intervention	Staff noted that many of their discussions were centred around relationships and communication between staff and the impact this has on their work with children and their families.	

6.2. Movement towards becoming increasingly reflective practitioners (related to Aim 1)

At the end of each collaborative problem solving session practitioners rated themselves, using evaluation scales (Appendix 11a and 11b), against each dimension of the Centre specific model of RP. 10 point scales were used (1=I am never doing this, 10=I am always doing this) as discussed in the data collection section of this paper. The direction of movement that is indicated in Tables 10a and 10b shows the direction of movement between practitioner's individual ratings (for example if a practitioner rated themselves as 6 at the end of session 1, and 8 at the

end of session 2, this would be marked with an upwards arrow to show positive movement between sessions). Not all practitioners were able to attend all sessions (see Appendix 8 for details). This accounts for the different number of arrows recording movement that different practitioners have. The final column in Tables 10a and 10b shows the overall direction of movement between each practitioner's first rating and their final rating.

Table 10a: Practitioner progress rated on evaluation scales for Centre A

↑ = positive movement (towards 10) on scale between ratings for consecutive sessions attended

↓ = negative movement (towards 1) on scale between ratings for consecutive sessions attended

→ = no movement, same rating for consecutive sessions attended

Dimension from model:	Practitioner:	Direction of movement between ratings:	Overall direction of movement:
1	Practitioners will always look back and make sense of their practice, learn from this and use this learning to effect future action		
	a	↓↑↑↑	↑
	b	→↑	↑
	c	→↑↑	↑
	d	↑↑	↑
	e	→↑↑↑	↑
	f	↑↓↑↑	↑
2	Practitioners will examine the purpose and reasons behind their actions and beliefs		
	a	↓↑↑↑	↑
	b	↑↑	↑
	c	→↑→	↑
	d	↑↑	↑
	e	→↑→↑	↑
	f	↑↓↑↓	↑

3	Practitioners will explore their experiences in order to lead to new understandings		
	a	↓↑↑↑	↑
	b	→↑	↑
	c	→↑↑	↑
	d	↑↑	↑
	e	↑→↑↑	↑
	f	↑↓↑↑	↑
4	Practitioners will be able to judge when a situation is beyond their knowledge and experience and will seek guidance/advice when appropriate in order to find new ways forward		
	a	↑↑↑↑	↑
	b	→→	→
	c	→↑↑	↑
	d	↑↑	↑
	e	→→↑→	↑
	f	↓↑↓↑	↑
5	Practitioners will look back on experiences and point out things that they have done wrong and point out things have gone well and identify solutions		
	a	↑→↑↑	↑
	b	↑↑	↑
	c	→→↑	↑
	d	↑↑	↑
	e	↑→↑↑	↑
	f	↑↑↓↑	↑
6	Practitioners will try to see things from another perspective or another person's point of view		
	a	↑→→↑	↑
	b	↑↑	↑
	c	→↑↑	↑
	d	↑↑	↑
	e	↑↑↑↑	↑
	f	↑↑↓↑	↑
7	Practitioners will think about their professional values and try to move their practice in line with these		
	a	↑↑↑↑	↑
	b	↑→	↑
	c	→↑→	↑
	d	↑↑	↑
	e	→↑↑→	↑
	f	↑↑→↑	↑
8	Practitioners will become more aware of what they are doing and how they are acting		
	a	↓↑→↑	↑
	b	↑↑	↑
	c	↑→↑	↑
	d	↑↑	↑

	e	↑→↑↑	↑
	f	↑↑→↑	↑
9	Practitioners will try to change things so that their practice improves		
	a	↑↑↑↑	↑
	b	→↑	↑
	c	→↑↑	↑
	d	↑↑	↑
	e	↑→↑↑	↑
	f	↑↑↑↑	↑

This shows that all practitioners made positive movement along each of the dimensions/statements of RP given in their model, apart from one practitioner (b) showing no movement along dimension 4. This practitioner placed themselves at the same point along the scale each time, although this positioning was one of their highest suggesting that perhaps this area of RP was relatively well developed prior to starting the course. The majority of practitioners made backwards movement or no movement along some dimensions at some point in their ratings, suggesting that progress was not always made in a positive linear fashion. The generally positive movement overall suggests that during the period of the intervention all practitioners were becoming increasingly reflective (based on their shared understanding of what it means to be reflective through use of a centre specific model of RP and evaluation scales).

Table 10b: Practitioner progress rated on evaluation scales for Centre B.

Dimension from model:	Subject:	Direction of movement between ratings:	Overall direction of movement:
1	Practitioners will look back and make sense of their practice, learn from this and use this learning to effect future action		
	a	↑↑↑	↑
	b	↑↑↑	↑
	d	↑↑↑	↑
	f	↑↑↓↑	↑
2	Practitioners will examine the purpose and reasons behind their actions and beliefs		

	a b d f	↑↑↑ ↑↑↑ ↑→↑ ↑↑↑→	↑ ↑ ↑ ↑
3	Practitioners will know that it is important to believe in what you do		
	a b d f	→↑↑ ↑↑↑ →↑↑ ↑↓↑↑	↑ ↑ ↑ ↑
4	Practitioners will listen to and consider advice from other professionals		
	a b d f	→↑↑ ↑→→ →↑↑ ↑↓↑↑	↑ ↑ ↑ ↑
5	Practitioners will try to see things from another perspective or another person's point of view when relevant		
	a b d f	→↑↑ ↑↑↑ →↑↑ ↑→↑→	↑ ↑ ↑ ↑
6	Practitioners will think about their experiences and practice and try to find new ways forward		
	a b d f	↑→↑ ↑↑→ →↑↑ ↑↓↑↑	↑ ↑ ↑ ↑
7	Practitioners will always question what they do, say, feel and believe		
	a b d f	→↑↑ →↑↑ →↑↑ ↑→↑↑	↑ ↑ ↑ ↑
8	Practitioners will become more aware of what they are doing and how they are acting		
	a b d f	↑→↑ ↑↑↑ →↑↑ ↑↑↑→	↑ ↑ ↑ ↑
9	Practitioners will try to change things so that their practice improves		
	a b d f	↑↑↑ ↑↑→ →↑↑ ↑↑→→	↑ ↑ ↑ ↑

This shows that all practitioners involved in Centre B showed positive progress overall along each of the dimensions of RP. This suggests that during the period of the intervention all practitioners were becoming increasingly reflective (based on their shared understanding of what it means to be reflective through use of a centre specific model of RP and evaluation scales).

6.3. Factors perceived to enable and inhibit developments in reflective practice (related to Aims 2 and 3)

At the start of each of the collaborative problem solving sessions group feedback was taken on factors that practitioners had experienced as being supportive of developments in RP both inside and outside of the group sessions (see Appendix 4 for recording proforma). These have been categorised as being either supportive or inhibiting mechanisms or supporting or inhibiting contexts, in relation to a Realistic approach to evaluation. The findings are summarised for each Centre in Table 11 below.

All group feedback comments have been included in Table 11. Comments have been grouped under different themes based on themes that emerged from the responses. Many of these themes relate to the literature reviewed at the beginning of this Chapter (Table 4).

Table 11: Mechanisms and contexts (experienced both within or outside of the group sessions) identified by practitioners as enabling or inhibiting developments in RP.

	Centre A:	Centre B:
Enabling mechanisms	<p><i>Support from external professional</i></p> <ul style="list-style-type: none"> • Discussion with outside perspective [external facilitator] to help think around problems • Going on courses and hearing other people talk about different ways of doing things gets you thinking • Observation of practice by an external professional with different priorities and perspective [health and safety audit] • Visits to other settings – seeing different ideas in action <p><i>Opportunities to discuss new ways forward with colleagues and hear their perspective</i></p> <ul style="list-style-type: none"> • Learning from other colleagues...discussing situations together <p><i>Planned time and structure for reflection on practice</i></p> <ul style="list-style-type: none"> • Individual performance management, setting and reviewing targets helps you think about practice and make improvements 	<p><i>Support from external professional</i></p> <ul style="list-style-type: none"> • Being able to talk about things and new ideas with someone external then try things out for yourself <p><i>Opportunities to discuss new ways forward with colleagues and hear their perspective</i></p> <ul style="list-style-type: none"> • Time and support to identify areas of development through discussing practice with colleagues <p><i>Planned time and structure for reflection on practice</i></p> <ul style="list-style-type: none"> • Having time set aside and an agenda so you don't do other things...like this group

	<p><i>Discussion of problematic situations</i></p> <ul style="list-style-type: none"> • Discussions focussed on difficult situations are particularly useful – it's hard to think of new things to try on your own 	
Inhibiting mechanisms	<p><i>Planned time and structure for reflection on practice (lack of)</i></p> <ul style="list-style-type: none"> • Not having time all together outside of the group to carry on discussing things • Informal unplanned planning meetings – you don't have chance to think about things properly • Structured non-contact time – you have to get through your to do list before you can even think about what you're doing or why you're doing it <p><i>Discussion of situations/practice in a group (lack of)</i></p> <ul style="list-style-type: none"> • Working alongside lots of part time staff/different shift patterns – don't get to see each other from one day to the next...you don't get time to reflect and plan together you just have to get on and deliver the activity, then the next time you see them is when you're starting the activity again 	<p><i>Planned time and structure for reflection on practice (lack of)</i></p> <ul style="list-style-type: none"> • Taking on too many new ideas/projects at once...you just need to focus on one or two things at a time • Competing priorities <p><i>Lack of time for planning and implementing new ways forward</i></p> <ul style="list-style-type: none"> • Not having time to try things out...if you never put your ideas in to practice you eventually stop thinking about new ways of doing things <p><i>Discussion of situations/practice in a group (lack of)</i></p> <ul style="list-style-type: none"> • Being left to think about things on your own all the time • Different shifts and rooms means you can't talk with people about things and get their thoughts

Enabling contexts	<p><i>Supportive group context</i></p> <ul style="list-style-type: none"> • Discussion in a group of people you know • Group discussions with colleagues you have a good rapport with...you can just talk more easily about things then • Visiting other settings as a group so you can discuss as you see things 	<p><i>Flexible physical environment</i></p> <ul style="list-style-type: none"> • Working in a flexible [physical] environment – means that you have more options to try different things out and see how they go
Inhibiting contexts	<p><i>Lack of shared understanding in group</i></p> <ul style="list-style-type: none"> • Working with people outside the group [but within same Children's Centre] who don't have the same understanding of reflective practice • Discussing practice in groups with people [working within same Children's Centre] with completely different values • Working with people [within same Children's Centre] who don't seem to care about reflective practice and don't understand why it's important <p><i>Lack of time to reflect</i></p> <ul style="list-style-type: none"> • Not having time to just sit down together • Doing different things all the time – you don't get chance to think about the same thing deeply over time, you just have to switch from one thing to another and before you know it you are doing it in the 	<p><i>Lack of time to reflect</i></p> <ul style="list-style-type: none"> • Having no time to stop and think • Having multiple roles – constantly moving from one thing to the next with no time

	<p>same way you always have</p> <ul style="list-style-type: none">• Not working in the same room as other colleagues stops you chatting about things as they happen, you don't always remember after	
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Supportive mechanisms tended to be focussed around: the support of an external professional; opportunities to gain colleagues' perspectives to help identify new ways forward; planned time committed to reflections on practice and the discussion of problematic situations. Discussion of problematic situations being the only theme not to be mentioned by both Centres. Similar themes emerged in relation to inhibiting mechanisms: the lack of planned time and structures to support RP and the lack of opportunity to discuss practice and plan new ways forward with colleagues. Several staff identified 'being left' to reflect on practice alone as an inhibiting factor. Interestingly, one practitioner in Centre B noted that time for implementing changes in addition to reflecting on practice and identifying new ways forward was important.

In terms of enabling contexts, most comments were regarding the provision of a supportive group context. Whilst the majority of comments regarding inhibiting contexts were related to a lack of time committed to reflections on practice, comments were also made regarding the negative influence that groups comprising individuals with different levels of understanding and value of RP (working within the same Children's Centre) have on developments in RP.

6.4. CMO questionnaire responses

All practitioners from Centre A and four out of six practitioners from Centre B (a, b, d, f) completed the end of project evaluation. Due to the real world limitations of this research it was not possible to rearrange the final evaluation session within the timescale available for the project so that all staff could attend (as discussed in the

data collection section of this paper). A summary of the CMO evaluation responses for Centre A and B are shown in Appendix 14a and 14b respectively. The results are presented as a summary with individual practitioners' ratings grouped to provide feedback on a Centre basis. Using the Centre as the unit of analysis rather than the individual has the limitation of losing the detail of individual outcome patterns, however it provides a useful insight on the mechanisms and contexts that are considered to be important in supporting RP for the majority of respondents in these two settings. Key findings from the results for each Centre are summarised below.

6.4.1. Outcomes experienced (related to Aim 1)

The progress made against expected outcomes for practitioners in Centre A and B are detailed in the results summary tables in Appendix 14a and 14b respectively. In Centre A, at least four out of six practitioners rated themselves as making at least one level of progress against all of the expected outcomes. All practitioners in Centre A (not including those that had rated the outcome as fully achieved pre intervention) made at least one level of progress against outcomes 8, 13, 14 and 15 (see Appendix 14a for details of outcomes and responses). Progress against outcomes was not as significant for practitioners in Centre B. There were no outcomes against which all respondents made progress. Two practitioners (half of respondents) rated themselves as making progress against 10 out of the 15 expected outcomes and at least one respondent rated themselves as making progress against all of the outcomes, other than outcome 15, towards which no practitioners in Centre B made progress. This outcome is related to practitioners'

knowledge of processes that will support further development of RP, suggesting that although some progress was made, progress would not be continued without ongoing support.

6.4.2. Perceived impact of mechanisms (related to Aim 2)

Table 12 provides a summary of the mechanisms that were rated as making a significant contribution to the outcomes by the majority of practitioners in each Centre. Many of the supportive mechanisms identified involved collaborative discussion, questioning of specific elements of practice by others and sharing of different perspectives. Practitioners in Centre B, in general, rated less of the mechanisms as having a 'significant' impact on their experience of the outcomes than practitioners in Centre A (see Table 12). This may provide an explanation for their lower level of progress against the outcomes. However, the mechanisms identified in Table 12 are ones which are rated as making a 'significant' contribution by the majority of practitioners (more than half) but as only four practitioners completed the evaluation in Centre B (compared to six in Centre A) the findings from each setting are not directly comparable in this way. Two practitioners in Centre B frequently rated themselves as making no progress during the period of intervention against several outcomes. It would be really useful to compare their feedback of their experience through an interview with that of practitioners who consistently rated themselves as making at least one level of progress.

Table 12: Summary of CMO questionnaire results: mechanisms perceived to be most supportive of outcomes related to RP

	Centre A:	Centre B:
Mechanisms rated as making significant contribution to outcomes related to RP by more than half of respondents	<ul style="list-style-type: none"> • Opportunities for collaborative discussion of values and use of voting system to develop set of shared core values for centre • Questioning of practice in group sessions to identify exceptions • Questioning of practice to identify alternative perspectives on situation as part of a multi-professional group • Questioning of practice by others in group session to identify if similar problematic situations have been encountered and successfully resolved in the past • Other practitioners sharing their views and experiences within the group sessions • Collaborative problem solving to identify ways of bringing practice more in line with shared core values • Participation in the collaborative problem solving process • Group session focussing on reflecting on the centre model of reflective practice and set of shared core values 	<ul style="list-style-type: none"> • Opportunities for collaborative discussion of possible dimensions related to RP • Other practitioners sharing their views and experiences within the group sessions

The majority of the mechanisms embodied within the program/intervention have been rated by the majority of practitioners in both settings as providing at least some support to their experience of the outcome (see results summary tables, Appendix

14a and 14b). In Centre A only three mechanisms (sharing examples of values, collaborative discussion of values and questioning of practice to identify alternative perspectives) were rated as being unhelpful/hindrance by one practitioner. None of the mechanisms were rated as unhelpful/hindrance by any of the practitioners in Centre B.

6.4.3. Perceived impact of contexts (related to Aim 3)

Table 13 provides a summary of the contexts that were rated as being supportive of the mechanisms and outcomes by the majority of practitioners in each Centre. The majority of the contexts identified as being most supportive of RP by the majority of practitioners were the same in both Centres, and include nearly all contexts embodied within the CMO configuration. The context of having supportive and trusting relationships between group members and discussing practice in multi-professional groups was frequently cited as a supportive context for many of the mechanisms and outcomes. Some of the contexts listed as being supportive of RP are related to qualities or experiences of the practitioners, some are related to the Centre provision and some are a context provided by the intervention (these have been identified in Table 13).

In Centre A only two contexts were rated by a majority of practitioners (four) as having no impact on the mechanism or outcome (framework provided for written recording and the extent to which Centre management encourages practitioners to identify what factors have supported their development). None of the contexts were

rated as having no impact by the majority of practitioners in Centre B. This suggests that overall the contexts identified within the CMO configuration/program specification had the expected impact on the mechanisms and outcomes.

Table 13: Summary of CMO questionnaire results: contexts perceived to be supportive of outcomes and mechanisms related to RP

	Centre A:	Centre B:
Contexts rated as supportive of RP by more than half of respondents	<p><i>Contexts related to intervention:</i></p> <ul style="list-style-type: none"> • Group containing practitioners from different roles, backgrounds and experiences • Time protected to reflect on values and practice • Practitioners have positive relationship with facilitator • A framework is provided for recording changes/progress and time is available for this <p><i>Contexts related to Centre:</i></p> <ul style="list-style-type: none"> • Positive and trusting relationships between practitioners in group • Centre environment is supportive of the identification of areas for development • Centre has an ethos of positive thinking and optimism • Centre promotes blame free approach to reflection on practice • Centre encourages practitioners to reflect on experiences that are positive and not so positive • Centre has set of shared values • Time protected to reflect on values and practice 	<p><i>Contexts related to intervention:</i></p> <ul style="list-style-type: none"> • Group containing practitioners from different roles, backgrounds and experiences • Time protected to reflect on values and practice • Practitioners have positive relationship with facilitator • A framework is provided for recording changes/progress and time is available for this <p><i>Contexts related to Centre:</i></p> <ul style="list-style-type: none"> • Positive and trusting relationships between practitioners in group • Centre environment is supportive of the identification of areas for development • Centre has an ethos of positive thinking and optimism • Centre encourages practitioners to reflect on experiences that are positive and not so positive • Centre has set of shared values • Time protected to reflect on values and practice

	<ul style="list-style-type: none"> • Centre values support and challenge from external professionals • Practitioners co-located • Management are perceived to value the input of all staff on the development of centre practice, policies and guidance • Practitioners feel that their views are valued <p><i>Contexts related to practitioners:</i></p> <ul style="list-style-type: none"> • Practitioners have a positive attitude towards research and the contribution it can make to practice <ul style="list-style-type: none"> • Practitioners recognise benefit of identifying difficulties to support professional development • Practitioners confident to share their views with others • Practitioners are experienced in discussing values • Practitioners understand how values inform practice • Practitioners perceive that informing centre practice, policy and guidance is part of their role 	<ul style="list-style-type: none"> • Centre values support and challenge from external professionals • Practitioners co-located • Management are perceived to value the input of all staff on the development of centre practice, policies and guidance • Practitioners feel that their views are valued • Practitioners are encouraged by management to identify what factors have supported their development <p><i>Contexts related to practitioners:</i></p> <ul style="list-style-type: none"> • Practitioners have a positive attitude towards research and the contribution it can make to practice • Practitioners familiar with collaborative dialogue as a process to support development • Practitioners recognise benefit of identifying difficulties to support professional development • Practitioners confident to share their views with others • Practitioners are experienced in discussing values • Practitioners understand how values inform practice • Practitioners perceive that informing centre practice, policy and guidance is part of their role
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6.4.4. Additional outcomes, mechanisms and contexts experienced (related to aims 1, 2 & 3)

Several of the practitioners in Centre A added additional CMO configurations based on their experience of additional outcomes that were not expected as a result of the intervention. These are detailed in Table 14. No practitioners in Centre B added additional CMO configurations.

Table 14: Additional outcomes, mechanisms and contexts experienced by practitioners in Centre A.

Additional Outcomes Experienced:	Mechanisms:	Contexts:
Understanding other people's roles and feelings	Group discussions	Group consisting of people with different roles and experiences
Having the evidence and support to take ideas for change within the centre to higher management	Group discussions about problematic issues	Extent to which the management values change and responds to problematic situations
Gained insight into other people's roles	Group discussion	Group contains a mixture of roles
Being aware of other people's views and values	Group discussion	A well balanced mix of professionals in the group
Gained a better understanding of family support role	Contributions in group discussion	Group containing mixture of other roles

6.5. Additional comments related to involvement in research project

As part of the CMO questionnaire, practitioners were also asked to record any additional comments they wished in relation to their involvement in the project generally. The responses are recorded in Table 15 below.

Table 15: General comments made by practitioners in relation to research project.

Centre A:	Centre B:
<ul style="list-style-type: none"> • Really enjoyed having time to discuss and have time with members of the team I wouldn't usually get chance to talk with • Evaluation very confusing! • Discussions very useful • Overall, research found useful for reflection • Was really informative talking about, discussing and reviewing problematic issues from a variety of different perspectives relating to different job roles • Gave me personally the evidence to approach management to identify issues that needed resolving to enhance staff morale and change within the centre • Valued being given the time and opportunity to reflect with other knowledgeable professionals and sharing experiences in a group situation • It has made me more aware of what is involved in reflective practice and the impact it can have individually for the centre as a whole 	No additional comments given

These additional comments made by practitioners only in one Centre, suggest that their experience of the intervention overall was positive. One comment was made

regarding the evaluation being confusing. This is discussed further in the discussion section below.

7. Discussion

Within this section there will be a discussion of the key findings in relation to the aims of this study and relevant research. Following this a reflection on the use of a RE informed evaluation will be provided before conclusions are summarised.

7.1 Key findings

The findings from the current study are now discussed further in relation to the stated aims of the study and in relation to the research regarding the development of RP.

7.1.1 Outcomes experienced

Outcomes were measured through use of evaluation scales based on the Centre specific models of RP agreed in the Introductory sessions, and through use of the CMO questionnaire, on which practitioners rated the extent to which they had achieved the outcomes (embodied within the CMO configuration informed by previous research findings) prior to and on completion of the intervention (retrospectively). All but one practitioner involved in the intervention made positive progress overall along all of the dimensions of RP contained within their Centre specific model. This suggests that during the period of intervention all practitioners

perceived they were engaging in behaviours or cognitive processes that represented their shared understanding of RP for more of the time.

Some practitioners' self evaluation ratings showed negative movement between some sessions. Informal discussions after sessions revealed this was mostly due to practitioners' increased understanding of what RP meant to them. As they became more aware they realised they were not being as reflective as they thought. This relates to the opinion of Scanlan & Chernomas (1997) who suggest that practitioners often think they are being reflective when they are not. It could suggest that the intervention supported practitioners to become more aware of the concept and purpose of RP. Morley (2007) and Gardner (2009) suggest that having an understanding of RP and its purpose is important in supporting developments in RP. In Centre A this finding is also supported by the changes made to the Centre specific model at the end of the intervention. Practitioners had refined their understanding of RP which resulted in amendments to the model.

Overall many of the practitioners in both Centres also made progress against the outcomes stated within the CMO configurations/program specification which are suggested by previous research to be related to RP. Practitioners in Centre A made more progress overall than those in Centre B, although the mechanisms and contexts were mostly rated by practitioners in Centre B as being supportive of the outcomes. Interviews informed by RE principles may have been of value here to explore further the differences in outcome ratings. It must also be considered that

the results presented here are based on self ratings of practitioners' perceptions of their changes in thinking and practice (espoused theories). It might be useful for future evaluations to consider changes in both practitioners' espoused theories and their theories in action (Schon, 1983), gathered through self rating in addition to observations of practice. The absence of a control group also limits conclusions.

7.1.2. Perceived support of mechanisms

Through use of the CMO questionnaire, the majority of practitioners in both Centres rated the majority of mechanisms embodied within the intervention as either making a significant contribution to the practitioners' experience of the outcomes or making some contribution. However, practitioners in centre A rated more of the mechanisms as making a significant contribution than practitioners in Centre B which may account for the differences in progress against expected outcomes. In both Centres the mechanisms of collaborative discussion, questioning of specific elements of practice by others and sharing of different perspectives were considered to have a highly significant impact on different outcomes by at least half of the respondents which supports earlier findings (Burchell & Dyson, 2005; Potter & Hodgson, 2007; Santaro & Allard, 2008). Additional information regarding mechanisms that were considered to be supportive of RP was gathered through the group feedback during the collaborative problem solving sessions. The findings here are supportive of the findings in previous studies. Supportive mechanisms tended to be focussed around: the support of an external professional (identified by Morley, 2007); opportunities to gain colleagues' perspectives to help identify new ways forward (identified by Hart,

1996); planned time committed to reflections on practice and the discussion of problematic situations (Schon, 1983, Evans, 1995).

7.1.3. Perceived impact of contexts

In Centre A only two contexts embodied within the program specification (provision of a framework for written recording, and the extent to which Centre management encouraged practitioners to identify what factors have supported their development) were rated by a majority of practitioners (four) as having no impact on the mechanism or outcome. None of the contexts were rated as having no impact by the majority of practitioners in Centre B. This suggests that overall the contexts embodied within the program specification had the expected impact on the mechanisms and outcomes and were supportive of developments in RP. The majority of respondents consistently rated the nature of relationships between group members and the presence of practitioners with different roles as having an impact on the program mechanisms. This supports Morley's (2007) findings which highlighted the need for a safe and supportive context to reflect openly on practice. As the Centre managers selected staff to be involved in this study it is likely that they were practitioners that the Managers were confident would engage positively in the project. Therefore, in both settings all practitioners felt that the trusting and supportive relationships within the group were supportive of several mechanisms. This has implications for the implementation of the intervention in other less established and supportive groups but also has implications for the increasing research exploring the use of electronic RP groups (Galanouli & Collins, 2000), where there is little opportunity for building

personal supportive relationships, and the use of group consultation networks across schools (Bozic & Carter, 2002).

Additional information regarding contexts that were considered to be supportive of RP was gathered through group feedback during the collaborative problem solving sessions. Most comments regarding enabling contexts were again regarding the provision of a supportive group context. The need for protected time for reflection in a group context was also consistently highlighted by practitioners in both Centres throughout the intervention as being an important contextual factor. This is supportive of the Children's Centre Practice Guidance (DfES, 2006) that states the importance of whole team discussions despite the recognised practical difficulties. One practitioner stated during a session that one of the most important roles of the facilitators was arranging dates and being there to protect the time and space for reflection. Whilst facilitation of the group intervention is considered to be a program mechanism, it may also relate to an important contextual factor if it provides security to time protected for RP. Another inhibiting context was discussion in groups comprising individuals with different levels of understanding and value of RP, again providing support for previous findings which suggest there is a need to develop a shared understanding of RP (Morley, 2007; Gardner, 2009). Although useful information is provided regarding the contexts that were particularly supportive of the outcomes, it is expected that further information regarding the practitioners' experience of the intervention, gathered through interviews, would have supported a more detailed insight. This needs to be considered in future evaluations.

In addition to the contexts and mechanisms appearing to support the expected outcomes, several practitioners in Centre A experienced additional outcomes that were not expected as a result of the intervention. They mostly related to experiencing an increased understanding of other people's roles through engaging in discussions about practice and sharing experiences. Other outcomes included an increase in evidence of the need for developments and change in certain areas of practice/policy as a result of having professionals together discussing problematic issues that would not otherwise have been explored. This demonstrates the general value of practitioners spending time together sharing their experiences but also highlights the importance of evaluations seeking to uncover the full experience of the practitioners engaged in interventions, rather than only measuring expected outcomes (Pawson & Tilley, 2001).

7.2. Reflections on the use of evaluation informed by Realistic Evaluation principles

Practitioners appeared overwhelmed when the end of project CMO evaluation questionnaire was shown to them. Evidence for this assertion was gathered through observations of body language and comments made by practitioners during the evaluation session and whilst completing the questionnaire. However, in general practitioners appeared to understand the relevance of the detailed approach to evaluation and "why it is important". In fact, several of the practitioners involved stated that the evaluation process contributed to their development, in terms of helping them to think about what was helpful to them in moving forward.

The questionnaire, designed to gain practitioner views on their experience of the CMO configurations, was considered to be a useful method of gaining an insight into the experiences of the practitioners. However, without additional information gathered through a RE informed interview, the insight remained limited. It provides some useful information which could inform the future implementation of the intervention, particularly regarding the contexts which would support its effectiveness. It also provides support for many of the findings revealed in previous studies which had little support through systematic evaluation previously (see Table 4). These findings are based on the implementation of the intervention in two specific contexts and further implementation would be needed to continue to develop the knowledge about what mechanisms are supportive for whom and in which contexts. As a RE informed approach to evaluation is likely to be outside of the experience of many educational practitioners, consideration needs to be given to how it is introduced and how their views are gathered. Whilst a Realistic interview may be more accessible to practitioners not familiar with a RE approach, it has significant implications in terms of the time needed to be built in to the program costing.

8. Conclusions

This study utilised RE principles to design, implement and evaluate an intervention planned to support the RP of practitioners in two Children's Centres. The design of the intervention was based on findings from previous research studies regarding outcomes associated with RP, and the mechanisms and contexts that were expected to be supportive of RP. The findings, based on practitioners' perceptions, suggest

that the intervention, utilising a collaborative problem solving framework, was supportive of developments in RP and highlight several mechanisms (collaborative discussion, questioning of specific elements of practice by others and sharing of different perspectives) and contexts (supportive relationships between practitioners in group and groups containing practitioners from different professional role) that were perceived by practitioners to be supportive of outcomes related to RP. This study provides a systematic approach to the evaluation of supportive mechanisms and contexts and has provided support for the findings of previous studies. It is suggested that evaluations informed by RE deserve greater attention within the field of RP and could support the systematic evaluation of interventions in the future.

The validity and reliability of findings revealed in this evaluation could be further developed through the use of Realistic interviews, but as discussed these have implications for time and costings. In addition, future studies could usefully explore methods of effectively measuring developments in RP. This, like many other studies, relied on practitioner perceptions of development, although this study did follow the advice of Forde et al (2006) and supported the development of a context specific mode of RP which was used to measure progress. By carefully evaluating both the expected and unexpected outcomes of interventions, a more accurate understanding of effectiveness, value and cost effectiveness can be developed. All of which are particularly important in this climate of increasing accountability (Timmins & Miller, 2007). Contribution to research and evaluations in the field, as well as to the facilitation of interventions aimed at supporting RP, are considered to be potential roles for Educational Psychologists.

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Appendix 1 - CMO configurations/program specification

	Expected Outcomes	Mechanisms	Contexts
1	Practitioners have an understanding of what reflective practice means to them in their work (Morley, 2007; Gardner, 2009)	Sharing literature on definitions and models of reflective practice (Morley, 2007; Bold, 2008)	Practitioners have positive previous experience of research and exploring research literature
2	Practitioners are able to identify when they are being a reflective practitioner and what they need to do to become an increasingly reflective practitioner (Larrivee, 2008)	Sharing literature on definitions and models of reflective practice (Morley, 2007; Bold, 2008) Opportunities for collaborative discussion of possible dimensions of reflective practice Development of a centre specific model of reflective practice (Forde et al, 2006)	Practitioners have a positive attitude towards research and the contribution it can make to their practice Practitioners have trusting and supportive relationships (Morley, 2007; Potter & Hodgson, 2007; Bold, 2008; Santaro & Allard, 2008) The centre places emphasis on collaborative dialogue and therefore practitioners are familiar with this as a process for supporting development
3	Practitioners are able to articulate their professional values and understand how these influence their practice (Bold, 2008; Gardner, 2009)	Sharing examples of professional values Opportunities for collaborative discussion of values and use of voting system to develop set of shared core values for centre	Practitioners have trusting and supportive relationships The centre places emphasis on collaborative dialogue
4	Practitioners are able to identify and explore problematic situations and reflect on their thinking and practice in relation to these (Potter & Hodgson, 2007; Bold, 2008)	Articulation of real problematic situations during group sessions using set framework (Hart, 1996; Morley, 2007; Bold, 2008)	Centre environment (in terms of professional development practices and general ethos) is supportive of the identification of areas for development Practitioners perceive the benefit of identifying things they find more difficult in terms of their professional development (Morley, 2007)
5	Practitioners are able to identify the	Questioning of practice in group sessions to	Centre has an ethos of positive thinking and optimism

	positive aspects of problematic situations (exceptions) and use these to develop positive ways forward (Morley, 2007)	identify exceptions	
6	Practitioners are able to view problematic situations objectively and gain insight from seeing situations from different perspectives (Hart, 1996; Santaro & Allard, 2008)	Questioning of practice to identify alternative perspectives on situation as part of a group (Santaro & Allard, 2008)	Group contains practitioners from different professional roles and experiences Practitioners are confident in sharing their views in group
7	Practitioners are able to identify how their actions can reinforce problematic situations (Hart, 1996)	Questioning of practice to identify alternative perspectives on situation supported by group	Centre promotes a blame free approach to reflecting on practice Practitioners have trusting and supportive relationships (Morley, 2007; Potter & Hodgson, 2007, Bold, 2008; Santaro & Allard, 2008)
8	Practitioners are able to learn from looking back on previous successful experiences and apply this knowledge to identify positive ways forward in different problematic situations (Schon, 1983)	Questioning of practice by others in group session to identify if similar problematic situations have been encountered and successfully resolved in the past Practitioners sharing their views and experiences with each other within the group sessions (Potter & Hodgson, 2007)	Centre encourages practitioners to reflect on experiences that are both positive and not so positive and to learn from this Practitioners have trusting and supportive relationships (Morley, 2007; Potter & Hodgson, 2007; Bold, 2008; Santaro & Allard, 2008) Group contains practitioners from different professional roles and experiences
9	Practitioners are able to identify and articulate the values underpinning current practice (Hart, 1996; Burchell & Dyson, 2005; Bold, 2008; Gardner, 2009)	Questioning of current practice in group context to understand the values underpinning it (Burchell & Dyson, 2005)	Centre has stated values prior to the research process Practitioners are experienced in identifying and discussing values
10	Practitioners are able to highlight inconsistencies between practice and shared core values and can understand how this can result in dissatisfaction with	Questioning in group context to identify if current practice is inconsistent with shared core values in group sessions	Practitioners have experience of identifying and discussing values Practitioners have trusting and supportive relationships

	practice (Gardner, 2009)		(Morley, 2007; Potter & Hodgson; Morley, 2008; Santaro & Allard, 2008)
11	Practitioners are able to identify ways of bringing their practice more in line with their values (Gardner, 2009)	Collaborative problem solving to identify ways of bringing practice more in line with shared core values	Practitioners have an understanding of how values inform practice Time available for practitioners to reflect on both values and practice (Potter & Hodgson, 2007)
12	Practitioners are able to ask themselves and other practitioners questions which encourage reflection on practice (Bold, 2008)	Modelling of questioning by facilitator (Trainee Educational Psychologist) in group context Structured/written framework to prompt collaborative discussion (Potter & Hodgson, 2007)	There is a positive relationship between the facilitator (Trainee Educational Psychologist) and practitioners (Morley, 2007) The Centre values support and challenge from external professionals Time is available for reflecting on practice outside of group sessions (Potter & Hodgson, 2007) Practitioners are physically co-located so they are able to work together and discuss practice
13	Practitioners are able to recognise how reflection on one aspect of practice can inform changes in wider practice (for example, the need for policy amendments, changes to practice guidance and the need for further staff development/training) (Gardner, 2009)	Specific discussion about broader implications of reflections on practice within group sessions (Gardner, 2009)	Management are perceived to value the input of all staff on the development of policies and centre guidance (Morley, 2007; Gardner, 2009) Practitioners perceive that informing policy and practice at a centre level is part of their role
14	Practitioners' reflections on practice consistently lead to changes in their practice (Potter & Hodgson, 2007; Gardner, 2009)	Participation in the collaborative problem solving process Opportunities to share experiences with other practitioners (Potter & Hodgson, 2007)	Time is available to consider changes in thinking and practice outside of group sessions (Potter & Hodgson, 2007) Group contains practitioners from different professional roles and experiences

		<p>Written recording of individual's perceived changes in thinking and/or practice resulting from the process</p> <p>Structured verbal feedback regarding changes actually made in thinking and practice and the impact of these changes</p>	<p>Time is available to record changes</p> <p>Framework is provided for written recording</p> <p>Framework is provided for verbal feedback</p> <p>Practitioners have trusting and supportive relationships (Morley, 2007; Potter & Hodgson, 2007, Morley, 2008; Santaro & Allard, 2008)</p>
15	Practitioners are confident in knowledge of processes that support further development in reflective practice (Larrivee, 2008)	<p>Group discussion regarding impact of sessions on practitioners' understanding and development of reflective practice</p> <p>Group session focussing on reflecting on the centre model of reflective practice and set of shared core values</p>	<p>The Centre/management encourage practitioners to identify factors that support their development</p> <p>Time available for practitioners to reflect on practice and values in and outside of group sessions (Potter & Hodgson, 2007)</p> <p>Practitioners feel that their views are valued (Morley, 2007)</p>

Appendix 2 – Overview of findings and limitations of group consultation and collaborative problem solving processes

Study focus/design:	Findings/discussion:	Limitations of evaluation methodology:	Implications for future research/program theory:
Stringer et al (1992) Supported the implementation of consultation groups in schools to promote problem solving.	Teachers perceived groups to be effective and felt that they provided support, reduced isolation and reduced stress.	The effectiveness of the groups was evaluated through use of teachers' subjective perceptions. Their views were gathered through use of a postal questionnaire. However, the particular processes within the groups which provided the support were not identified. The evaluation was therefore focussed on outcomes (as judged by teachers) rather than the process.	Perceived to be a source of support but lack of evidence to support whether or not the groups support changes in thinking and/or practice.
Hawkins & Shoet (1996) Provides suggestions for forming peer and group supervision groups based on review of literature and their own experience.	Groups comprising individuals with different professional roles but from similar theoretical positions are most effective. Multi-professional groups supports discussion of different perspectives. Maximum group of 7 suggested.	Propose suggestions for facilitating individual, group and peer supervision based on their experience and on a review of the literature. No evaluations given.	Use of multi-professional groups (context) may support discussion of different perspectives (outcome) through structured group discussion (mechanism).
Forest & Pearpoint (1996) Presented a model named 'Solution Circles' to support group problem solving	Requires a facilitator to support the process. Emphasises the importance on drawing on the skills that already exist within groups and organisations to help move 'stuck' situations forward.	Model proposed but no evaluations of its application to practice are provided.	The need for processes to be supported by a structure and facilitator.

<p>Bozic & Carter (2002) Educational Psychologists set up and trained school staff to facilitate their own consultation groups.</p>	<p>Teachers found the process to be supportive. 92% of respondents to questionnaire stated that the groups supported them in thinking more deeply about their work. 64% of respondents stated that the groups supported changes in their practice.</p>	<p>Gained views of teachers regarding the impact of the groups through use of a questionnaire. 84% response rate achieved. Conclusions based on teacher's views about changes in thinking and practice (espoused theories) rather than measures of actual thinking and objective measures of practice (theories in action). Evaluation methodology does not identify what it was about the process that supported development.</p>	<p>Need for future studies to consider measures of both espoused theories and theories in action. Need for future studies to evaluate the impact of the specific processes/mechanisms within consultation groups which led to positive outcomes.</p>
<p>Bahr et al (2006) Developed a 'creative problem solving model' for use in school settings.</p>	<p>Emphasised four important phases in group problem solving process; understanding the challenge, generating and selecting interventions, action planning and follow up evaluation of impact.</p>	<p>Model proposed but no evaluations of its application to practice are provided.</p>	<p>The need to plan opportunities to revisit discussions to evaluate the impact of problem solving on practice. Ensure adequate time and support is provided to understanding the problematic situation fully before planning interventions.</p>
<p>Dowd & Thorn (2007) Educational Psychologists facilitated consultation groups across schools using discussion of problematic situations.</p>	<p>Staff reported that the time commitment was difficult and they initially found the collaborative process difficult to adjust to. 74% of questionnaire respondents stated that the consultation groups were helpful.</p>	<p>Data gathered through use of questionnaires. 75% response rate. The evaluation does not identify the particular mechanisms that were supportive of the positive experience of the groups. Evaluations do not attempt to measure impact of groups on changes in thinking or practice, rather they focus on the level of perceived support provided to staff.</p>	<p>Need for future evaluations to identify the impact of consultation groups (outcomes) as well as identify the processes that support the outcomes (mechanisms) and the contexts in which these are effective (contexts).</p>

Appendix 3 – Post intervention CMO questionnaire

I would like to take this opportunity to thank you again for your participation in the research project. It has already provided me with some really useful information about the processes that support the development of reflective practice in your setting.

As you already know from the discussions we had in the introductory sessions I feel it is really important to get your personal views on whether you have found this process supportive, how it has supported you in terms of developing your thinking and/or practice and the things about the context and situation that have meant that it could be supportive or useful. We know that the same processes are not useful in all situations and settings. For example, practitioners may not feel that opportunities for group discussion were useful in developing thinking and practice if they did not feel confident to share their thoughts within the group.

Please could you spend a few minutes completing the ratings in the table below to help me to identify the specific factors that were supportive in this situation. This will help us to improve and develop the approaches we have used together so that they can be used effectively in other settings. Information you provide about this process may also be used to help the Educational Psychology team support you effectively in the future and to contribute to research about how to effectively develop reflective practice in educational settings.

Please look at each row, one at a time, and start by rating the extent to which you feel you had achieved the outcome prior to taking part in the project (F=fully achieved, D+=further developing, D=developing/emergent, N= not achieved) and then rate the extent to which you have achieved the outcome after taking part in the project (F=fully achieved, D+=further developing, D=developing/emergent, N= not achieved).

Next to each outcome are the 'mechanisms' or processes that were/might have been part of our work together and that I hoped would support you in achieving the outcome. Please indicate how helpful these processes were in supporting you to achieve the outcome (1=highly significant contribution to my learning, 2=made some contribution to my learning, 3=hindered learning, 4=neutral/neither help nor hindrance). There is space for you to add in any other 'mechanisms' or processes that you felt helped you to achieve the outcome. These additional mechanisms or processes might have been part of our work in the group or they might relate to things that happened to you outside of the group (through working with other members of staff, further discussions etc).

In addition please then rate the extent to which the different 'contexts' listed next to each 'mechanism' supported it to achieve the outcome (E=enabler, I=inhibitor, N=no impact). Again, there is space for you to add other 'contexts' that had an impact on whether or not the 'mechanism' supported you in achieving the outcome. This process is then repeated for all of the outcomes listed.

I am not expecting that everyone will have thought that all aspects of our work together have made the best possible contribution to developing reflective practice in this setting, so please feel that you can record your honest views. You do not have to respond to all items if you do not wish to, you can leave them blank. However, I hope to be able to support you in feeling that you are able to respond to all items so that I can gather a clear picture of the aspects of the process that you feel were most useful to you. So, if you have any questions or queries I will be here to support you in completing the evaluation.

The ratings you provide will be used in my reporting of the research project. I will ask you to put your name on the evaluation form as it will be used as a stimulus for discussion in the interviews that I conduct with a small number of practitioners. All practitioners will be anonymous in any reporting of data gathered through this process and evaluation sheets with names on will only be seen by myself not managers or other professionals.

Thank you again for your support.

End of Introductory Sessions evaluation of CMO's:

Extent to which outcome was achieved prior to project (F=fully achieved D+=further developing D=developing/emergent N=not achieved/little or no awareness)		Expected Outcomes:	Extent to which outcome achieved as a result of participation in the study (F=fully achieved D+=further developing D=developing/emergent N=not achieved/little or no awareness)	Mechanisms:	Importance of mechanism in supporting outcome (1=highly significant contribution to my learning 2=made some contribution to my learning 3=hindered learning 4=neutral/neither helpful or hindrance)	Contexts: (please state the context as you experience it)	Effect of context on supporting mechanism to achieve outcome (E=enabler I=inhibitor N=no impact)
.....	1	Confident in your understanding of what reflective practice means to you in your work	.....	Sharing literature on definitions and models of reflective practice	.....	Your previous experience of research and exploring research literature	.....

.....	2	Confident in your ability to identify when you are being a reflective practitioner and what you need to do to become an increasingly reflective practitioner	.....	Sharing literature on definitions and models of reflective practice Opportunities for collaborative discussion of possible dimensions of reflective practice Development of a centre specific model of reflective practice	..... ..... .....	Your attitude towards research and the contribution you feel it can make to your practice Nature of relationships between practitioners (trusting etc) The extent to which the centre places emphasis on collaborative dialogue and therefore how familiar you are with this as a process for supporting centre development	...............
.....	3	Able to articulate your professional values and understand how these influence your practice	.....	Sharing examples of professional values Opportunities for collaborative discussion of values and use of voting system to develop set of shared core values for centre	..... .....	Nature of relationships between practitioners (trusting, whether they can reach agreement etc) The extent to which the centre places emphasis on collaborative dialogue	..........

End of project evaluation of CMO's:

.....	4	Able to identify and explore problematic situations and reflect on your thinking and practice in relation to these	Articulation of problematic situations during group sessions using set framework	The extent to which the centre environment (in terms of professional development practices and general ethos) is supportive of the identification of areas for development The extent to which you see the benefit of identifying things you find more difficult in terms of your professional development
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.....	5	Able to identify the positive aspects of problematic situations (exceptions) and use these to develop positive ways forward	Questioning of practice in group sessions to identify exceptions	The extent to which the centre has an ethos of positive thinking and optimism
.....	6	Able to view problematic situations objectively and gain insight from seeing the situation from different perspectives	.....	Questioning of practice to identify alternative perspectives on situation as part of a multi-professional group	.....	Different backgrounds and experiences of different professionals in group context Practitioners confidence in sharing views with group	..........
.....	7	Able to identify how your actions can be reinforcing problematic situations	.....	Questioning of practice to identify alternative perspectives on situation supported by multi-professional group	.....	The extent to which the centre promotes a blame free approach to reflecting on practice Nature of relationships between practitioners (trusting etc)	..... .....
.....	8	Able to learn from looking back on previous successful experiences and apply this knowledge to identify positive ways forward in different problematic situations	.....	Questioning of practice by others in group session to identify if similar problematic situations have been encountered and successfully resolved in the past Other practitioners sharing their views and experiences within the group sessions	..... .....	The extent to which the centre encourages practitioners to reflect on experiences that are both positive and not so positive and to learn from this Nature of relationships between practitioners (trusting etc) Range of professional roles and experiences	...............

.....	9	Able to identify and articulate the values underpinning current practice	.....	Questioning of current practice in group context to understand the values underpinning it	.....	Whether the Centre has stated values prior to the research process Practitioners level of experience of identifying and discussing values	..........
.....	10	Able to highlight inconsistencies between practice and shared core values and can understand how this can result in dissatisfaction with practice	.....	Questioning in group context to identify if current practice is inconsistent with shared core values in group sessions	.....	Practitioners level of experience of identifying and discussing values Nature of relationships between practitioners (trusting)	..... .....
.....	11	Able to identify ways of bringing practice more in line with values	.....	Collaborative problem solving to identify ways of bringing practice more in line with shared core values	.....	Practitioner's level of understanding of how values inform practice Amount of time available to reflect on both values and practice	..........
.....	12	Confident in ability to ask yourself and other practitioners questions which encourage reflection on practice both in and out of group context	.....	Modelling of questioning by Trainee Educational Psychologist in group context Written framework to prompt collaborative discussion	..... .....	Relationship between the Trainee Educational Psychologist and practitioners (trusting etc) The extent to which the Centre values support and challenge from external professionals Amount of time available for reflecting on practice outside of group sessions	...............

						Physical location of practitioners outside of group sessions (implications for the amount of time they are able to work together and discuss practice etc)	.....
.....	13	Able to recognise how reflection on one aspect of practice can inform changes in wider practice (the need for policy amendments, changes to practice guidance and the need for further staff development)	.....	Discussion about broader implications of reflections on broader issues such as policy and practice guidance within group sessions	.....	Extent to which management are perceived to value the input of all staff on the development of policies and centre guidance Your perceptions of whether informing policy and practice at a centre level is part of your role	..........
.....	14	Reflections on practice consistently lead to changes in practice	.....	Participation in the collaborative problem solving process Opportunities to share experiences with other practitioners Written recording of individual's perceived changes in thinking and/or practice resulting from the process Structured verbal feedback regarding changes actually made in thinking and practice and the impact of these changes	..... ..... ..... .....	Time available to consider changes in thinking and practice outside of group sessions Range of roles and experiences of practitioners in group Time available to record changes Framework provided for written recording Framework provided for verbal feedback Nature of relationships between practitioners and perceived level of support provided in group sessions	.........................

.....	15	Confident in knowledge of processes that support further development in reflective practice	.....	Group discussion regarding impact of sessions on practitioners' understanding and development of reflective practice	.....	Whether the Centre/management encourage practitioners to identify what factors have supported their development	.....
				Group session focussing on reflecting on the centre model of reflective practice and set of shared core values	.....	Amount of time available for practitioners to reflect on practice and values in and outside of group sessions	.....
						Extent to which practitioners feel that their views are valued	.....

Please be honest and have the confidence to tell me about any other factors that influenced your experience as it is sometimes the unplanned and unexpected factors that have the biggest impact. It is important that I know about these so that the project can be modified and adapted in light of your feedback.

I am interested to know if there are other things you feel you have got out of taking part in this research project (outcomes) other than the outcomes I expected that are listed in the table above. If you feel that you have experienced any outcomes that I have not included please can you add them to the table below. For each outcome please try and identify the mechanisms or factors that supported you in achieving this outcome and the contextual factors that supported the mechanism in producing the outcome. The outcomes you experienced may or may not be positive. For example you may have achieved a level of anxiety about your perceived low level of reflection. This might have been due to you having the opportunity to meet regularly with other practitioners who you perceived to be much more reflective than you. So the mechanism would be regular meetings with colleagues and the context would be the high level of reflective practice amongst colleagues.

Extent to which outcome was achieved prior to project (F=fully achieved D+=further developing D=developing/emergent N=not achieved/little or no awareness)	Additional Outcomes Experienced:	Extent to which outcome achieved as a result of participation in the study (F=fully achieved D+=further developing D=developing/emergent N=not achieved/little or no awareness)	Mechanisms:	Importance of mechanism in supporting outcome (1=highly significant contribution to my learning 2=made some contribution to my learning 3=hindered learning 4=neutral/neither helpful or hindrance)	Contexts:	Effect of context on supporting mechanism to achieve outcome (E=enabler I=inhibitor N=no impact)

Please feel free to add any additional comments about your experience of this research process in the space below:

Appendix 4 – Proforma for recording group feedback

Enablers for developing reflective practice	Inhibitors for developing reflective practice
What is the evidence that we are becoming more reflective practitioners?	

Appendix 5 – Overview letter for Children’s Centre Managers

In the summer term you will have received some information from me regarding my research into the role of Educational Psychologists in Children’s Centres. I am writing to provide you with further information and an overview of my project proposal. Research literature regarding the role of Educational Psychologists in Children’s Centres and effective organisational development as well as discussions within Early Years services and Children’s Centres have informed the further development of my project proposal. An outline of the rationale for my research is provided below:

- a time allocation model is used in the Authority which means that schools have a certain number of sessions from the Educational Psychology Team per year (based on a formula). Last year, when the focus for my research was negotiated, Children’s Centres were not included in the time allocation model, meaning that the support we offered you was limited and ad hoc
- this year a limited amount of time has been protected for work with Children’s Centres. This is a very positive step which raises questions as to how we can most effectively provide support to Children’s Centres within a limited capacity
- research within Early Years and within the field of Educational Psychology suggests that Educational Psychologists have an essential role to play in Early Years and specifically in supporting children, young people and their families through work with Children’s Centres
- some research into a potential role for Educational Psychologists in Children’s Centres points to the important role we may play in delivering training
- there is a wealth of literature which suggests that one off training has little long term impact and often does not result in maintained change in practice so we need to think carefully about our work in this area
- literature regarding organisational change and development suggests that interventions which focus on changing perceptions and beliefs are important in promoting long term maintainable change in practice
- within Early Years literature and policy there are an increasing number of references to ‘reflective practice’ and the ‘reflective practitioner’, however, within psychological research and literature there is little consensus as to how these terms are understood in practice
- Educational Psychology could have a central role to play in supporting the continuing development of reflective practice within Children’s Centres to promote the successful inclusion of children with special educational needs and other vulnerable groups
- it is thought that if practitioners in Children’s Centres are able to reflect effectively on their practice and are able to accurately identify their own training needs, then subsequent training input should be more effective and changes in practice should be maintained
- ‘group consultation’ or ‘collaborative problem solving’ or ‘solution circles’ are processes to support existing groups to work together to find solutions to complex problems or situations that appear to be ‘stuck’. Educational Psychologists have skills in facilitating these group processes. If Children’s Centres are supported in finding solutions to many complex problems, the continuing ‘problems’ that are raised when requesting support from external services are likely to be an effective use of time. For example, if a training need has been

identified after following the problem solving process, practitioners will be aware of the training need and desired outcomes hence resulting in positive change and long term maintenance of change in practice

- a group problem solving model will be trialled in three Children's Centres with an aim of further developing reflective practice. Additional Educational Psychology time will be provided for facilitation of these groups through my research project, although any further development needs identified through the process will be negotiated in line with the developing service offer for Children's Centres

What the research project will involve:

- volunteering centres that are selected to participate in the research project will need to commit staff time (approximately 6 staff with different roles and level of experience) for meetings in which the group problem solving process will be planned and facilitated (approximately six fortnightly meetings, lasting 1 hour)
- during the planning stage staff will be asked to consider what 'reflective practice' means to them and contribute to the development of a working model of reflective practice (introductory session with all staff involved, lasting approximately 1 hour)
- during the planning stage staff will be asked to consider their professional values and the impact these have on their practice (introductory session with all staff involved, lasting approximately 1 hour)
- in between meetings staff will be required to implement changes in practice as agreed within the meetings and reflect on their impact
- at intervals during the project staff will be asked to complete a short evaluation and take part in group discussions to evaluate the impact of the process
- at the end of the project all staff involved in the project will be given time within a planned session to complete a questionnaire
- at the end of the project volunteers (2 people per centre) will be asked to take part in a short interview (lasting approximately 30 minutes) based on the responses they have provided on the questionnaire

I hope that you are interested in being involved in my research project. **I will be attending the Children's Centre Manager's meeting on 17th September and will be giving a brief overview of my research then. I will also be asking for Managers to volunteer on behalf of their Centres to be involved in the project on the day.** Those who are unable to attend the meeting will be contacted via telephone. If more than three Centres volunteer, the three centres taking part in the project will be selected using a range of criteria to provide a useful sample.

If you have any queries regarding any of the above information please feel free to contact me using the details given below. I will also be available to answer any questions or receive any comments over lunch after the Children's Centre Managers meeting on 17th September 2009.

Many thanks for your support, I look forward to hearing from you.

Appendix 6 – Framework for collaborative problem solving sessions

Collaborative problem solving framework for group sessions

The aim of these sessions is to provide a time and space for practitioners to further develop skills in reflective practice through a collaborative problem solving process. It is thought that the collaborative nature of the sessions will provide social support as well as positive challenge. The process will be facilitated by the Trainee Educational Psychologist but the group will be responsible for identifying ways forward together. The facilitator will ensure the session does not run over time.

All practitioners should be aware of the group rules and should be supportive of colleagues, respecting everyone's beliefs and opinions. This does not mean that everyone will always agree.

Reflection on process (15 minutes):

Practitioners will be involved in an individual scaling activity to measure progress towards becoming an increasingly reflective practitioner. They will be encouraged to consider evidence to support their judgement (in terms of changes in thinking and changes in practice)

Practitioners will then be encouraged to engage in a group discussion focussing on the following questions:

- How have we moved forward in terms of reflective practice?
- How do we know?
- What has helped us to move forward?

After the first session the discussions will be supported by feedback from changes in thinking and practice as a result of discussions during the previous session.

*During the first week this part of the session will be replaced by discussions about the process and an opportunity to answer any questions.

Collaborative problem solving (30 minutes in total):

Donating problematic/difficult situations (5 minutes):

All members of the group will have the opportunity to give a brief overview of a difficult/problematic situation which they would be willing to share with the group

Selection of situation and additional details (5 minutes):

All members of the group will have the opportunity to say which difficult/problematic situation they think would be useful to discuss in more detail (which they feel they will gain the most learning from). The final decision will be made using a voting system.

The 'owner' of the difficult/problematic situation will then have a further few minutes to add detail to their overview and provide the group with the context including:

- Background information
- Details of the specific problem
- Who is involved and their perception of the situation
- What has already been tried

Further questioning by the group (5 minutes):

All members of the group are invited to ask the 'owner' of the difficult/problematic situation questions to find out more about the situation. Questions should be solution focussed and should aim to clarify the problem and point to ways forward. Questions should aim to find out more information about:

- When is this not a problem (exceptions)
- Whether there are different ways of viewing the situation (can it be turned around)
- Whether any similar situations have been encountered and successfully resolved previously
- The values underpinning the current actions
- Whether current practice is inconsistent with ideal values
- Ways in which practice can be altered to be more consistent with core values

Identifying new ways forward (10 minutes):

All group members will support the 'owner' of the difficult/problematic situation to identify new ways forward. This may indicate the need for changes in thinking or/and practice or the need to reconsider the core values. The 'solutions' should be discussed openly in the group and should stem from the discussions held in the previous section. The 'owner' of the difficult/problematic situation will ultimately be responsible for making a decision regarding which new way forward they feel will be most useful and for making a decision regarding the need to change any of the factors.

New ways forward should take account of:

- The previous discussions
- All information available
- The views of all involved
- Relevant research and experience
- Core values
- Practical aspects (time, funding etc)

Discussion of broader implications (5 minutes):

In light of discussions regarding the current situation the group will highlight any broader implications regarding thinking or practice. Consideration of the following questions may be useful:

- Does this situation have any implications for other situations
- Does this raise any questions at a policy or organisational level
- Does this situation highlight the need for further training or skill building amongst practitioners?
- How can we try to ensure that this situation does not present as being difficult/problematic in the future?

All practitioners will then be given a couple of minutes to complete a short evaluation form to briefly record whether and how this session has changed how they think about their practice and how it may lead to actual changes in practice.

Appendix 7 – Detailed overview of session content

Session:	Content:
Introductory session 1	<ul style="list-style-type: none"> • Overview of role of Educational Psychologist • Overview of research project and aims (Morley, 2007) • Develop group rules • Introduction of sample of definitions and models of reflective practice from the literature. Ten definitions and three models of reflective practice selected from the literature (using purposive sampling to provide a range of different definitions and models, in terms of perceived complexity and relevance to the Children's Centre context). Structured feedback from group regarding their views of the definitions and models (Morley, 2007) • Development of Centre specific model of reflective practice. In pairs staff sort sample of reflective practice statements (agree, disagree, not sure) and feedback as a whole group to agree statements to form a centre specific model (staff encouraged to re-write statements and add their own). Only statements that all staff agree with are used as part of the centre specific model of reflective practice (Forde et al, 2006)
Introductory session 2	<ul style="list-style-type: none"> • Present staff with centre specific model of reflective practice (comprising statements/dimensions of reflective practice) agreed in previous session. 10 point scales attached to each statement from Centre model to form evaluation scales and measure progress/movement along each statement/dimension of reflective practice (Forde et al, 2006; Larrivee, 2008) • Introduce concept of professional values (Gardner, 2009) • Development of shared core values for centre. In pairs staff sort sample of example values (agree, disagree, not sure) and feedback as a whole group to agree shared values that all agree with (staff encouraged to re-write values and add their own) (Gardner, 2009) • Collaborative problem solving framework introduced (see Appendix 6) (Stringer et al, 1992; Hart, 1996; Gardner, 2009)

Collaborative problem solving session 1 (see Appendix 6 for framework used)	<ul style="list-style-type: none"> • Practitioners asked to volunteer to share problematic situations that they are willing to discuss (Hart, 1996; Bold, 2008) • Discussion of selected situation in group context using framework to consider underlying values and assumptions, consider different perspectives, new ways forward and broader implications (Bold, 2008; Santaro & Allard, 2008; Gardner, 2009) • Process facilitated by Trainee Educational Psychologist (Morley, 2007) • Practitioners complete evaluation scales based on context specific model of reflective practice (Larrivee, 2008)
Collaborative problem solving session 2	<ul style="list-style-type: none"> • Feedback from changes/new ways forward tried as a result of last session • Feedback as group on enablers and inhibitors for developing reflective practice and examples of evidence from practice demonstrating reflective practice (see Appendix 4 for recording sheet) • Practitioners asked to volunteer to share problematic situations that they are willing to discuss • Discussion of selected situation using framework facilitated by Trainee Educational Psychologist • Practitioners complete evaluation scales based on context specific model of reflective practice
Collaborative problem solving session 3	<ul style="list-style-type: none"> • As above
Collaborative problem solving session 4	<ul style="list-style-type: none"> • As above
Collaborative problem solving session 5	<ul style="list-style-type: none"> • As above
Collaborative problem solving session 6	<ul style="list-style-type: none"> • Feedback from changes/new ways forward tried as a result of last session • Review/amend context specific model of reflective practice and shared core values for centre • Practitioners complete realistic evaluation informed evaluation questionnaire • Practitioners complete evaluation scales based on context specific model of reflective practice • Ask for volunteers for interviews, arrange dates/times • Provide information regarding feedback/dissemination of results

Appendix 8 – Staff attendance at the sessions

Staff attendance in Centre A.

Staff:	Introductory session 1	Introductory session 2	Collaborative problem solving session 1	Collaborative problem solving session 2	Collaborative problem solving session 3	Collaborative problem solving session 4	Collaborative problem solving session 5	Collaborative problem solving session 6
a	√	√	√	√		√	√	√
b	√	sickness	√	leave		√	cover	√
c	√	√	√	√		√	cover	√
d	√	√	√	sickness		leave	√	√
e	√	√	√	√		√	√	√
f	√	√	√	√		√	√	√

Staff attendance in Centre B

Staff:	Introductory session 1	Introductory session 2	Collaborative problem solving session 1	Collaborative problem solving session 2	Collaborative problem solving session 3	Collaborative problem solving session 4	Collaborative problem solving session 5	Collaborative problem solving session 6
a	√	√	√	√	√	cover		√
b	√	√	√	√	cover	√		√
c	√	√	√	√	√	√		leave
d	√	√	√	leave	√	√		√
e	√	√	√	√	√	√		sickness
f	√	√	√	√	√	√		√

Appendix 9 – EC2 Ethics clearance form

Form EC2 for POSTGRADUATE RESEARCH (PGR) STUDENTS **MPhilA, MPhilB, MPhil/PhD, EdD, PhD IS**

This form MUST be completed by ALL students studying for postgraduate research degrees and can be included as part of the thesis even in cases where no formal submission is made to the Ethics Committee. Supervisors are also responsible for checking and conforming to the ethical guidelines and frameworks of other societies, bodies or agencies that may be relevant to the student's work.

Tracking the Form

- I. Part A completed by the student
- II. Part B completed by the supervisor
- III. **Supervisor refers proposal to Ethics Committee if necessary (via Julie Foster, the Ethics Committee Administrator)**
- IV. Supervisor keeps a copy of the form and send the original to the Student Research Office, School of Education
- V. Student Research Office – form signed by Management Team, original kept in student file.

Part A: to be completed by the STUDENT

NAME: Emma Thornbery

COURSE OF STUDY (MPhil; PhD; EdD etc):

EdPsychD - Doctorate in Applied and Educational Child Psychology

POSTAL ADDRESS FOR REPLY:

CONTACT TELEPHONE NUMBER:

EMAIL ADDRESS:

DATE: 20th September 2009

NAME OF SUPERVISOR: Paul Timmins

PROPOSED PROJECT TITLE:

Exploring the role of the Educational Psychologist in Children's Centres

BRIEF OUTLINE OF PROJECT: (100-250 words; this may be attached separately)

The Authority's Educational Psychology team operates using a time allocation model, meaning that each school (including nursery schools, primary schools, secondary schools and special schools) has a certain amount of time devoted to supporting them through consultation per year. This is calculated using a consistent formula. Since the initial negotiation of the research focus, the Authority have committed a limited amount of EP time to work with Children's Centres (40 sessions delivered by 4 EP's). This is the first time the Authority have worked in a planned and strategic way with Children's Centres and so possible ways of working effectively are currently being discussed. Prior to this Educational Psychologists did spend some time working with Children's Centres but this was inconsistent and mostly related to statutory assessment. Through this research I hope to explore the role of Educational Psychologists in Children's Centres and explore the use of a time limited model to support Children's Centres in further developing their reflective practice within the Authority.

The focus of the research will be on how Educational Psychologists can facilitate the development of a context specific shared understanding/model of reflective practice alongside the development of a shared set of professional values that inform practice. A model of collaborative problem solving with a multi-professional group will be used in three Children's Centres in order to promote reflective practice in terms of progression towards their context specific shared understanding/model. The development of the collaborative problem solving model to support the development of reflective practice is based on literature suggesting that the following factors support reflection and reflective practice:

- Support and challenge from an external professional
- Contexts that support dialogue and questioning
- Opportunity to see things from another perspective
- Encountering surprising or problematic situations
- An awareness of an inconsistency between values and practice
- An awareness that practice can be improved

MAIN ETHICAL CONSIDERATION(S) OF THE PROJECT (e.g. working with vulnerable adults; children with disabilities; photographs of participants; material that could give offence etc):

The second phase of the research will involve me working with Children's Centre staff and facilitating a collaborative problem solving process. This process will require the staff to ask themselves questions about their values and their practice, ask each other questions and will also involve me (as an external professional) asking them questions. These questions are likely to challenge their perceptions and practice and therefore may lead to feelings of dissatisfaction or frustration. Staff will be informed of the cyclical nature of the problem solving process and will be encouraged to take actions which will bring their practice more in

line with their values and will hopefully then lead to reduced feelings of frustration. During the process the staff may feel that their professional identity is threatened. To help reduce the feeling of threat all staff will be fully informed about the process and will be given an overview of the research aims, their role in the process and the nature and use of any data (see attached ethics script for use in introductory sessions).

The sessions will be held during allocated work time and so attendance will not be optional as the Centre Managers have committed to this aspect of staff development. However, the staff attending the meetings will be reminded that their contribution during meetings is optional and also the completion of any evaluations and written feedback is also optional (see attached ethics script for use in introductory sessions). A short evaluation form will be used at the end of each session so that staff can provide me with feedback as to potential barriers to their contribution and involvement so that these can be addressed where possible (see feedback form attached). Staff will also be supported to agree a set of group rules at the start of the project so that confidentiality is raised as well as the importance of respect, active listening and valuing everyone's opinion/perspective. These rules will be revisited at the start of each session.

Full engagement in the research will be promoted and the potential benefits to staff will be highlighted in the introductory sessions. During the introductory sessions time will also be spent talking about people's responses to change and the emotions and anxiety that this can evoke (see attached script for use in introductory sessions). This response will be normalised but I will also be available for a set amount of time at the end of each session to speak with individuals should they have any concerns or additional questions. The research process will be viewed as contributing to continued professional development and involvement in reflective activities such as this is encouraged in the Children's Centre Guidance and in the Early Years Foundation Stage Guidance, this will also be discussed with the staff.

Through my role as a facilitator I will be hearing staff discuss their values and practice. The Children's Centre managers will also be attending the meetings and so it will be agreed prior to the start of the process (with the Centre Manager and all staff involved during the initial planning meeting) that if anything is discussed that makes me concerned about the safety or wellbeing of children or staff I will discuss it with the Centre Manager who will then be responsible for following the Centre policy for following up concerns of this nature. If the Children's Centre Manager has any concerns as a result of this process they will also follow it up in line with the policy. If I have any concerns about practice or behaviour in the sessions which does not have implications for safeguarding I will discuss this privately with the individual/s involved in the first instance.

RESEARCH FUNDING AGENCY (if any):

None

DURATION OF PROPOSED PROJECT (please provide dates as month/year):

It is anticipated that the research will be carried out between October 2009 and February 2010.

DATE YOU WISH TO START DATA COLLECTION:

I hope to start my initial data collection for the research in December 2009. This will be when the three Children's Centres are selected and the initial planning meetings are arranged with the selected Children's Centres.

Please provide details on the following aspects of the research [note that, if completing this electronically, the form will expand as text is typed; use as much space as you need]:

1. What are your intended methods of recruitment, data collection and analysis? [see note 1]

Please outline (in 100-250 words) the intended methods for your project and give what detail you can. However, it is not expected that you will be able to answer fully these questions at the proposal stage.

The Children's Centre Managers will be sent information regarding the research project and the time commitment on the part of the Centres during the Summer term 2009/Autumn term 2009. I will also attend a Children's Centres Managers meeting in the Autumn term so that I can introduce myself, provide an overview of the research and answer any questions. The Children's Centre Managers will then be contacted by telephone and asked to volunteer. If more than three Children's Centres volunteer, three will be selected on various criteria. As it is not possible to select a representative sample (due to the small sample size and the wide variation in Children's Centres) three Centres will be selected who has demonstrated a commitment to staff development in this area and who have rated themselves similarly on the scale of reflective practice (contained within the questionnaire used in phase 1 of the research). If only three or less Children's Centres volunteer then all volunteering Centres will be used.

The Centres that are selected will then be studied as case studies. It is proposed at this stage that realistic evaluation may be used to evaluate the impact of the intervention. It is proposed that data will be collected through the use of questionnaires (completed at the end of the intervention period) focussing on the effectiveness of the mechanisms and contextual factors in supporting the expected outcomes, interviews with target staff in each setting (centre manager and another member of staff) and the use of group discussion and feedback (focussed on looking for evidence to support practitioners' judgements as to whether they are moving backwards or forwards along the dimensions of reflective practice contained in the Centre's working model). All practitioners involved in the study will be made aware of the data gathering methods from the outset (see attached ethics script for use in introductory sessions) and will also be reassured that they will remain anonymous in the reporting of the project. In case they may be identifiable in other ways the proposed format for the reporting of individual views will be shared with the relevant member of staff and their informed consent will be gained for their views being reported in this way. If consent is not gained, alternative ways of reporting will be discussed. See section 6 for the safe storage of data.

2. How will you make sure that all participants understand the process in which they are to be engaged and that they provide their voluntary and informed consent? If the study involves working with children or other vulnerable groups, how have you considered their rights and protection? **[see note 2]**

The Children's Centre Managers will be fully informed of the research process, expectations and time commitment prior to volunteering their Centre (see above). The other staff within the Centres may not be aware of the research project until the Centre has been selected and the initial planning meeting is arranged. During the initial planning meeting information about the research project will be shared with all staff and they will be told that although their attendance at the meetings is compulsory, as it is during their directed working time, their contribution and engagement in the meetings and during evaluation activities is optional (see ethics script for use during introductory session attached). If they choose to not contribute verbally or in written feedback their responses will not be recorded for research purposes as they will not have made a recordable response. The numbers of staff who choose not to contribute throughout the project will be recorded. The names of staff will not be used at any stage in the reporting of the data/process and they will be assured of this prior to and throughout the project (see ethics script attached for use in introductory sessions).

3. How will you make sure that participants clearly understand their right to withdraw from the study?

If staff have concerns about their involvement in the study they will be asked to discuss this further with either the Centre Manager or myself. If they are sure that they do not want to be

involved in the process they will be reassured that they do not have to contribute during the sessions or complete the evaluation activities (see attached ethics script for use in introductory sessions). The staff will also be reminded that they are able to contribute to some aspects but not to others if they wish. All staff will also be asked to complete a short feedback form at the end of each session which asks them what factors supported them in feeling able to contribute and what were the potential barriers (if any) that they felt made them not able to contribute (see attached feedback form). This feedback will be used to inform the approach taken in subsequent sessions where possible.

4. Please describe how you will ensure the confidentiality and anonymity of participants. Where this is not guaranteed, please justify your approach. **[see note 3]**

The Children's Centre and staff will remain anonymous in the reporting of the research project. The context of the Centres will be described and the roles of staff may be stated in the reporting of the research project. As the report will be available for other Children's Centres to access it may be possible for other professionals to identify individuals through the reporting of their responses despite them being anonymous. To overcome this all staff will be shown the reporting of their responses/data and will be asked for their written consent to report it in this way (see consent letter attached). If consent is not gained alternative ways of reporting their views will be explored with them.

5. Describe any possible detrimental effects of the study and your strategies for dealing with them. **[see note 4]**

The research will involve me working with Children's Centre staff and facilitating a collaborative problem solving process. This process will require the staff to ask themselves questions about their values and their practice, ask each other questions and will also involve me (as an external professional) asking them questions. These questions are likely to challenge their perceptions and practice and therefore may lead to feelings of dissatisfaction or frustration. Staff will be informed of the cyclical nature of the problem solving process and will be encouraged to take actions which will bring their practice more in line with their values and will hopefully then lead to reduced feelings of frustration. During the process the staff may feel that their professional identity is threatened. To help reduce the feeling of threat all staff will be fully informed about the process and will be given an overview of the research aims, their role in the process and the nature and use of any data (see attached script for use in introductory sessions). The sessions will be held during allocated work time and so attendance will not be optional as the Centre Managers have committed to this aspect of staff development. However, the staff attending the meetings will be reminded that their contribution during meetings is optional and also the completion of any evaluations and written feedback is also optional. A short evaluation form will be used at the end of each session so that staff can provide me with feedback as to potential barriers to their contribution and involvement so that these can be addressed where possible (see feedback

form attached). Staff will also be supported to agree a set of group rules at the start of the project so that confidentiality is raised as well as the importance of respect, active listening and valuing everyone's opinion/perspective. These rules will be revisited at the start of each session.

Full engagement in the research will be promoted and the potential benefits to staff will be highlighted in the introductory sessions. During the introductory sessions time will also be spent talking about people's responses to change and the emotions and anxiety that this can evoke (see attached script for use in introductory sessions). This response will be normalised but I will also be available for a set amount of time at the end of each session to speak with individuals should they have any concerns or additional questions. The research process will be viewed as contributing to continued professional development and involvement in reflective activities such as this is encouraged in the Children's Centre Guidance and in the Early Years Foundation Stage Guidance, this will also be discussed with the staff during the introductory sessions.

All staff involved will also be given my contact details so they can contact me to discuss any concerns they may have as a result of the process out of the setting if they wish. Staff will also be encouraged to use their existing lines of support within the Centre to raise any concerns.

Through my role as a facilitator I will be hearing staff discuss their values and practice. The Children's Centre managers will also be attending the meetings and so it will be agreed prior to the start of the process (with the Centre Manager and all staff involved during the initial planning meeting) that if anything is discussed that makes me concerned about the safety or wellbeing of children or staff I will discuss it with the Centre Manager who will then be responsible for following the Centre policy for following up concerns of this nature. If the Children's Centre Manager has any concerns as a result of this process they will also follow it up in line with the policy. If I have any concerns about practice or behaviour in the sessions which does not have implications for safeguarding I will discuss this privately with the individual/s involved in the first instance.

The involvement of Children's Centre Managers in meetings is planned as this is thought to contribute to long term impact and commitment to further development. However, it may result in some members of staff not feeling able to contribute or feeling that they cannot discuss certain areas of concern. Although this cannot be completely eradicated steps will be taken to lessen the negative impact. The Centre Managers have committed to the project with the understanding that developing reflective practice may result in changes in practice or a perceived need to adapt policies or procedures. The Managers have agreed to be responsive to the needs highlighted by the staff team and will also be involved in the agreement of group rules. The Managers will share their commitment with the staff group in the initial session and I will have additional meetings with Centre Managers between sessions to ensure that anything necessary is followed up. I will also have an initial planning

meeting with the Centre Managers to discuss the structure and content of sessions and to agree their role – to participate as an equal member of the group for this purpose, valuing the opinions of staff, promoting dialogue without overshadowing less qualified or less confident members of the team.

6. How will you ensure the safe and appropriate storage and handling of data?

It is anticipated that after each reflection session staff will be asked to complete a short rating scale activity/evaluation. There will also be more detailed evaluations at a mid point and at the end of the research project. The data gathered from these evaluations will be stored in a locked cabinet within The Authority Early Intervention and Inclusion service office, only I will have access to these. The information gained through the collaborative planning stage of the activity will be shared with all Centre staff and they will be given a copy for their records and further development work if desired. It is likely that this will also be illustrated in the final reporting of the project. It is also likely that I will be carrying out interviews with individuals or groups. After each interview/group session the staff will be asked whether they feel the responses recorded reflect their views accurately. At the end of the project, where there is reporting of the views of individual's the individual will be shown the proposed reporting of the data and will be asked to sign a consent form agreeing that they are happy with the way in which their views have been recorded.

Any analysis of data will be completed on paper which will be held in the locked cabinet or on a password secured laptop, to which only I have access. After the final reporting of the project is assessed and considered appropriate to meeting the University requirements for the course the raw data (stored on computer and paper copies) will be deleted or destroyed. It is proposed that this will be during the Autumn Term 2010. All staff involved in the project will be informed of this process.

7. If during the course of the research you are made aware of harmful or illegal behaviour, how do you intend to handle disclosure or nondisclosure of such information? **[see note 5]**

Through my role as a facilitator I will be hearing staff discuss their values and practice. The Children's Centre managers will also be attending the meetings and so it will be agreed prior to the start of the process (with the Centre Manager and all staff involved during the initial planning meeting) that if anything is discussed that makes me concerned about the safety or wellbeing of children or staff I will discuss it with the Centre Manager who will then be responsible for following the Centre policy for following up concerns of this nature. If the Children's Centre Manager has any concerns as a result of this process they will also follow it up in line with the policy. If the Children's Centre Manager is not present when I am made aware of any 'harmful or illegal behaviour' I will share this with the Centre Manager for them to follow-up in line with their centre policy. I will also discuss any concerns with my Service supervisor and University tutor during supervision/tutorials. If I have concerns regarding

practice or behaviour/discussions in the sessions that does not have implications for child protection or safeguarding I will initially discuss this in private with the person/s concerned.

8. If the research design demands some degree of subterfuge or undisclosed research activity, how have you justified this and how and when will this be discussed with participants?

During the initial planning stages of the research, staff will be asked to share their values and share their perceptions of what reflective practice means to them. After this point models of reflective practice discussed in my critical literature review will be shared with the staff and then they will be consulted again about what reflective practice means to them in light of the research literature. They will then be involved in developing a working model of reflective practice relevant to the individual Centre based on staff perceptions and information from the literature.

The aims and expectations of the research project will be made clear to all at the start of the research process.

9. How do you intend to disseminate your research findings to participants?

All staff involved will be told how they can access the final report on completion of the research project. A summary of the research findings will also be disseminated to all Children's Centre Managers either through letter correspondence or through an information sharing session at a Children's centre Manager's meeting.

Appendix 10a - Centre A Context specific model of reflective practice

Practitioners will always look back and make sense of their practice, learn from this and use this learning to effect future action

Practitioners will examine the purpose and reasons behind their actions and beliefs

Practitioners will explore their experiences in order to lead to new understandings

Practitioners will be able to judge when a situation is beyond their knowledge and experience and will seek guidance/advice when appropriate in order to find new ways forward

Practitioners will look back on experiences and point out things that they have done wrong and point out things have gone well and identify solutions

Practitioners will try to see things from another perspective or another person's point of view

Practitioners will think about their professional values and try to move their practice in line with these

Practitioners will become more aware of what they are doing and how they are acting

Practitioners will try to change things so that their practice improves

Appendix 10b - Centre B Context specific model of reflective practice

Practitioners will look back and make sense of their practice, learn from this and use this learning to effect future action

Practitioners will examine the purpose and reasons behind their actions and beliefs

Practitioners will know that it is important to believe in what you do

Practitioners will listen to and consider advice from other professionals

Practitioners will try to see things from another perspective or another person's point of view when relevant

Practitioners will think about their experiences and practice and try to find new ways forward

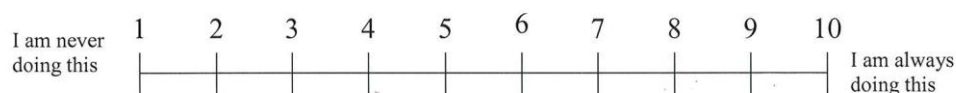
Practitioners will always question what they do, say, feel and believe

Practitioners will become more aware of what they are doing and how they are acting

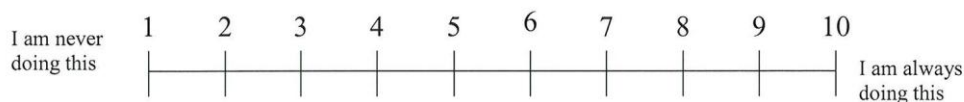
Practitioners will try to change things so that their practice improves

Appendix 11a - Scaling evaluation centre A

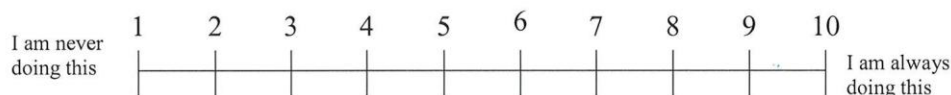
Practitioners will look back on experiences and point out things that they have done wrong and point out things that have gone well and identify solutions



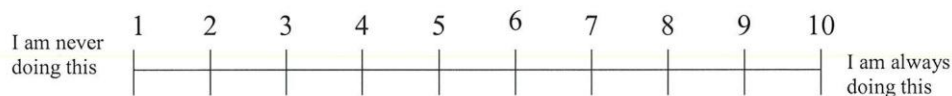
Practitioners will try to see things from another perspective or another person's point of view



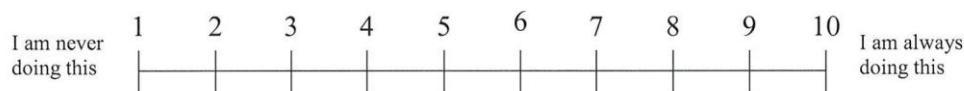
Practitioners will think about their professional values and try to move their practice in line with these



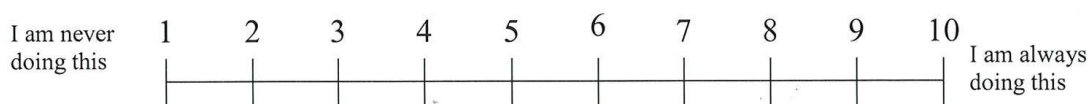
Practitioners will become more aware of what they are doing and how they are acting



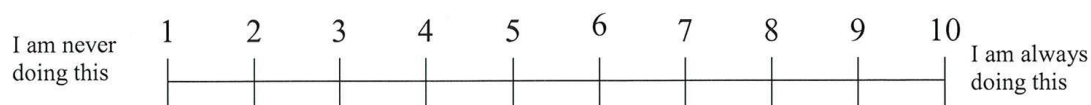
Practitioners will try to change things so that their practice improves



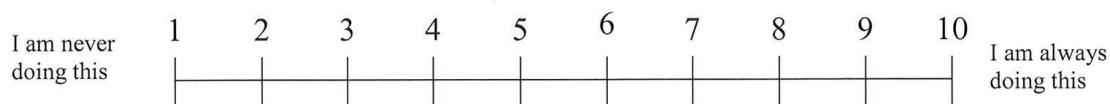
Practitioners will always look back and make sense of their practice,
learn from this and use this learning to effect future action



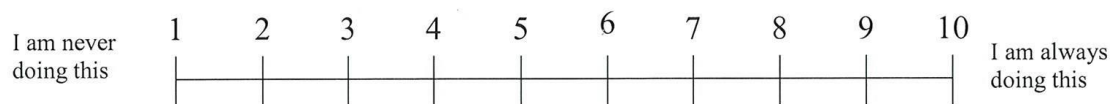
Practitioners will examine the purpose and reasons behind their actions
and beliefs



Practitioners will explore their experiences in order to lead to new understandings

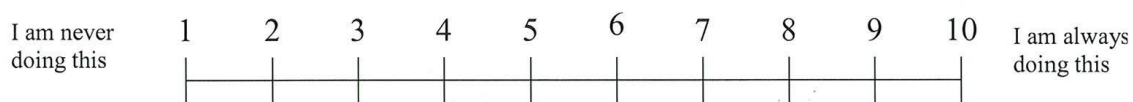


Practitioners will be able to judge when a situation is beyond their knowledge and experience and will seek guidance/advice when appropriate in order to find new ways forward

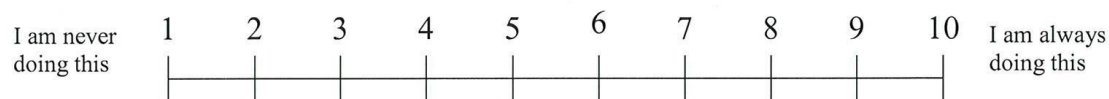


Appendix 11b - Scaling evaluation centre B

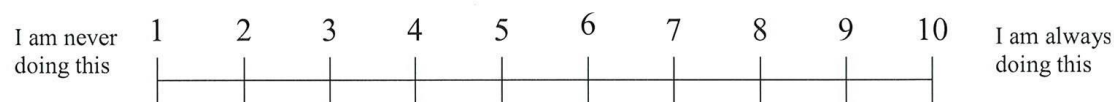
Practitioners will think about their experiences and practice and try to find new ways forward



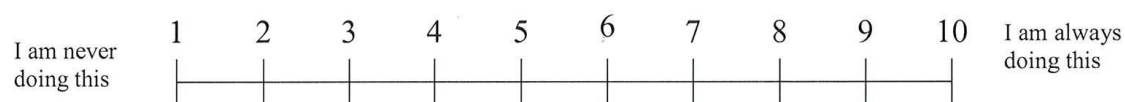
Practitioners will always question what they do, say, feel and believe



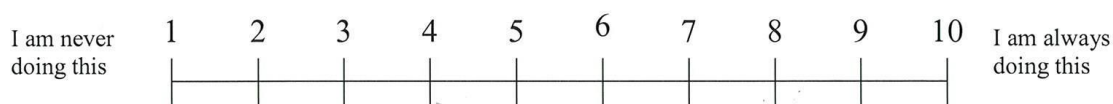
Practitioners will become more aware of what they are doing and how they are acting



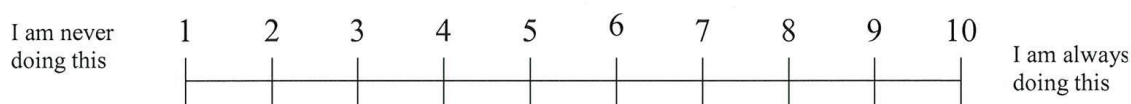
Practitioners will try to change things so that their practice improves



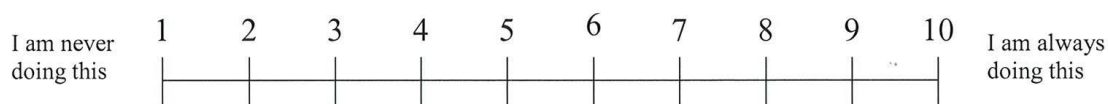
Practitioners will look back and make sense of their practice, learn from this and use this learning to effect future action



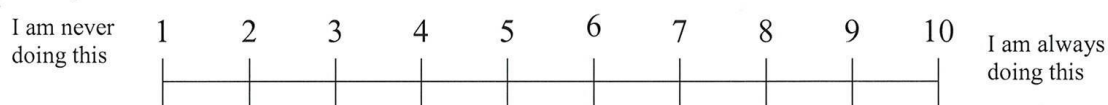
Practitioners will examine the purpose and reasons behind their actions and beliefs



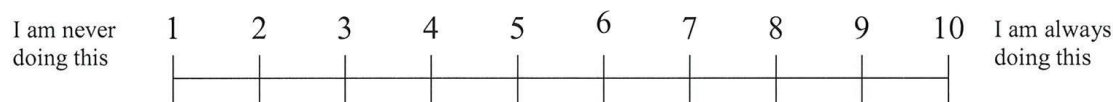
Practitioners will know that it is important to believe in what you do



Practitioners will listen to and consider advice from other professionals



Practitioners will try to see things from another perspective or another person's point of view when relevant



Appendix 12 – Script used to discuss ethical considerations with practitioners

All sessions will be held at the Centre and during your working hours. I realise that you will have been asked to come along to these sessions and might not have a very clear idea about why you are here or what to expect. As your manager has volunteered your centre to be involved in this research project on behalf of the staff it is important that you now have a clear understanding of what it is about and what to expect. You will be asked to come along to 2 introductory sessions (this is the first one) where you will find out more about the project and contribute to discussions about what reflective practice means to you as a centre and what you consider to be your shared professional values. Then we will meet fortnightly for six sessions in which we will use a particular framework to help us to hopefully become increasingly reflective practitioners.

I hope that you will feel that you will gain something in terms of your professional development from attending the sessions and I hope that you are happy to contribute to the sessions. All of the sessions are intended to be interactive and enjoyable. We will have the opportunity to discuss many aspects of our professional practice in what is hoped will be a 'safe' environment. I hope that you feel able to discuss aspects of your practice and collaboratively look at new ways of seeing and doing things. However, if you feel that you do not wish to contribute to certain aspects of discussion then that is your right and I will respect that. However, I would value feedback so that I am aware of the factors that are presenting as barriers and can try to reduce these where possible. It will also be really important in terms of our future work with you as a Centre. You will have time to fill in a very short feedback sheet at the end of each session which will allow you to identify the factors that supported you in feeling confident to contribute and any factors that presented as a barrier to you contributing.

From this point on it is really important that everybody feels that they can be honest and feels that their contribution is valued and respected. I certainly respect the views of all individuals as without you there would be no research!

It does not mean that we all have to agree but that we listen to and value what others are saying.

Discuss and write up basic ground rules – practitioners to be invited to share thoughts first but to ensure the following are discussed:

- Respect other people's views
- Listen to others
- Do not laugh
- Respect confidentiality – of each other and service users

Are there any particular strategies we need to put in place to ensure that everyone feels confident to participate in the group?

Obviously your contribution is voluntary and you will not be pressured to do or say anything, however it is important that a representative view is gained. A very simple evaluation sheet will be completed at the end of each session so that I can be made aware of any factors that are presenting as barriers to your participation and also so that I can see the things that were helpful to you.

There is also a commitment from your Centre Manager to support this process and to ensure that any need for further training or support is considered and implemented where possible. Our

discussions may also be important in contributing to decisions about policy and procedures so this is something your Manager is also committed to where appropriate.

This research project will contribute to theory and practice beyond the EP team. As it is part of my course requirements the final reporting will be shared with the Early Intervention and Inclusion Service, all Children's Centres in the Authority, the University of Birmingham and will be published and accessible for public access. The discussions we have in the group context, the feedback you provide me with verbally and in writing and your views during evaluation of the project will be included in the reporting of this project. All of the recording of evaluations will occur during the session times so it will not be a requirement for you to complete any forms etc outside of the sessions. However, you will be encouraged to think about your practice in new ways and it might be appropriate for you to try and make changes in your practice. Evaluations will take the form of feedback forms, rating scales and questionnaires at the end of the process. I will also be conducting short interviews with a selected number of practitioners as there is not time to interview all participants. At times it will be useful to use your direct quotes and responses from your responses to questionnaires/interviews etc to highlight the views of practitioners in my reporting of the study. Any reporting of views will be fully anonymised so the Authority will not be named, the Children's Centres will not be named and the staff will not be named. However, there is a chance in the local and wider reporting of the study that you or the centre may be identifiable due to the context described or the response given. To ensure that you are happy with my reporting of your views I will check back with you at this stage the exact way I will record and display this data so that you are happy and give your informed consent for it to be used and reported in this way.

I realise this makes it sound a bit scary but it is important for me that this is a transparent and open project in which you are fully informed. I hope that this does not put you off contributing to the sessions and I hope I have reassured you that you will be asked to provide your consent for use of data that involves your direct views.

If you have any queries or questions you can discuss these with me at any point. I am also providing you with my contact details so you can discuss any queries about the project via phone or email at any point. I will also make myself available for 15 minutes after each session so you can approach me individually then if you wish. I would also encourage you to share your thoughts about the process with the centre manager and or use your usual lines of support within the setting.

You will be provided with all the information I have talked about in letter form for your reference. There will be nothing I haven't talked to you about contained in the letter but I know it is a lot to take on in one session so you will have it to refer back to.

**Appendix 13a - Centre A Context specific model of reflective practice
(adapted post intervention)**

Practitioners will always look back and make sense of their practice, learn from this and use this learning to effect future action.

Practitioners will examine the purpose and reasons behind their actions and beliefs and make changes/adjustments if necessary.

Practitioners will explore their experiences and consider those of others in order to lead to new understandings.

Practitioners will be able to judge when a situation is beyond their knowledge and experience and will seek guidance/advice when appropriate in order to find new ways forward.

Practitioners will look back on experiences and point out things that they have done wrong and point out things that have gone well and identify solutions.

Practitioners will try to see things from another perspective or another person's point of view.

Practitioners will think about their professional values and try to move their practice in line with these, taking account of the values of others and those of the Centre.

Practitioners will become more aware of what they are doing and how they are acting.

Practitioners will try to change things so that their practice improves and has an increasingly positive impact on the outcomes of others.

**Appendix 13b - Centre B Context specific model of reflective practice
(adapted post intervention)**

Practitioners will look back and make sense of their practice, learn from this and use this learning to effect future action

Practitioners will examine the purpose and reasons behind their actions and beliefs

Practitioners will know that it is important to believe in what you do

Practitioners will listen to and consider advice from other professionals

Practitioners will try to see things from another perspective or another person's point of view when relevant

Practitioners will think about their experiences and practice and try to find new ways forward

Practitioners will always question what they do, say, feel and believe

Practitioners will become more aware of what they are doing and how they are acting

Practitioners will try to change things so that their practice improves

Appendix 14a - Summary of CMO responses for Centre A

The table below provides the grouped CMO questionnaire responses for practitioners in Centre A. A summary of the results are provided after each outcome.

Expected Outcomes: Progress against outcome as a result of participation in the study (F=fully achieved D+=further developing D=developing/ emergent N=not achieved/ little or no awareness)	Change experienced a to b =c where a is pre intervention rating, b is post intervention rating and c refers to the number of practitioners	Mechanisms: Support of mechanism on outcome rated (1=highly significant contribution to my learning 2=made some contribution to my learning 3= hindered learning 4=neutral/neither helpful or hindrance)	Perceived importance of mechanism in supporting outcome a=b a is the rating b is the number of practitioners who used the rating	Contexts: (E=enabler I=inhibitor N=no impact)	Effect of context on supporting mechanism to achieve outcome a=b a is the rating b is the number of practitioners who used the rating
1. Confident in your understanding of what reflective practice means to you in your work	D to D+ = 4 D+ to F = 1 D+ to D = 1	Sharing literature on definitions and models of reflective practice	1 = 1 2 = 5	Your previous experience of research and exploring research literature	E = 3 N = 3
5 out of 6 practitioners made one level of progress against this outcome during the period of intervention, 1 practitioner regressed one level. The practitioner who regressed marked on their questionnaire that this was due to an increased understanding of what reflective practice meant to her in her role. With increased knowledge as a result of the intervention she was able to identify more accurately where she was in terms of development. As they have rated the mechanism as highly significant or making some contribution it could be suggested that this progress, is due at least in part, to the support of the mechanism within the intervention. Three practitioners who had no experience of research rated that their experience had no influence on the mechanism but the three practitioners who did have some research experience thought that this was helpful. It could be concluded that sharing research might be an effective strategy but may be more supportive for those who have had positive research experience.					
2. Confident in your ability to identify when you are being a reflective practitioner and what you need to do to become an increasingly reflective practitioner	N to D = 2 D to D+ = 2 D to D = 1 D to F = 1	Sharing literature on definitions and models of reflective practice Opportunities for collaborative discussion of possible dimensions of reflective practice	2 = 6 1 = 3 2 = 3 1 = 3	Your attitude towards research and the contribution you feel it can make to your practice Nature of relationships between practitioners (trusting etc) The extent to which the centre places	E = 6 E = 6 E = 3

		Development of a centre specific model of reflective practice	2 = 3	emphasis on collaborative dialogue and therefore how familiar you are with this as a process for supporting centre development	N = 3
<p>Again, 5 out of 6 practitioners made one level of positive progress against this outcome, with one practitioner making no progress in relation to the ratings during the period of the intervention. The opportunities for collaborative discussion and the development of a centre specific model of RP were rated more highly generally than the sharing of definitions and models of RP. Practitioners' attitude towards research was rated as being a significant influence (in this case positive) on the impact of sharing literature on the outcome. Also, the nature of relationships between individuals in the group was seen to be a significant influence on the effectiveness of group discussion as a mechanism to support the outcome. This suggests that there is a need for positive relationships and a positive perception of the contribution of research if these mechanisms are to be supportive of the outcome. Attention perhaps needs to be paid to how the research literature is introduced and shared.</p>					
3. Able to articulate your professional values and understand how these influence your practice	N to D = 2 D to D+ = 2 D+ to F = 1 F to F = 1	Sharing examples of professional values Opportunities for collaborative discussion of values and use of voting system to develop set of shared core values for centre	1 = 2 2 = 3 3 = 1 1 = 4 2 = 1 3 = 1	Nature of relationships between practitioners (trusting, whether they can reach agreement etc) The extent to which the centre places emphasis on collaborative dialogue	E = 6 E = 3 N = 3
<p>Again 5 out of 6 practitioners made one level of progress towards this outcome during the period of the intervention. The practitioner who made no progress rated the outcome as fully achieved prior to the intervention. There were a range of views expressed regarding the perceived support provided by the mechanisms. Although, 5 out of 6 practitioners made positive progress it may be worth exploring other mechanisms which may more effectively support the expected outcome for some practitioners. Opportunities for collaborative discussion was considered to make a more significant contribution to supporting the outcome than the sharing examples of professional values. The experience of practitioners in collaborative dialogue seemed less important than the nature of the group. This suggests that time protected to discussion of values in a supporting group context is most important in supporting practitioners to be able to articulate their professional values and the influence they have on practice.</p>					

4. Able to identify and explore problematic situations and reflect on your thinking and practice in relation to these	N to D = 1 D to D = 1 D to D+ = 1 D to F = 1 D+ to F = 1 F to F = 1	Articulation of problematic situations during group sessions using set framework	1 = 3 2 = 3	The extent to which the centre environment (in terms of professional development practices and general ethos) is supportive of the identification of areas for development	E = 6
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				The extent to which you see the benefit of identifying things you find more difficult in terms of your professional development	E = 6
<p>1 practitioner made two levels of progress, 3 made one level of progress and 2 made no progress, although one of these was due to the practitioner already rating the outcome as 'fully achieved' prior to the project. Half of the practitioners found the opportunity to discuss problematic situations in the group context as highly supportive of the outcome, 3 rated it as making some contribution. All practitioners thought that the extent to which the centre is supportive of the identification of areas for development and the extent to which practitioners see the benefit of identifying areas for development had an influence on the mechanism and their experience of the outcome. In this case practitioners thought that the Centre was supportive and they did see the benefit. This suggests that this mechanism may not be as supportive for practitioners who do not perceive the benefit of identifying difficulties as areas for development. This may be why the findings in relation to the importance of discussing problematic situations as opposed to successful experiences in the literature is variable, with some authors suggesting that discussion of problematic situations can be threatening (Morley, 2007).</p>					
5. Able to identify the positive aspects of problematic situations (exceptions) and use these to develop positive ways forward	N to D = 3 D to D = 1 D to F = 1 D+ to F = 1	Questioning of practice in group sessions to identify exceptions	1 = 4 2 = 2	The extent to which the centre has an ethos of positive thinking and optimism	E = 5 N = 1
<p>5 practitioners made one level of progress against the outcome and 1 made no progress. 3 practitioners initially rated the outcome as 'not achieved/little or no awareness' prior to the intervention and made one level of progress, suggesting that a high proportion of practitioners were not able to identify positive aspects of situations and use this to develop positive ways forward before the intervention. This strategy is related to solution focussed approaches which is an approach used by Educational Psychologists during consultation. These findings suggest that the specific questioning of practice in the group context in relation to exceptions supported developments in this ability. The extent to which the centre has an ethos of positive thinking was considered by 5 practitioners to have an impact on the mechanism. This suggests that practitioners within Centres which encourage a focus on the positive are better able to identify positive aspects of difficult situations. Educating practitioners and settings about the values of positive psychology and solution focussed thinking may be another mechanism which could support the outcome, or indeed increase the effectiveness of the existing mechanism through supporting the context.</p>					
6. Able to view problematic situations objectively and gain insight from seeing the situation from different perspectives	D to D+ = 3 D to F = 2 D+ to F = 1	Questioning of practice to identify alternative perspectives on situation as part of a multi-professional group	1 = 4 2 = 2	Different backgrounds and experiences of different professionals in group context Practitioners confidence in sharing views with group	E = 6 E = 6

All practitioners made at least one level of progress against this outcome during the period of the intervention, with 2 practitioners making two levels of progress. The specific questioning of practice in the group context was rated by most as being highly significant and by some as making some contribution to development. Both practitioners' confidence in sharing views and the grouping of practitioners from different professional roles was considered to have an impact on the influence of the mechanisms. Research suggests that considering situations from different perspectives is considered to be an important element of reflective practice. So it appears that the process of questioning practice in a multi-professional group and supporting practitioners to feel confident in sharing their views are important mechanisms and contexts to consider when promoting RP.					
7. Able to identify how your actions can be reinforcing problematic situations	N to D = 1 D to D+ = 4 D to F = 1	Questioning of practice to identify alternative perspectives on situation supported by multi-professional group	1 = 4 2 = 1 3 = 1	The extent to which the centre promotes a blame free approach to reflecting on practice Nature of relationships between practitioners (trusting etc)	E = 6 E = 6
5 practitioners made one level of progress against this outcome and 1 practitioner made two levels of progress. There were a range of views related to the perceived support of the mechanism, with the majority of practitioners rating the questioning of practice to identify different perspectives as having a significant impact on their experience of the outcome, and all practitioners suggesting that a blame free approach to reflection and a trusting relationship between group members are important contexts to support the positive impact of the mechanism. So again, for this mechanism within the intervention to be effective a focus may need to be placed on supporting the development of a blame free culture so that practitioners can reflect honestly on their practice and needs for development. This would provide support for Morley (2007) who suggested that the exploration of problematic situations may be perceived as a threat to confidence and competence.					
8. Able to learn from looking back on previous successful experiences and apply this knowledge to identify positive ways forward in different problematic situations	D to D+ = 3 D to F = 1 F to F = 2	Questioning of practice by others in group session to identify if similar problematic situations have been encountered and successfully resolved in the past Other practitioners sharing their views and experiences within the group sessions	1 = 5 4 = 1 1 = 5 4 = 1	The extent to which the centre encourages practitioners to reflect on experiences that are both positive and not so positive and to learn from this Nature of relationships between practitioners (trusting etc) Range of professional roles and experiences	E = 6 E = 6 E = 6
3 practitioners made one level of progress against this outcome during the period of intervention, 1 made two levels of progress and 2 made no progress (but they rated the outcome as being fully achieved prior to the project commencing). Questioning in the group context and other practitioners sharing their views and experiences were both highlighted by the majority of practitioners as being mechanisms which were highly supportive of the outcome. The extent to which the centre supports reflections on both positive and negative experiences, the nature of relationships between practitioners and the range of professional roles and experiences that are within the group are all thought to have an impact on the mechanisms.					

9. Able to identify and articulate the values underpinning current practice	N to D = 2 D to D+ = 2 D+ to F = 1 F to F = 1	Questioning of current practice in group context to understand the values underpinning it	1 = 3 2 = 2 4 = 1	Whether the Centre has stated values prior to the research process Practitioners level of experience of identifying and discussing values	E = 4 N = 2 E = 6
5 practitioners made one level of progress against the outcome during the period of intervention, and 1 made no progress (although they had rated the outcome as fully achieved prior to the intervention. One practitioner rated the mechanism (questioning in group) as having no impact on the outcome so it may be worth exploring other mechanisms that might be supportive of the outcome, or it may be that they did not experience the context as being supportive of the mechanism. Practitioners' experience of discussing values and Centres having existing Centre values were considered to be important contexts and many of the practitioners stated that they had not talked about professional values before, so again, efforts focussed at supporting centres to engage in discussions about centre values and agreeing shared values may be support the mechanism to have a greater impact on the outcome.					
10. Able to highlight inconsistencies between practice and shared core values and can understand how this can result in dissatisfaction with practice	N to D = 2 D to D = 1 D to D+ = 2 D to F = 1	Questioning in group context to identify if current practice is inconsistent with shared core values in group sessions	1 = 2 2 = 3 4 = 1	Practitioners level of experience of identifying and discussing values Nature of relationships between practitioners (trusting)	E = 6 E = 6
Again 5 out of 6 practitioners made one level of progress and 1 made no progress against the outcome during the period of the project. The practitioner who rated themselves as making no progress rated the mechanism as having no impact on their development, which accounts for the lack of progress. Practitioners' level of experience of identifying values and the nature of relationships between practitioners were rated by all as being contexts that influenced the mechanism. Again, this suggests it is important for centres to be supported in engaging in discussions about professional values in the context of a supportive group. If practitioners have no prior experience of discussing values, questioning in a group context may not be supportive of the outcome. Therefore other mechanisms may need to be identified to support the early stages of development in this ability.					
11. Able to identify ways of bringing practice more in line with values	N to D = 1 D to D = 1 D to D+ = 3 D to F = 1	Collaborative problem solving to identify ways of bringing practice more in line with shared core values	1 = 5 2 = 1	Practitioner's level of understanding of how values inform practice Amount of time available to reflect on both values and practice	E = 6 E = 6
5 practitioners made one level of progress against this outcome during the period of intervention and 1 made no progress. This was the same practitioner that rated themselves as making no progress against the previous expected outcome. This time however, they rated the mechanism as making some contribution to their development, with the other practitioners rating collaborative problem solving as having a significant impact on the outcome when practitioners have an understanding of how values inform practice (supported through discussions in the introductory sessions) and have time available to reflect on both values and practice.					

12. Confident in ability to ask yourself and other practitioners questions which encourage reflection on practice both in and out of group context	N to D = 2 N to D+ = 1 D to D+ = 1 D to F = 1 F to F = 1	Modelling of questioning by Trainee Educational Psychologist in group context	1 = 3 2 = 3	Relationship between the Trainee Educational Psychologist and practitioners (trusting etc)	E = 6
				The extent to which the Centre values support and challenge from external professionals	E = 6
		Written framework to prompt collaborative discussion	1 = 2 2 = 4	Amount of time available for reflecting on practice outside of group sessions	I = 6
				Physical location of practitioners outside of group sessions (implications for the amount of time they are able to work together and discuss practice etc)	I = 6
4 practitioners made one level of progress, 1 practitioner made two levels of progress and 1 rated themselves as making no progress against the outcome during the period of intervention (but they rated the outcome as fully achieved prior to the intervention). The modelling of questioning by the Trainee Educational Psychologist was considered by 3 practitioners to make a significant contribution to progress against the outcome, and by 3 to make some contribution. A positive relationship between the Trainee Educational Psychologist and the practitioners and the extent to which practitioners value support and challenge from an external professional were considered by all to have an impact on the support of this mechanism. Fewer practitioners found the written framework to support discussions as supportive as the role of the Educational Psychologist, although responses were still positive. Having time available outside group sessions and having opportunities to meet with group members outside of group sessions was considered to be important but something that the practitioners did not experience. Despite this, 5 out of 6 practitioners made progress against the outcome.					
13. Able to recognise how reflection on one aspect of practice can inform changes in wider practice (the need for policy amendments, changes to practice guidance and the need for further staff development)	N to D = 3 D to F = 3	Discussion about broader implications of reflections on broader issues such as policy and practice guidance within group sessions	1 = 3 2 = 3	Extent to which management are perceived to value the input of all staff on the development of policies and centre guidance	E = 6
				Your perceptions of whether informing policy and practice at a centre level is part of your role	E = 6

3 practitioners rated themselves as making one level of progress and 3 as making two levels of progress against this outcome during the period of intervention, with 3 rating themselves as having little or no awareness of this outcome prior to the intervention. The mechanism expected to support this was the specific questioning about wider implications towards the end of the group discussions. This was always included as it was written into the framework, so although the written framework was not rated very highly in support of another outcome above it may be that the value of it was recognised here, as without it it may be suggested that the practitioners would not have engaged in broader discussions. All practitioners felt that it was important that centre management valued the contribution of practitioners to policy development and that practitioners perceived this to be part of their role. These contexts could be developed within centres through the use of managers sharing draft policies for feedback, developing working groups for policy development of consulting regularly with practitioners about policies and guidance etc.

14. Reflections on practice consistently lead to changes in practice	N to D = 1 D to D+ = 2 D to F = 2 D+ to F = 1	Participation in the collaborative problem solving process	1 = 4 2 = 2	Time available to consider changes in thinking and practice outside of group sessions	E = 6
		Opportunities to share experiences with other practitioners	1 = 5 2 = 1	Range of roles and experiences of practitioners in group	E = 6
		Written recording of individual's perceived changes in thinking and/or practice resulting from the process	1 = 1 2 = 4 4 = 1	Time available to record changes	E = 6
				Framework provided for written recording	E = 2 N = 4
		Structured verbal feedback regarding changes actually made in thinking and practice and the impact of these changes	1 = 2 2 = 4	Framework provided for verbal feedback	E = 6
				Nature of relationships between practitioners and perceived level of support provided in group sessions	E = 6

4 practitioners rated themselves as making one level of progress and 2 rated themselves as making two levels of progress against the outcome over the period of intervention. The collaborative problem solving process and the sharing of experiences within the group were perceived to be more supportive than the written recording of developments (scaling) and giving structured verbal feedback about changes made. This perhaps suggests that the practical sharing of ideas and discussions are more helpful than the monitoring structures which might be put in place (recording of changes in practice etc). The provision of a framework was not considered to be important but having time available to consider changes in and outside of the group, having opportunities to share discussions with people in different roles, having time available to record changes, having a framework to support verbal feedback and having positive relationships between practitioners were all considered to influence the impact the mechanisms had on experience of outcomes.

15. Confident in knowledge of processes that support further development in reflective practice	N to D = 1 D to D+ = 2 D to F = 3	Group discussion regarding impact of sessions on practitioners' understanding and development of reflective practice Group session focussing on reflecting on the centre model of reflective practice and set of shared core values	1 = 3 2 = 3 1 = 4 2 = 2	Whether the Centre/management encourage practitioners to identify what factors have supported their development Amount of time available for practitioners to reflect on practice and values in and outside of group sessions Extent to which practitioners feel that their views are valued	E = 2 N = 4 E = 3 N = 3 E = 6
<p>3 practitioners rated themselves as making two levels of progress and 3 making one level of progress against this outcome during the period of the intervention. The group discussion regarding the impact of sessions on development was considered by 3 practitioners to make a significant contribution to their experience of the outcome and by 3 to make some contribution. The majority of practitioners did not think the extent to which centre management encourages practitioners to identify factors supporting their development influenced the mechanism. Half of the respondents thought that the provision of time supported reflections on the context model of RP and all of them thought that the extent to which they perceived their views are valued influenced their reflections on the model.</p>					

Appendix 14b - Summary of CMO responses for Centre B

The table below provides the grouped CMO questionnaire responses for practitioners in Centre B. A summary of the results are provided after each outcome.

Expected Outcomes: Progress against outcome as a result of participation in the study (F=fully achieved D+=further developing D=developing/ emergent N=not achieved/ little or no awareness)	Change experienced a to b =c where a is pre intervention rating, b is post intervention rating and c refers to the number of practitioners	Mechanisms: Support of mechanism on outcome rated (1=highly significant contribution to my learning 2=made some contribution to my learning 3=hindered learning 4=neutral/neither helpful or hindrance)	Perceived importance of mechanism in supporting outcome a=b a is the rating b is the number of practitioners who used the rating	Contexts: (E=enabler I=inhibitor N=no impact)	Effect of context on supporting mechanism to achieve outcome a=b a is the rating b is the number of practitioners who used the rating
1. Confident in your understanding of what reflective practice means to you in your work	N to D = 1 D to D+ = 1 D+ to D+ = 1 F to D+ = 1	Sharing literature on definitions and models of reflective practice	1 = 1 2 = 3	Your previous experience of research and exploring research literature	E = 2 N = 1 I = 1
2 practitioners rated themselves as making one level of progress during the period of intervention, 1 rated themselves as making no progress and 1 rated themselves as regressing one level. 3 practitioners rated that the sharing of literature made some contribution to learning and 1 rated it as making a highly significant contribution. Previous research experience was thought to influence the impact of the mechanism, with 2 practitioners rating that they had previous research experience which was an enabler, 1 rating that they had no experience which was an inhibitor and 1 rating that the level of research had no impact. The fact that 3 practitioners thought previous experience had an impact on the support of the mechanism suggests that this is something to be mindful of when sharing research with practitioners.					
2. Confident in your ability to identify when you are being a reflective practitioner and what you need to do to become an increasingly reflective practitioner	D to D+ = 2 D+ to D = 1 F to F = 1	Sharing literature on definitions and models of reflective practice Opportunities for collaborative discussion of possible dimensions of reflective practice	1 = 1 2 = 3 1 = 3 2 = 1 2 = 4	Your attitude towards research and the contribution you feel it can make to your practice Nature of relationships between practitioners (trusting etc) The extent to which the centre places	E = 4 E = 4 E = 3

		Development of a centre specific model of reflective practice		emphasis on collaborative dialogue and therefore how familiar you are with this as a process for supporting centre development	N = 1
<p>2 practitioners rated themselves as making one level of progress, 1 as making no progress (but outcome rated as fully achieved pre intervention), and 1 rating that they had regressed one level against the outcome. The development of a Centre specific model was thought to be the most significant contributor to this outcome which itself was thought by 3 practitioners to be influenced by their experience of collaborative dialogue as a process. Collaborative discussion was rated as having a significant impact on the outcome by 3 practitioners and some contribution by 1, and all practitioners thought that the impact of this was influenced by the nature of relationships between practitioners, suggesting that supportive and trusting relationships are an important support for the outcome. Most practitioners thought that the sharing of research literature (models and definitions of reflective practice) made some contribution with only 1 rating its contribution to the outcome as highly significant. All practitioners rated that their positive attitude towards the contribution of research had an impact on the effectiveness of this mechanism. This suggests that positive relationships and a positive attitude towards the contribution of research are needed for it to have a positive impact on the outcome.</p>					
3. Able to articulate your professional values and understand how these influence your practice	D to D = 1 D to F = 1 D+ to F = 1 F to D+ = 1	Sharing examples of professional values Opportunities for collaborative discussion of values and use of voting system to develop set of shared core values for centre	1 = 1 2 = 3 2 = 4	Nature of relationships between practitioners (trusting, whether they can reach agreement etc) The extent to which the centre places emphasis on collaborative dialogue	E = 4 E = 4
<p>1 practitioner made one level of progress, 1 made two levels of progress, 1 rated themselves as making no progress and 1 rated themselves as regressing one level against this outcome during the period of intervention. Sharing examples of professional values was thought to contribute significantly to the outcome by 1 practitioner, and make some contribution by the other 3. These mechanisms were rated by all practitioners to be influenced by the nature of relationships between practitioners that in this case were perceived to be positive. The contribution of collaborative dialogue to practitioners' ability to articulate professional values was rated as making some contribution to the outcome by all practitioners and all thought this was influenced positively by the emphasis placed on collaborative dialogue by the centre.</p>					

4. Able to identify and explore problematic situations and reflect on your thinking and practice in relation to these	D to D = 1 D to D+ = 1 D+ to D+ = 1 F to D = 1	Articulation of problematic situations during group sessions using set framework	1 = 1 2 = 2 4 = 1	The extent to which the centre environment (in terms of professional development practices and general ethos) is supportive of the identification of areas for development	E = 4
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				The extent to which you see the benefit of identifying things you find more difficult in terms of your professional development	E = 4
<p>1 practitioner rated themselves as making one level of progress against this outcome during the period of intervention, 2 rated themselves as making no progress and 1 rated themselves as regressing one level. Only 1 practitioner rated the contribution of the mechanism as making a significant contribution to development, 2 rated it as making some contribution and 1 rated it as making no contribution (this was one of the practitioners who made no progress). All practitioners rated that the mechanism was supported by the centre environment being supportive of identification of areas for development and that it was also supported by their understanding of the benefit of identifying problematic situations for development. This suggests that this mechanism may not be as supportive for practitioners who do not perceive the benefit of identifying difficulties as areas for development. This may be why the findings in relation to the importance of discussing problematic situations as opposed to successful experiences in the literature is variable, with some authors suggesting that discussion of problematic situations can be threatening (Morley, 2007). The lower rate of progress of practitioners in Centre B in comparison to Centre A against this outcome may suggest that practitioners in Centre B may benefit from the identification of successful experiences and reflection on these to promote development.</p>					
5. Able to identify the positive aspects of problematic situations (exceptions) and use these to develop positive ways forward	D to D = 2 D to D+ = 1 D+ to D = 1	Questioning of practice in group sessions to identify exceptions	1 = 2 2 = 2	The extent to which the centre has an ethos of positive thinking and optimism	E = 3 N = 1
<p>1 practitioner rated themselves as making one level of progress against the outcome during the period of intervention, 2 rated themselves as making no progress and 1 rated themselves as regressing one level. The questioning of practice in the group context was rated by 2 as being highly significant and by 2 as only making some contribution. The impact of the questioning on the outcome was thought by 3 practitioners to be influenced by the ethos of the centre. 1 practitioner thought the ethos had no impact on the effectiveness of the mechanism. This may suggest that it is important to ensure that the centre has an ethos of positive thinking and optimism so that positive aspects of problematic situations can be identified and used to develop new ways forward. Educating practitioners and settings about the values of positive psychology and solution focussed thinking may be another mechanism which could support the outcome, or indeed increase the effectiveness of the existing mechanism through supporting the context.</p>					
6. Able to view problematic situations objectively and gain insight from seeing the situation from different perspectives	D to D = 1 D to D+ = 2 D+ to D = 1	Questioning of practice to identify alternative perspectives on situation as part of a multi-professional group	1 = 2 2 = 2	<p>Different backgrounds and experiences of different professionals in group context</p> <p>Practitioners confidence in sharing views with group</p>	<p>E = 4</p> <p>E = 4</p>

<p>2 practitioners rated themselves as making one level of progress against the outcome during the period of intervention, 1 rated themselves as making no progress and 1 rated themselves as regressing one level. The use of questioning to support the ability to view situations from different perspectives was rated by 2 practitioners as making a significant contribution to development in relation to the outcome and by 2 as making some contribution. This was considered by all to be influenced by the use of a multi-professional group and practitioners' confidence in sharing views. This supports the research findings relating to the benefit of multi-professional supervision and consultation groups. However, for some practitioners they may have been a more effective mechanism that could support this outcome.</p>					
7. Able to identify how your actions can be reinforcing problematic situations	N to D = 1 D to D = 1 D to D+ = 1 D + to D+ = 1	Questioning of practice to identify alternative perspectives on situation supported by multi-professional group	2 = 3 4 = 1	<p>The extent to which the centre promotes a blame free approach to reflecting on practice</p> <p>Nature of relationships between practitioners (trusting etc)</p>	E = 2 N = 2 E = 3 N = 1
<p>2 practitioners rated themselves as making one level of progress and 2 practitioners rated themselves as making no progress against this outcome during the period of intervention. The use of questioning to support the identification of actions that may be reinforcing problematic situations was thought to be highly supportive by 3 practitioners and was thought to make some contribution by 1 practitioner. A blame free ethos in the centre was only considered to influence the mechanism and outcome by half of the practitioners, the other half thought the ethos had no impact. 3 out of 4 practitioners thought the nature of relationships had an impact on this. This suggests that it may not always be the case that the exploration of problematic situations is perceived as a threat and requires a supportive group context and an understanding of the emotional response as Morley (2007) suggests.</p>					
8. Able to learn from looking back on previous successful experiences and apply this knowledge to identify positive ways forward in different problematic situations	D to D = 1 D to D+ = 1 D+ to D+ = 1 F to F = 1	<p>Questioning of practice by others in group session to identify if similar problematic situations have been encountered and successfully resolved in the past</p> <p>Other practitioners sharing their views and experiences within the group sessions</p>	1 = 2 2 = 2 1 = 3 2 = 1	<p>The extent to which the centre encourages practitioners to reflect on experiences that are both positive and not so positive and to learn from this</p> <p>Nature of relationships between practitioners (trusting etc)</p> <p>Range of professional roles and experiences</p>	E = 3 N = 1 E = 3 N = 1 E = 4
<p>2 practitioners rated themselves as making one level of progress against this outcome and 2 as making no progress during the period of intervention, although 1 rated the outcome as fully achieved prior to the intervention. The sharing of views by different practitioners was perceived to be more supportive of the outcome than the use of questioning (although this was perceived to provide support also) and was perceived to be influenced by the range of roles in the group and the nature of relationships. This provides support for the guidance that suggests the need for whole team meetings to reflect on practice (DfES, 2006) where practitioners from different roles can get together. Feedback from practitioners during sessions suggests that whole team meetings tend to cover practical issues rather than provide time for reflection, and discussions of practice tend to occur in mono-professional groups. This is therefore perceived to be a valuable mechanism in finding new ways forward but is not a naturally occurring mechanism, hence providing support for the intervention.</p>					

9. Able to identify and articulate the values underpinning current practice	N to D = 1 D to D = 1 D to D+ = 1 D+ to D+ = 1	Questioning of current practice in group context to understand the values underpinning it	1 = 2 2 = 2	Whether the Centre has stated values prior to the research process Practitioners level of experience of identifying and discussing values	E = 3 N = 1 E = 4
2 practitioners rated themselves as making one level of progress and 2 rated themselves as making no progress in their ability to identify and articulate values during the period of intervention. The specific questioning about values in the group sessions was rated by 2 practitioners as making a significant contribution to learning and by 2 as making some contribution. This mechanism was perceived by most practitioners to be influenced by the stating of values prior to the intervention and by all practitioners to be influenced by their level of experience in discussing values. This therefore suggests that the discussion of values and agreement of core values as a centre prior to the intervention may influence the impact of the mechanism on the outcome.					
10. Able to highlight inconsistencies between practice and shared core values and can understand how this can result in dissatisfaction with practice	N to D = 1 D to D = 1 D to D+ = 1 D+ to D+ = 1	Questioning in group context to identify if current practice is inconsistent with shared core values in group sessions	1 = 2 2 = 2	Practitioners level of experience of identifying and discussing values Nature of relationships between practitioners (trusting)	E = 4 E = 4
2 practitioners rated themselves as making one level of progress against this outcome and 2 as making no progress during the period of intervention. Again the mechanism was perceived to be influenced by practitioners' prior experience in discussing values as well as the nature of relationships between practitioners. Therefore, identification of values and inconsistencies between practice and values may be supported by centres having ongoing dialogue regarding values and placing an emphasis on positive relationships between practitioners to facilitate open discussion and the sharing of views.					
11. Able to identify ways of bringing practice more in line with values	N to D = 1 D to D+ = 1 D+ to D+ = 2	Collaborative problem solving to identify ways of bringing practice more in line with shared core values	1 = 2 2 = 2	Practitioner's level of understanding of how values inform practice Amount of time available to reflect on both values and practice	E = 4 E = 3 N = 1
Again, 2 practitioners rated themselves as making one level of progress against this outcome and 2 as making no progress during the period of intervention. 2 practitioners rated the mechanism as being highly supportive of the outcome and 2 rated it as making some contribution. The mechanism was thought to be influenced by the practitioners' level of understanding of the influence of values on practice and the time available to reflect on values and practice. Therefore without an initial focus on developing shared values and discussing the impact of these during introductory sessions it is likely that this mechanism would not be as supportive of the outcome. Also, without time committed to reflection on values and practice through this structured intervention the mechanism would be unlikely to support the outcome.					

12. Confident in ability to ask yourself and other practitioners questions which encourage reflection on practice both in and out of group context	D to D = 2 D+ to D+ = 1 D+ to F = 1	Modelling of questioning by Trainee Educational Psychologist in group context Written framework to prompt collaborative discussion	1 = 2 2 = 2 1 = 2 2 = 2	Relationship between the Trainee Educational Psychologist and practitioners (trusting etc) The extent to which the Centre values support and challenge from external professionals Amount of time available for reflecting on practice outside of group sessions Physical location of practitioners outside of group sessions (implications for the amount of time they are able to work together and discuss practice etc)	E = 4 E = 4 E = 3 N = 1 E = 3 N = 1
Only 1 practitioner rated themselves as making progress against this outcome during the period of intervention. So it could either be suggested that other mechanisms could be more effective at supporting the outcome or that the context was not supportive of the mechanism. However, as the mechanisms were rated as either highly supportive or providing some support, and the as the contexts were mostly rated to be supportive of the mechanism, it could be suggested that practitioners needed to experience these mechanisms over a longer time period. This may have implications for considering how the intervention could continue with internal facilitation so as to be viable as a longer term intervention.					
13. Able to recognise how reflection on one aspect of practice can inform changes in wider practice (the need for policy amendments, changes to practice guidance and the need for further staff development)	D to D = 3 D to D+ = 1	Discussion about broader implications of reflections on broader issues such as policy and practice guidance within group sessions	1 = 1 2 = 3	Extent to which management are perceived to value the input of all staff on the development of policies and centre guidance Your perceptions of whether informing policy and practice at a centre level is part of your role	E = 3 N = 1 E = 3 N = 1
Again, only 1 practitioner rated themselves as making progress against this outcome during the period of intervention. During group discussions practitioners tended to need ongoing support and guidance from the Trainee Educational Psychologist to engage in discussions about the broader implications. This is different to the progress rated in Centre A and so although the practitioners in Centre B mostly rated the mechanisms and contexts as supportive it is likely that there are other mechanisms or contextual factors that influenced progress against this outcome.					

14. Reflections on practice consistently lead to changes in practice	D to D+ = 1 D+ to D = 1 D+ to F = 1 F to F = 1	Participation in the collaborative problem solving process	1 = 2 2 = 2	Time available to consider changes in thinking and practice outside of group sessions	E = 2 N = 1 I = 1
		Opportunities to share experiences with other practitioners	1 = 2 2 = 2	Range of roles and experiences of practitioners in group	E = 4
		Written recording of individual's perceived changes in thinking and/or practice resulting from the process	1 = 1 2 = 2 4 = 1	Time available to record changes	E = 3 N = 1
		Structured verbal feedback regarding changes actually made in thinking and practice and the impact of these changes	1 = 1 2 = 2 4 = 1	Framework provided for written recording	E = 3 N = 1
				Framework provided for verbal feedback	E = 3 N = 1
			Nature of relationships between practitioners and perceived level of support provided in group sessions	E = 4	
2 practitioners rated themselves as making one level of progress against this outcome, 1 as making no progress (due to rating the outcome as fully achieved prior to the intervention) and 1 as regressing one level. As with Centre A, the written recording and verbal feedback regarding changes was perceived to be less supportive of the outcome than engagement in the collaborative problem solving process and opportunities to share experiences with other practitioners. These more supportive mechanisms were perceived by most practitioners to be influenced by time available to consider changes inside and outside of the group with people from a variety of roles and experiences. This suggests that alongside the group intervention centres could usefully provide planned time for collaborative discussion and reflection. But this was something that several practitioners stated was not provided. The only non-contact time they had was for individual planning and recording.					
15. Confident in knowledge of processes that support further development in reflective practice	D to D = 3 D+ to D = 1	Group discussion regarding impact of sessions on practitioners' understanding and development of reflective practice	1 = 2 2 = 1 4 = 1	Whether the Centre/management encourage practitioners to identify what factors have supported their development	E = 3 N = 1
		Group session focussing on reflecting on the centre model of reflective practice and set of	1 = 2 2 = 2	Amount of time available for practitioners to reflect on practice and values in and outside of group sessions	E = 2 N = 2

		shared core values		Extent to which practitioners feel that their views are valued	E = 3 N = 1
<p>3 practitioners rated themselves as making no progress against this outcome and 1 practitioner rated themselves as regressing one level during the period of intervention. This suggests that although mechanisms within the intervention have resulted in progress against some of the outcomes, they have not supported practitioners to become more confident in their ability to continue to develop their reflective practice outside of the group intervention. This suggests that there may need to be some explicit planning at the end of the intervention regarding ways forward, or there may need to be consideration of the intervention being continued in the long term, perhaps with internal facilitation. This also may provide supporting for the research findings suggesting that reflective practice and support through group consultation requires the support of an external professional.</p>					

CHAPTER FOUR

CONCLUDING REFLECTIONS

CONCLUSIONS AND REFLECTIONS

1. Introduction

This chapter provides reflections on the contribution of the study to the wider literature on reflective practice (RP), particularly that related to attempts to support developments in RP. It also provides reflections on the implications that the findings have on the role of Educational Psychologists in supporting the development of practice in Children's Centres.

2. Contribution of research to knowledge in the field of reflective practice

This research is suggested to provide a systematic approach to evaluation of the key processes and contexts that support RP. This has been identified as a gap in the literature. Evaluation of an intervention, embodying several mechanisms and contexts implicitly identified in the literature as being supportive of RP, has provided support for many of the earlier findings. It has identified particular mechanisms and contexts that are important in supporting developments in RP in Children's Centres. The findings, based on practitioners' views, suggest that particular mechanisms (collaborative discussion, questioning of specific elements of practice by others and sharing of different perspectives) and contexts (supportive relationships between practitioners in group and groups containing practitioners from different professional roles) are highly supportive of developments in RP.

However, there is a need for further evaluation of the mechanisms and contexts in a range of settings. In addition, there is also a need for future studies to focus on practitioners' perceived changes in their thinking about practice in addition to more objective measures of changes in their actual practice. This will provide more information on whether the mechanisms and contexts identified as supportive of RP by practitioners in this study result in changes and improvements in practice.

3. Reflections on use of evaluation methodology informed by Realistic Evaluation principles

The use of Realistic Evaluation (RE) informed evaluation methodology (Pawson & Tilley, 2001) was perceived to be useful, although applying it to very complex concepts (RP) and complex, multifaceted interventions was difficult. As the program specification and CMO configurations were drawn from a wide range of previous research, and as there were many outcomes associated with the intervention, it was difficult to present the CMO configurations in an accessible way and difficult to develop a way of communicating these effectively to practitioners for the purpose of evaluation. An innovative approach to the development of a questionnaire was used, which enabled practitioners to see the CMO configurations and expected outcome patterns and rate the extent to which these were experienced. This provided useful data although the absence of volunteers to take part in an interview informed by RE principles resulted in limited qualitative data.

It was my experience that an approach to research informed by RE principles supported the careful extraction of findings from previous studies, highlighted limitations with the methodology previously used in the development and evaluation of interventions to support RP, and supported the development of an intervention which allowed existing assumptions about how best to support RP to be 'tested'. It was also perceived that the evaluation process was a useful learning tool for the practitioners involved in the study. Although some needed a high level of support to understand the structure and presentation of the evaluation questionnaire, they were all able to complete it fully which resulted in them thinking about the specific mechanisms and contexts which supported their learning. It is suggested that a simplified CMO configuration format could be used by Children's Centre managers to evaluate the impact of other training and development initiatives (for example, training days, supervision meetings). This would perhaps support them in understanding how different practitioners respond to different learning and teaching strategies (for example use of discussion, use of direct delivery of training).

Information gathered through evaluations of this nature may support managers in streamlining professional development processes, incorporating only the mechanisms which are most supportive of developments. It may also identify the particular contexts which are most supportive of development so that managers are able to focus on developing these contexts alongside the implementation of development processes. This would obviously have implications for the role of Educational Psychologists in delivering training to Centre managers regarding the principles and application of a Realistic approach to evaluation. No studies have

been identified through this research that explore practitioners' perception of an evaluation process informed by RE principles. This may be an area worthy of further study. It would be interesting to evaluate the impact of the evaluation itself on the learning and development of practitioners.

4. Implications of the findings for the role of Educational Psychologists in Children's Centres

4.1. Practitioner perceptions of support provided by Trainee Educational Psychologist

Half of the respondents in both Centres rated the modelling of questioning by the Trainee Educational Psychologist as making a highly significant contribution to progress against the outcome and half rated it as making some contribution. This suggests that the facilitation of the process by a Trainee Educational Psychologist was a supportive mechanism. However, the relationship between the Trainee Educational Psychologist and the practitioners, and the extent to which the Centre values support and challenge from external professionals, were contexts considered to have an impact on the effectiveness of the mechanism. In the case of both Centres the context was perceived to enable the mechanism to have the planned impact but these contextual factors need to be considered when implementing future interventions. These findings support those of Morley (2007) who suggested that

practitioners need to be supported by an external professional who has knowledge of the role and a positive relationship with the practitioners involved.

4.2 Trainee Educational Psychologists reflections on role in facilitating the intervention

Although the impact of the Trainee Educational Psychologist was only directly measured against one outcome on the questionnaire, the impact is considered to be broader. It is argued here that the role of the Trainee Educational Psychologist was crucial in supporting the positive outcomes. Firstly, due to the development of the intervention by the Trainee Educational Psychologist. It could be argued that Educational Psychologists are one of the only external support professionals that have a remit to work at the organisational level, have skills and training in group processes and management and are also skilled in creating safe and trusting spaces to engage in sensitive consultations. Many of the focuses of the collaborative problem solving discussions were centred on sensitive topics, for example difficult professional relationships having an impact on practice. Discussions of this nature need very careful facilitation with an awareness of group dynamics, the need for confidentiality, the need for emotional containment and the need for support to move towards new ways forward and possible solutions.

Whilst Educational Psychologists are not the only professionals that have those skills they are perhaps one of the only professional groups working regularly with educational settings that have specific training and skills in the combination of aspects. An understanding of solution focussed approaches (Macdonald, 2007) was considered to be useful in the facilitation of the group sessions as some practitioners needed support to move from sharing their problematic situation and concerns about practice to considering new ways forward. There was sometimes a tendency for practitioners to 'dwell' on the negative aspects of practice, finding it difficult to identify exceptions as a way forward. Educational Psychologists are familiar with solution focussed approaches to consultation and are able to use these to empower practitioners to look for their own solutions and have a sense of optimism about future practice.

Some studies have suggested that RP needs to be supported by a skilled professional (Moran & Dallat, 1995; James et al, 2007; Morley, 2007). The reflections of the Trainee Educational Psychologist would support that finding here. The practitioners in both settings needed support to move through the process and engage fully in discussions to clarify the problem. Practitioners tended to want to move onto suggesting new ways forward without achieving a full understanding of the integration of the problem dimensions and values underpinning them. The Trainee Educational Psychologist facilitated this process with the support of the written framework, although this was not rated as a significant mechanism by many of the practitioners. Again, Educational Psychologists with their skills in clarifying

problems and integrating problem dimensions in order to lead to well informed actions (Cameron, 2006) may be well placed to provide this support. In addition, in this current study, perhaps the most significant contribution of the Trainee Educational Psychologist was the development of the program specification, informed by RE principles and previous research findings. It is suggested that this is a unique contribution which other professionals could develop and ‘test out’ through applying the intervention in context.

4.3 Need for further research

Although the reflections suggest that the role of the Trainee Educational Psychologist made a contribution to the outcomes experienced by practitioners, further research is needed to identify whether this is a valuable and effective role for Educational Psychologists. The intervention here required the investment of a high level of Educational Psychologist time and the value of this needs to be considered carefully when working within a limited time allocation model. There is a need to evidence time effective and efficient ways of supporting development and perhaps refining the intervention to include only the mechanisms and contexts that are perceived to be most supportive of developments in RP. There is also a need for future evaluations to explore the longer term impact of the intervention both on practitioners’ thinking about practice and their actual practice. Only if the intervention is perceived to have a positive impact on the provision for children and young people, including those that are the most vulnerable, will it be considered as a potential role for Educational Psychologists. Measuring this impact is likely to require the use of sensitive

measures over time. In addition, further research gaining practitioners' views about the particular mechanisms within the facilitation by the Educational Psychologist that were particularly supportive of outcomes, will be valuable. If they are mechanisms that could be provided by someone internal to the settings or by other external professionals, consideration needs to be given to who is most able to fulfil this role (in terms of skills and resources such as available time).

5. Reflections on the future direction of research in the field of reflective practice

'Reflective learning is a journey not a destination and all journeys need a starting point' (Corley & Eades, 2004, p.141).

It could be suggested that this research provides a useful starting point for considering effective strategies to support the development of RP in educational settings. As RP is so frequently cited within the early years and Children's Centre guidance (DfES, 2006; DCSF, 2008) and as there is evidence that RP has a positive impact on practice and the professional development of practitioners (Haggarty & Postlethwaite, 2003; Murph & Timmins, 2009), it is suggested that it is an area that deserves further attention from Educational Psychologists supporting educational settings at an organisational level. Although there is a lack of consensus regarding definitions of RP (Forde et al, 2006) and whether or not all practitioners are necessarily capable of reflecting critically on their practice (Hobbs, 2007) it is suggested that the journey needs to be continued.

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