

**THE EFFECTS OF DATA DRIVEN LEARNING ON IRANIAN EFL
LEARNERS' WRITING SKILLS DEVELOPMENT**

By

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ABSTRACT

The aim of this study is to investigate the effects of Data Driven Learning (DDL) on Iranian EFL learners' writing skills development as well as their attitudes towards the method. 'Writing skills' in the present study are confined to the formal or structural aspects of the language, the way the linguistic elements, words, phrases, clauses, and sentences form larger units of language to transfer the ideas and concepts. The objectives of the study were to compare the learning effects of DDL method with the conventional teaching method's effects on the measures of 1) learners' declarative knowledge of the taught materials, 2) analytic scoring of their written products, and 3) 'Complexity', 'Accuracy', and 'Fluency' (CAF) as the three components of second language writing development.

A pretest posttest control group design supplemented by a set of interviews and a questionnaire administered to members of the experimental group was employed to collect the required data. Two groups of EFL university students attending a 'Paragraph Development' course were compared as far as their micro-level writing skills are concerned. The control group received instructions through conventional method of textbook usage, teacher explanations and classroom exercises. The experimental group received a certain number of classroom concordance-based handouts in addition to textbook usage.

Statistical analyses conducted on different parts of the pre- and post-test showed that there was a significant difference between the two groups in terms of declarative knowledge. It means that class attendance with the DDL-based materials has had more positive effects on the learners' improvement than a conventional one with typical textbook.

The results concerning the analytic scoring of the learners' performance showed that there was no statistically significant difference between the two groups in terms of 'Content', 'Vocabulary', and 'Organisation'. However, the DDL group demonstrated more knowledge in 'Language use' indicating that the DDL-based units have given the learners an advantage in learning and applying the target grammar patterns.

In the CAF analysis of the data, it was found that there was no statistically significant difference between the two groups in terms of 'Complexity' and 'Fluency'. In 'Accuracy', however, the DDL group outperformed the Non DDL one. Lack of improvement in 'Complexity' features of the learners' performance and slight regression in mean length of T-units and mean length of clause (two measures of 'Fluency') versus 'Accuracy' improvement was explained as an indication of a trade-off between accuracy and fluency. Since the majority of class activities have been planned to improve structural knowledge and grammatical development of the learners' performance in terms of micro-skills of writing, the accuracy features have improved, whereas the fluency features have decreased. In fact, committing attention to accuracy might have caused lower performance in fluency.

Results obtained from qualitative data collected to explore the learners' attitudes towards the DDL approach show that most of them have found the DDL units interesting and in good formats with easy instructions to follow. The interviewees of the study expressed their satisfaction of attending in the DDL group and of the amount of learned materials in a class session, and thought that the method is new and innovative. It was also revealed that there was a generally positive attitude towards the DDL units for writing classes among the interviewees. An outstanding finding of qualitative analyses is that a considerable number of Iranian EFL learners feel they need new kinds of materials and innovative styles of presenting them. Results from the interviews showed that DDL-based materials can help teachers in getting learners involved with learning through 'noticing' while learners are being more inductively oriented in DDL classes.

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Chapter One

Introduction

1.1 Background of the study

A brief review of the literature on learning/teaching English second language writing shows its inherent differences from learning/teaching other language skills. First, writing was not viewed as a language skill to be taught to learners until as late as the 1970s. Reid (2001) states that second language (L2) writing was used as a support skill in language learning to practice handwriting, write answers to grammar and reading exercises, and write dictation. It has been pointed out that since graduate programmes in ESL/EFL regularly offer courses in other skill areas, no particular course work was designed and offered in teaching L2 writing. Second, the early attempts in developing the theory and practice of L2 writing were deemed to follow the path of US native English speaker composition theory (Reid 2001: 28 and Trrible 1998: ch. 2, p. 3). It was the time when L2 writing professionals tried to apply the English L1 composition theories and techniques in teaching English writing skill in ESL/EFL pedagogical contexts.

Language teachers' familiarity with composition theories led them to change writing class activities from strictly controlled writing to guided writing. Up to the time, writing was limited to structuring sentences, often in direct answers to questions, or by combining sentences - the result of which looked like a short piece of discourse. Hinkel (2004) referring to Johns (1990), Reid (1993), and Zamel (1982, 1983) reminds us that the predominant method of instructing L2 writing has remained focused on writing process similar to the pedagogy adopted in L1 writing instruction for native speakers of English.

The process-oriented approach to teaching writing skill focuses on invention, creating ideas, and discovering the purpose of writing (Reid, 1993). Within this paradigm, mainly developed for L1 instruction, student writing is evaluated on the quality of prewriting, writing, and revision. The product of writing is given a secondary prominence. Issues of grammar and lexis would be addressed only as needed in the context of writing. In a process-oriented approach it is believed that student writers would be involved with a learning context in which they acquire grammar and lexis naturally. Although these features of a process approach have attracted the attention of a considerable number of researchers in the field of L1 composition both theoretically and practically, quite a good number of other researchers have shown that English as a Second Language (ESL)/English as a Foreign Language (EFL) students experience a great deal of difficulty in their studies at the college and university level (Hinkel, 2002; Johns, 1997a; Johnson 1989; Jordan, 1997; Leki and Carson, 1997; Prior, 1998; Santos, 1988). This group of researchers has identified important reasons why the academic writing of even highly advanced and trained NNS (non-native speakers) students continues to exhibit numerous problems and shortfalls. Johns (1997, cited in Hinkel 2004), for example, found that many NNS graduate and undergraduate students, after years of ESL training, often fail to recognize and appropriately use the conventions and features of academic written prose. According to the results she obtained, NNS students' writing lacks sentence-level features considered to be basic—for example, appropriate uses of hedging, modal verbs, pronouns, active and passive voice (commonly found in texts on sciences), balanced generalizations, and even exemplification.

Within the same line of thinking, Leki and Carson (1997) and Chang and Swales (1999) examined the importance of teaching sentence-level linguistic features of academic writing to

ESL and EAP (English for Academic Purposes) students. In both cases the researchers indicate that ‘even in the case of advanced and highly literate NNSs, exposure to substantial amounts of reading and experience with writing in academic contexts does not ensure their becoming aware of discourse and sentence-level linguistic features of academic writing and the attainment of the necessary writing skills’ (Hinkel, 2004: 5). Chang and Swales emphasized that explicit instruction in advanced academic writing and text is needed.

Although the above discussions have been made in ESL learning/teaching contexts, they are relevant to and appropriate for an EFL context like the one we are dealing with in this study, that is, an Iranian EFL context in which adult learners of the language are mainly trying to improve their language skills through academic instructional participation. In this context, the language learners are attending either private language specific schools and institutes or universities majoring in a language-related degree – English Language and Literature, Teaching English as a Foreign Language, and English Language and Translation Studies.

As far as writing skill is concerned, a series of sequentially ordered ‘Writing Courses’ are currently offered to the language learners. The aim of these courses is to help them to be able to produce a wide range of written language texts from short typical paragraphs (up to 250 words) in different rhetorical structures to informal personal letters, formal business letters, and longer typical 5-paragraph essays in various themes and topics.

1.2 Statement of the Problem

Much similar to ESL contexts (discussed briefly above), EFL learners even at advanced levels of proficiency have an urgent need to develop basic sentence-level linguistic features, grammatical and lexical. As an English language instructor involving with Iranian EFL learners, I have been aware of cases of teaching and learning problems, insufficient methods, and inappropriate materials used at different levels. Teaching different 'Writing' courses to university students at different levels drew me to the idea that there are a number of skills and sub-skills involving in developing writing skills that must be pursued by the learners in a longitudinal process. In technical terminologies the two concepts of 'micro-level skills' (the issues more focused on in product-oriented instructions) and 'macro-level skills' (the focused subjects in process-oriented classes) cannot be separated when the idea of teaching 'Writing' comes to the mind both theoretically and practically. By micro-level skills is meant the formal or structural aspects of the language, the way the linguistic elements, words, phrases, clauses, and sentences form larger units of language to transfer the ideas and concepts. According to Brown (2004), using acceptable grammatical systems (e.g., tense, agreement, and pluralization), patterns, and rules; expressing a particular meaning in different grammatical forms; and using cohesive devices in written discourse are all features of micro-skills of writing.

Macro-level-skills, however, focus on a wide variety of issues such as: the use of the rhetorical forms of written discourse; accomplishing the communicative functions of written texts according to form and purpose; distinguishing between literal and implied meanings of writing; and developing and using a battery of writing strategies, such as accurately assessing audience's interpretation, using prewriting devices, writing with fluency in the first drafts, using paraphrases

and synonyms, soliciting peer and instructor feedback, and using feedback for revising and editing (see Brown 2004: 221 for more detailed discussions).

As far as offering 'Writing' courses at university departments is concerned, it seems as if curriculum developers have considered a linear procedure of foreign language writing development for the Iranian EFL learners in which they learn these micro- and macro-skills in a linear fashion term by term. In reality, however, learners' needs analyses and inter-language studies show that mastering the language skills is a recursive process. EFL learners are improving their micro- and macro-skills simultaneously all the time. It is not the case that they are completely competent in grammar when they have passed 'Grammar' courses and do not need grammatical development while taking writing courses. Passing a 'Paragraph Development' course does not mean that they are all perfect paragraph writers, and when they are taking an 'Essay Writing' course it does not mean that no micro-level error (grammatical and lexical) would be expected of them.

These observations are in line with what ESL researchers have concluded regarding the significance of teaching towards the product, by focusing on the micro-skills of writing. Hinkel (2004) summarises the results of a large number of studies showing that learning to write the formal L2 academic prose crucial in NNSs' academic and professional careers requires the development of an advanced linguistic foundation, without which learners simply do not have the range of lexical and grammar skills required in academic writing (Berkenkotter and Huckin, 1995; Bizzell, 1982; Byrd and Reid, 1998; Chang and Swales, 1999; Grabe and Kaplan, 1996; Hamp-Lyons, 1991a, 1991b; Hinkel, 1999, 2002; Johns, 1981a, 1997; Jordan, 1997; Kroll, 1979;

Nation, 1990, 2001; Nation and Waring, 1997; Raimes, 1983, 1993; Read, 2000; Santos, 1984, 1988; Swales, 1971).

As far as L2 writing evaluation is concerned, Hinkel states:

‘...the assessment of L2 writing skills by ESL professionals on standardized and institutional placement testing has largely remained focused on the writing product without regard to the writing process (ETS, 1996; MELAB, 1996; Vaughan, 1991). The disparity between the teaching methods adopted in L2 writing instruction and evaluation criteria of the quality of L2 writing has produced outcomes that are damaging and costly for most ESL students, who are taught brainstorming techniques and invention, prewriting, drafting, and revising skills [process], whereas their essential linguistic skills, such as academic vocabulary and formal features of grammar and text [product], are only sparsely and inconsistently addressed’ (Hinkel, 2004: 6).

Having all of these discussions along with my personal views and experiences as well as results obtained from a needs analysis that I conducted on a sample of paragraphs written by Iranian EFL learners in mind, I came up with the idea of conducting the present study on developing the writing skills of a group of EFL learners focusing on grammatical features of their writing ability. More specifically speaking commonly used structural patterns (target patterns in this study) in certain rhetorical text types were identified as the micro-level linguistic items to be developed during an instructional term.

In order to teach these target structural patterns in an introductory writing course, ‘Paragraph Development’, a Data-Driven Learning method is used because of its potential in language learning in general (Cobb, 1999a and b, and 1997 a and b) and revealing grammatical patterns in

particular (Gaskell and Cobb, 2004). The following section first introduces the Data-Driven Learning approach and then leads us to the research questions of the study.

1.3 Introducing Data-Driven Learning

Data-Driven Learning (DDL) in a broad sense refers to any teaching methods that require learners to work with some sort of language data. This is a rather vague definition because language data are used in almost all teaching methods, although they come in different forms and are manipulated differently from one teaching methodology to another (Sripicharn, 2002). Constructed dialogues and drills used in Audio-lingualism and authentic texts used to create genuine communicative opportunities applied in Communicative Language Teaching (CLT) are two types of common examples of language data (Richards and Rodgers 1986).

The DDL method in this thesis refers to a computer-based approach to foreign language learning. It is an approach to language learning through ‘the use of computer generated concordances to get students to explore the regularities of patterning in the target language, and the development of activities and exercises based on concordance output’ (Johns and King 1991: iii). DDL, in this sense, was first developed as a pedagogical implementation of corpora used with international students at the University of Birmingham by the late Prof. Tim Johns.

Another frequently used alternative term of DDL is ‘classroom concordancing’ although a slight distinction can be made between the two terms. Sripicharn (2002) associates the former with the methodological framework of the approach and the latter with the practical aspect of the approach, that is, data used in the classroom in the form of concordance citations. In this thesis,

the term 'DDL' is used to address both the methodological framework and the practical aspects of the approach.

'DDL consists in using the tools and techniques of corpus linguistics for pedagogical purposes' (Gilquin and Granger, 2010: 359). The general term for the tools is 'concordancer', a computer program that can search through an available language database, technically called a corpus, and find a selected word and list sentences or portions of sentences containing that word, called the Key-Word-In Context (KWIC). In this format, the lexical or grammatical items that collocate with the key word are sorted to the left and right side of the key word. It can also identify collocations or words most often found together with the key word. This information can provide students with information on lexical or grammatical patterns in sample sentences of real language (Koosha and Jafarpour, 2006).

DDL in its earliest stages was developed as a more computerized-oriented class presentation in which the learner was either positioned as a researcher who searched for his queries through computer programmes and language corpora or who asked the class teacher to do so in the same session. In fact, the class required some sort of work with at least a computer. The impracticalities of this version of DDL, the hard version as called by Leech (1997), forced its proponents and practitioners to find a balance between technical facilities required and the costs imposed on the institution, and the theoretical conceptualizations of the approach. It came to be known that the underlying notions of the approach such as 'discovery learning', 'learning by doing', and 'noticing' can be met with class hand-outs, and papers designed and prepared by the teachers before the classroom sessions. Teachers were found to be able to design concordance-

based units according to a certain syllabus and apply the DDL underlying principles and methodological requirements for groups of students. In this way not all students need to have access to computers in classes to be able to take the advantage of the approach. Theoretical bases of DDL will be reviewed in detail in chapter 2.

In DDL approach, concordances used in language learning are viewed as starting points to stimulate the learners to enquire, to speculate and to search for rules. The ability to see patterning in the target language and to form generalizations is the key concept of learning the language in question (Hunston and Francis 1999, Hunston 2002). In this case, the concept of induction and inductive learning comes into one's mind. That is, the simple conceptualization of a move from instances of occurrence to get to the underlying rules. Hadley (2002) calls DDL a "research-then-theory" method of studying [language] as in DDL language is being learned while it is being investigated. This is the method in which, language learners look into language through concordancing texts.

Despite all these promising features of the DDL approach and the associated techniques and activities (discussed in detail in chapter 2), many language pedagogy professionals have asked for empirical evidence to support its theoretical bases. During the two recent decades different researchers have tried to pin down the evaluative issues around the approach both qualitatively and quantitatively. In qualitative research the main question deals with the learners' behavioural reaction toward and their experiences with concordancing (how they react to the approach). Quantitative research mainly seeks to establish the effectiveness of DDL in language learning.

Gilquin and Granger (2010) admit that very little is known about the effectiveness of DDL, and it is a recurrent theme in the DDL literature that more empirical studies are needed to validate this approach. Other researchers such as Bernardini (2001: 247), Hadley (2002: 120), Mukherjee (2006: 21), and Boulton (2007: 13) are in the same line as they emphasise that ‘the claims about the effectiveness of DDL are more of an act of faith, sometimes relying on subjective observation or informal testing, but usually engaging in pure speculation’ (Gilquin and Granger, 2010: 365).

Boulton (2007) reviewing some attributed advantages of DDL such as its application in ‘syllabus design’ and ‘materials preparation’ in foreign or second language teaching, ‘fostering learner autonomy’, ‘increasing language awareness’, ‘noticing skills’, and ‘improving ability to deal with authentic language’, asserts that ‘although these theoretical arguments may seem convincing, their power is mitigated by the fact that DDL has yet to filter down into mainstream teaching and learning practices’ (p 13). He states, ‘[DDL] may be fine in theory, but what about in everyday practice? Empirical evidence in support of the theory would seem essential’ (ibid).

Elsewhere, Boulton (2008: 41, cited in Gilquin and Granger 2010) classifies the types of research carried out on DDL in this way: evaluation of the attitudes (what do participants think about DDL?), practices (how well are the learners doing with DDL?) and efficiency (can learners gain benefit from DDL?). In spite of the importance of ‘attitudes’ and ‘practices’, ‘efficiency’ is considered as the basic criterion in determining whether DDL is worth doing or not. However, he still believes that very few studies seek to quantitatively assess the efficiency of DDL, and that in

most of the studies that do, no control group is involved, which seriously calls into question the validity of these studies.

A quick review of the related literature reveals that one strand of empirical research has been conducted to examine how effective different formats of DDL in the learners' writing skills might have been. Very few empirical studies have been conducted on the learning effects of soft version of DDL, the version in which concordance-based teaching materials in a hand-out format prepared by the teacher, in a writing course. This thesis will contribute to the research on DDL by conducting empirical investigations, with both an experimental group and a control group design, on the soft version of DDL, posing the following questions.

1.4 Research Questions

Considering the lack of empirical evidence on DDL methods in different aspects of EFL learning/teaching as briefly reviewed in this chapter (1.3) as well as discussions presented in relation to teaching writing skills to EFL learners and the need to do research on improving their micro-level linguistic knowledge (1.2), the present study was conducted to find appropriate answers to the following four research questions:

1. Do Iranian EFL learners achieve higher improvements in their declarative knowledge scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
2. Do Iranian EFL learners achieve higher improvements in their analytic writing scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?

3. Do Iranian EFL learners achieve a greater improvement in their Complexity, Accuracy, and Fluency (CAF) scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
4. What is the Iranian EFL learners' attitude towards using the DDL approach in a 'Paragraph Development' course?

1.5 Scope of the Study

The present study is in the area of Teaching English as a Foreign Language (TEFL) focusing on micro-skills of writing for a 'Paragraph Development' course at an undergraduate level. The study is confined to the following areas:

1. The course is being offered to the EFL learners at an intermediate to upper-intermediate proficiency level.
2. The writing course is an introduction to producing longer texts than individual sentences. EFL learners are being familiar with structural patterns of expanding their phrases, clauses and sentences in different rhetorical text types so that they can express their ideas in paragraph-length texts.
3. In this study "conventional teaching method" refers to a traditional teaching/learning method in which the teacher presents the contents of the textbook as exactly as it is. The content of the book is read, explained and exemplified by the teacher; and the exercises are assigned to the students for the next session. The teacher functions as the knower and presenter of the textbook contents and the students are just receivers of the teacher's presentations.

4. Linguistic items – concordance lines and example sentences – used in the prepared DDL-based units for this study are confined to two learner corpora: 1) the mini learner corpus of the Iranian EFL learners (IrCLE) compiled specifically for this study, a corpus of around 120000 words, 2) the International Corpus of Learner English (ICLE), a corpus of writing by higher intermediate to advanced learners of English containing 3.7 million words of EFL writing from learners representing 16 mother tongue backgrounds.
5. The participants’ declarative knowledge refers to their knowledge of micro-level linguistic items taught during the term, that is, words, multi-word chunks, and structural patterns that are frequently used in different rhetorical text types such as enumeration, cause and effect, and compare and comparison.
6. The participants’ written paragraphs are evaluated according to analytic scoring procedures – explained in chapter 3.
7. The participants’ English writing development is measured in terms of ‘Complexity’, ‘Accuracy’, and ‘Fluency’ (CAF) measures as introduced by Wolfe-Quintero et al, (1998).

1.6 Significance of the Study

The present study is significant in ascertaining the importance of working on lexico-grammatical skills of EFL learners involved in introductory stages of writing. EFL learners who have been familiar with linguistic items at sentence level and might have been able to distinguish between grammatical and ungrammatical strings of words, whether phrases, clauses or sentences on the one hand and can comprehend these structures in their reading activities on the other hand are still very likely to find themselves unable to write paragraphs. Although “Paragraph

Development” courses are aimed at training the language learners to produce well-structured coherent paragraphs, a large number of language problems at sentence level cause them to produce erroneous structures, incomprehensible sentences, and finally non-coherent paragraphs. In this study, a certain number of target structural patterns representing product features of writing have been integrated with composing skills of writing at paragraph level representing process features of writing. Concordance-based instructional hand-outs have been produced to enable the learners to reproduce the linguistic patterns that could be used in their writings. Therefore, one significance of the study is to provide a practical framework for teaching paragraph writing which can lead the learners to various other types of writing in different genres.

In addition, the present study is significant in expanding insights in using the DDL approach in Iranian EFL contexts. So far, only three classroom-based studies of Koosha and Jafarpour (2006), Zaferanieh and Behrooznia (2011), and Ashtiani and Tahriri (2013) have been conducted in Iranian educational settings. The first two focused on teaching collocations through DDL approach and the last one on reading comprehension. Studies on teaching/learning collocations using DDL-based materials (Koosha and Jafarpour, 2006) and web-based concordancing (Zaferanieh and Behrooznia, 2011) proved to be more efficient than traditional method. Ashtiani and Tahriri (2013) also showed that the experimental group utilizing concordancer improved significantly more than the control group in terms of reading comprehension. The present study is the only research conducted on examining the learning effectiveness of DDL in teaching micro-skills of writing in an Iranian EFL context. Moreover, revealing the learners’ attitudes towards the DDL method in a writing class will help language teachers, materials developers and

syllabus designers in determining the extent to which they might allocate class time and textbook materials to the DDL method.

1.7 Outline of the Thesis

This introductory chapter has presented the background of the study in relation to issues around teaching ESL/EFL writing. Having reviewed the studies focusing on the importance of product aspects of writing and the problems of teaching micro-skills of writing, I have proposed the DDL as a possible solution with the aim of comparing its learning effects on developing writing skills of the research participants with the conventional teaching method of using a textbook along with the class teacher's presentations. Chapter 2 reviews the underlying principles of second language writing, presents different methods and techniques of teaching ESL/EFL writing, and gives an account of assessing writing. Different scoring scales have also been introduced and language development measures of Complexity, Accuracy, and Fluency are reviewed. In chapter 3, DDL as a pedagogical application of corpus linguistics techniques is presented both theoretically and practically. In the final section of the chapter research on DDL is reviewed according to different themes and contexts. Chapter 4 deals with the research methodology of the study which includes the research design, participants, materials and data collection procedures. In chapter 5, quantitative data analyses are presented in order to answer the first three research questions. Results of each type of analysis are presented in different tables. Chapter 6 deals with the qualitative evaluation of DDL. It summarises the results of questionnaires and interviews that were conducted to elicit the participants' attitudes towards DDL method. The first questionnaire indicates the participants' general information, English learning experiences, learning styles and strategies prior to the experiment. The second questionnaire which was asked to answer by the

experimental group at the end of the term elicits participants' ideas regarding the DDL-based materials, classroom activities, and relevance and usefulness of concordancing lines. The final chapter, 7, gives a summary of the findings presented in chapters 5 and 6 and discusses the results obtained in relation to the four research questions. The conclusion of the research as well as the implications of the study, limitations and suggestions for further studies appears in the final sections of chapter 7.

Chapter Two

Teaching and testing of writing

2.1 Introduction

Chapters two and three review the literature related to the three main areas of the study. Issues such as writing in general, the nature of second language (L2) writing, second language writing development, and assessment, comprise the different sections of chapter two. Firstly, writing in general and L2 writing in particular are introduced and then the major theories and models of L2 writing are reviewed. Secondly, second language writing assessment issues such as scoring approaches and procedures are examined. Thirdly, research on second language writing development focusing on measures of complexity, accuracy and fluency is summarised. Issues around language corpora and different types of corpora as well as corpus use in language teaching, the techniques used in DDL classes, and research related to DDL and its effects on second language writing development with a particular focus on English as a foreign language will be discussed in chapter three.

2.2 Writing

For Rivers (1981) writing involves individual selection of vocabulary and structure for expression of personal meaning. She looks at writing from two perspectives, as a major skill and as a service skill. Gorman (1981) is also in the same line when he believes that composition involves the production and arrangement of written sentences in a manner appropriate to the purpose of the writer, the person or persons addressed and the function of what is written. Writing is frequently said to be a complex activity that requires various skills which teachers

have not yet come up with an agreed method of teaching. Widdowson (1983) considers writing as a communicative activity and as an interactive process of negotiation. And finally, Zamel (1987) informs us of the complex, recursive and nonlinear nature of composing.

Considering these varied conceptualisations, one may discover two major lines of thinking regarding writing. According to some definitions, the emphasis is on the product: the visible outcome which provides us with the manifestation of the ability to communicate by the writer, this ability, no doubt, is the result of activating the knowledge of vocabulary, grammar and spelling. On the other hand, other definitions emphasize the "process". It seems that the process which leads writers to generate ideas, organize them into a coherent sequence and put them on paper is asserted to be the major factor affecting teaching of writing ability. The two lines of thinking as mentioned above have led to two theories or paradigms in teaching writing in ESL/EFL contexts: Writing as a product and writing as a Process.

2.2.1 Second language writing

Writing skills and strategies are among the most important skills and strategies that second language learners need to develop. Hence, the ability to teach writing has been central to the expertise of a well-trained teacher (Hyland, 2003). Although the needs and necessities of learning the writing skill from the learners' side and approaches to teaching it from the teachers' side have increased considerably, not as many theoretically well-supported and practically appropriate resources as required have been developed and as Hyland (2003: XV) reminds us teachers are often left to their own resources in the classroom.

On the importance of teaching/learning second language writing, Brown (2003) asserts that not all native speakers of any language are necessarily good writers in their own mother language. Producing a well-organised piece of written language requires knowledge and skills of composing ideas in a logical coherent way that not all speakers of a language are armed with. Brown calls our attention to the significance of the field where he writes:

"Every educated child in developed countries learns the rudiments of writing in his or her native language, but very few learn to express themselves clearly with logical, well-developed organization that accomplishes an intended purpose. And yet we expect second language learners to write coherent essays with artfully chosen rhetorical and discourse devices!" (p 218).

In order to have a better understanding of L2 writing situation in ESL/EFL pedagogy it seems necessary to examine its theoretical background as well as the relevant research conducted. First of all, the two quite distinctive theories of second language writing i.e. *writing as a product* vs. *writing as a process*, are introduced and then some relevant research conducted in the field are reviewed. This is followed by more recent developments in the discipline.

2.2.2 Writing as a product

In the past, the approach to writing was one of drill or skill. Teachers drilled the various grammar forms expecting students to develop the skill needed to communicate via written message. Both teachers and students focused their attention on the correct use of the drilled grammar forms. As Atwell (1985) points out, all writing was directed to the teacher to check the grammar and little interest or importance was attached to the content that was developed.

According to the underlying principles of this orientation writing is viewed as "a coherent arrangement of words, clauses, and sentences, structured according to a system of rules" (Hyland 2003: 3). The main points of concern are formal text units or grammatical features of texts.

Writing as a product is an orientation towards the skill in which vocabulary choices, syntactic patterns, and cohesive devices are considered as the building blocks of texts. Therefore, learning to write in a foreign or second language mainly involves mastery over these linguistic items. This orientation has been attributed to structural linguistics and the behaviourist learning theories of second language teaching that were dominant in the 1960s (Silva, 1990a). "Learning to write in a second language is seen as an exercise in habit formation. The writer is simply a manipulator of previously learned language structures...[and]...the text becomes a collection of sentence patterns and vocabulary items- a linguistic artefact, a vehicle for language practice" (Silva, 1990a: 13).

Within this theory of writing an emphasis on language structures forms the basis for writing teaching with a four-stage process. These stages as described by Hyland are as the followings:

- 1. Familiarization:** Learners are taught certain grammar and vocabulary, usually through a text.
- 2. Controlled writing:** Learners manipulate fixed patterns, often from substitution tables.
- 3. Guided writing:** Learners imitate model texts.
- 4. Free writing:** Learners use the patterns they have developed to write an essay, letter, and so forth.

Teachers using these structured steps usually employ "slot and filler" framework in which sentences with different meanings can be generated by varying the words in the slots. Writing classes involve controlled activities through guided compositions where learners are given short texts and asked to fill in gaps, complete sentences, transform tenses or personal pronouns, and complete other exercises that focus students on achieving accuracy and avoiding errors. Based on these guidelines, Hamp-Lyons and Heasley (1987) prepared a number of substitution tables in which certain linguistic patterns are asked to work out by the students by which they can generate risk-free sentences (Hyland, cf.) . Table 2.1 is an example of the substitution table.

Although this approach to teaching and learning second language writing has been used widely in ESL/EFL contexts, two main shortcomings have been recognised within it. The first one is that the patterns and structures to be worked out in class sessions are usually selected by teachers or materials developers according to their own intuition, interests and preferences not based on the analyses of the students' needs and/or real texts produced for real situations. This may cause some sort of confusion for the students when they need to write in a new situation with an unfamiliar topic.

Table 2.1 A substitution table

There are		types		: A, B, and C.
	Y	kinds		. These are A, B, and C.
The		classes	of X	are A, B, and C.
		categories		
X	Consists of		categories	
	Can be divided	Y	classes	. These are A, B, and C.
	into		kinds	: A, B, and C.
	classes		types	
A, B, and C are	kinds			
	types	of X.		
	categories			

Source: Hamp-Lyons and Heasley, 1987: 23

The second drawback of this structural orientation towards L2 writing can be found within the measurement criteria. In order to measure students' writing improvement Hunt (1983) has developed a measurement framework in which the "syntactic complexity" and "grammatical accuracy" of the written texts are the main points of focus. L2 writers' produced texts can be measured in terms of formal features such as the number and ratio of clauses and sentences. However, these are not the only features of writing improvement and may not even be the best measures of good writing (Hyland, 2003: 5).

2.2.3 Writing as a process

In 1980, Donovan and McClelland observed that there is a weak correlation between grammar instruction and writing ability. In so doing, they called for a new orientation toward composition. Later writing specialists proposed a distinction between the process of writing and written

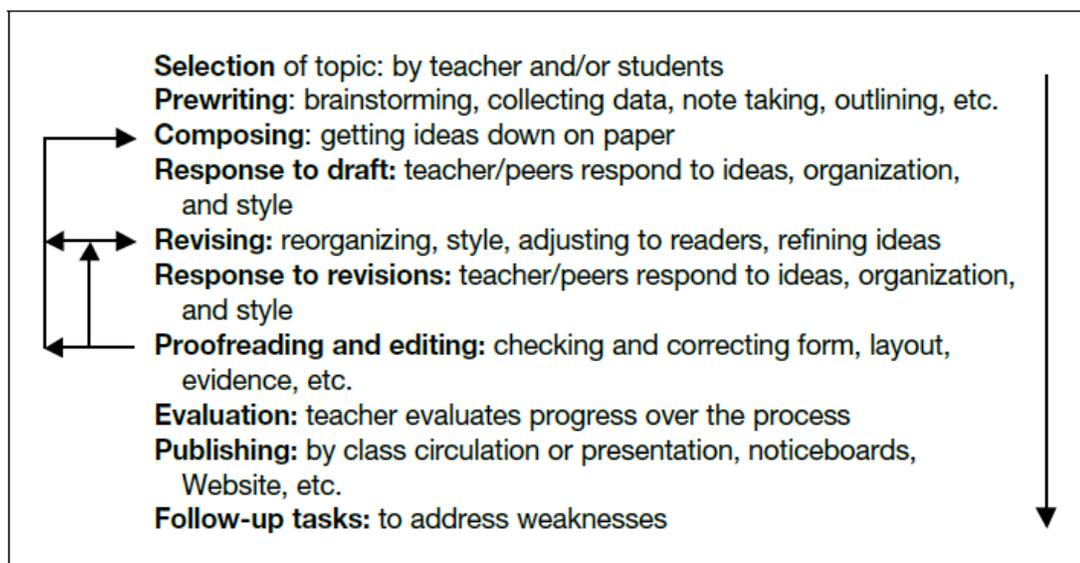
product. Their contention has been that knowledge of grammar is not sufficient and if the teacher wants to improve the product, s/he must assist the students in the ways that will enable them to improve the process they go through to produce that product. Zamel (1983: 165) supports this position when she states, "having recognized that the investigation of students' written products tells us very little about their instructional needs, researchers are now exploring writing behaviours, convinced that by studying and understanding the process of composing, we can gain insight into how to teach it". Elsewhere she says that writing involves a continuous attempt to discover what it is that one wants to say (Zamel 1982).

Conner (1987), in an attempt to describe the advances achieved in the 1980s in writing pedagogy, states that the process-centred paradigm, focuses on writing processes; teaches strategies for invention and discovery; considers audience, purpose and context of writing; emphasizes recursiveness in writing process; and distinguishes between aims and modes of discourse. Connor believes that these analyses which she calls knowledge-based or process-oriented text analyses focus on the writer's reasons for selecting ideas and on how they are presented, rather than on the surface-level structures of the language.

Zamel (1987), in support of the applicability of insights taken from process studies, provides us with a variety of techniques used in process studies consisting of interviews, surveys, and protocol analysis. She further states that they have all revealed the complex, recursive, and nonlinear nature of composing and thus challenged both methodology in composition research and previously held notions about the teaching of writing.

On a description of the widely accepted model of "writing as a process" Flower and Hayes (1981) recount the original framework with three interrelated stages of *planning*, *writing*, and *reviewing*. This basic premise of the model was then developed by other scholars such as Zamel (1983), Silva (1990), Hinkel (2003), and Hyland (2003). A process model of writing instruction with the same recursive non-linear features as proposed by Zamel was developed by Hyland. The model composes of 10 stages from 'selection' of topic by teacher or students and ends with the 'follow-up tasks' for the purpose of addressing students' weaknesses. Figure 2.1 illustrates the model, its components and what it means by recursive nature of writing process.

Figure 2.1: A process model of writing instruction (taken from Hyland 2003: 11)



Hyland, in this model, shows that planning, drafting (writing), revising, and editing do not occur in a neat linear sequence, but are recursive, interactive, and potentially simultaneous, and all work can be reviewed, evaluated, and revised, even before any text has been produced. He emphasises that at any point the writer can jump backward or forward to any of these activities: returning to the library for more data, revising the plan to accommodate new ideas, or rewriting for readability after peer feedback.

ESL/EFL writing teachers who adopt a process model like the one presented here play the role of students' guide while they are acting in an exploratory range of activities. Teachers avoid an emphasis on form to help the students develop strategies for writing, reviewing, and editing. To do so they prepare pre-writing activities to generate ideas about content and structure, encourage brainstorming and outlining, require multiple drafts, give extensive feedback, seek text level revisions, facilitate peer responses, and delay surface corrections until the final editing (Raimes, 1992).

One important role of the teacher in this model is fulfilled when they give their feedback to the students' submitted drafts, the response to writing. Hyland considers this activity as a priority of teachers to develop their students' metacognitive awareness of their processes, their ability to reflect on the strategies they use to write. Hyland (2003: 12) says:

"A response is potentially one of the most influential texts in a process writing class, and the point at which the teacher's intervention is most obvious and perhaps most crucial. Not only does this individual attention play an important part in motivating learners, it is also the point at which overt correction and explicit language teaching are most likely to occur. Response is crucial in assisting learners to move through the stages of the writing process and various means of providing feedback are used, including teacher-student conferences, peer response, audiotaped feedback, and reformulation".

Although teachers' feedback on the students' writing activities have been accepted by most scholars and practitioners of the field, the main focus of attention in their feedbacks and corrections has been a point of controversy. Many believe that grammatical error corrections are neither necessary nor helpful. Truscott (1996), for example, argues that grammar correction in

L2 writing classes should be abandoned because it is ineffective with no interesting sense for the students. He even goes further and concludes that grammar correction has harmful effects and also rejects a number of arguments previously offered in favour of grammar correction.

Hyland (2003) criticizes the process framework on two main grounds. First, he asserts that although considerable research into writing processes has been conducted so far, no comprehensive idea of how learners go about a writing task or how they learn to write has been achieved. Familiarity of researchers with the complexity of planning and editing activities, the influence of task, and the value of examining what writers actually do when they write has been considered as a central element of the writing process which would contribute to the ways we teach. The problem, however, is that "process models are hampered by small-scale, often contradictory studies and the difficulties of getting inside writers' heads to report unconscious processing" (2003: 12). It is believed by the critics that these models will not tell us why writers make certain choices or how they actually make the cognitive transition to a knowledge-transforming model.

The second point that Hyland reminds us is the overemphasis that process models make on "the cognitive relationship between the writer and the writer's internal world" (Swales, 1990: 220). The results of this overemphasis according to Hyland is that the process models fail to offer any clear perspective on the social nature of writing or on the role of language and text structure in effective written communication. ESL/EFL learners need clear guidelines on how to construct the different kinds of texts they have to write and encouraging them to make their own meanings and find their own text forms does not provide them with these guidelines. As a result of these

drawbacks and the idea that process theories alone cannot help us to confidently advise students on their writing, one might think of considering (applying) more than a single approach.

2.2.4 Integrative theory of writing

Two major lines of thinking with regard to writing have been elaborated on so far. These two were to some extent complementary. It seems that both are extremes. On the one hand, some researchers argue for the separation of these studies, on the other hand, others have articulated various cooperative relationships between process and product research and have called for theories of writing which integrate these in which the "overarching process" is the cooperative enterprise where by writers and readers construct meanings together.

Zamel (1983) does not reject the possibility of understanding the process from product, but she believes that product studies tell us little about underlying processes that writers go through while producing a piece of writing. In contrast, Connor (1987) views the point quite differently. In her article; while trying to make a compromise between process and product studies, she shows that various approaches to the description and evaluation of writing products take into account the process as that writers go through in constructing a text. Moreover, she demonstrates that complete inferences about writer's composing processes necessarily depend upon adequate analysis of written products. Connor's idea led to new trend in writing theory which is an integration of the process and product theories. Connor (1987), conducting a research on the two paradigms, called for the integration of the theories. She advocated that this theory would provide a greater explanatory power, when she stated, "an integrative theory enables us to explain the apparent paradox in some process researches. She further added "although product

theories have been harshly condemned by some composition theorists, description of writing process have been largely achieved by analysing sequence of different kinds of products".

Equally important for the argument on behalf of an integrated theory of process and product in ESL, Raimes (1985) recommended that we must consider the need to attend to product as well as process. She suggested that our students should be taught not only heuristic devices to focus on meaning, but also heuristic devices to focus on rhetorical and linguistic features.

The idea of integrating the two orientations was pursued by Kamimura (2000) in a Japanese EFL context. In her study on investigating whether product-oriented knowledge and composing process skills are both necessary or whether either one of the two is sufficient in order for EFL students to become skilled writers in EFL, she asked her research subjects to write an argumentative essay . After that the participants were given a retrospective questionnaire designed to probe their composing process strategies. They also took a form-based test which assessed their knowledge of English academic texts. The students were classified into two groups, skilled and unskilled, according to the holistic scores given to their essays. The two groups were compared in terms of the behaviours shown in the questionnaire and the scores on the test. The results showed that the skilled writers possessed more developed knowledge of formal aspects of English academic writing as well as more sophisticated composing process strategies. It was also clarified that both the form-oriented knowledge and process-oriented skills are necessary to function as successful EFL writers. Kamimura concludes that L2 writing instruction should maintain a balance between process and product orientations to meet the needs of various L2 writers who come from non-English discourse communities.

2.3 Approaches to teaching L2 writing

Raimes (1991), in her brief historical survey of approaches to L2 writing instruction, postulates that four approaches have been widely applied in the field: "focus on form", "focus on the writer", "focus on content", and "focus on the reader".

2.3.1 Focus on form

In the approach termed as "focus on form", developed in the 1960s, the rhetorical and linguistic form of the text is the main focus. Since the audiolingual method was the dominant approach to instruction in those years, writing served a subservient role: to reinforce oral patterns of the language. In such a context, writing took the form of sentence drills: fill-ins, substitutions, transformations, and completions.

Kaplan's influential 1966 article introduced the concept of contrastive rhetoric and this contributed a theoretical basis for compensatory exercises that offer training in recognizing and using topic sentences, examples, and illustrations. Hyland (2003) observes that the main principle in this approach is to relate structures to meanings, that is, to make language use a criterion for teaching materials and calls this orientation a "functional approach". The approach is similar to product-oriented models since paragraphs are considered as syntactic units composed of a number of sentences in which writers can fit particular functional units into given slots. Elements of paragraphs such as Introduction - Body - Conclusion are viewed as structural entities and text types such as narration, description, and exposition are described as organisational patterns. Writing classes within this approach are organised and conducted in such a way as to teach the students how to sequence functions into a structural pattern and which structures express each function.

Teachers who apply this approach to L2 writing instruction are aiming at preparing their students to produce effective paragraphs through the creation of topic sentences, supporting sentences, and transitions, and to develop different types of paragraphs. For this purpose students should start from sentence-level activities and move toward creating longer pieces of written products. Activities such as reordering sentences in scrambled paragraphs (see, for example, Kaplan and Shaw, 1983; Reid and Lindstrom, 1985), selecting appropriate sentences to complete gapped paragraphs and writing paragraphs from provided information are commonly used in these classes. Other formal features such as the structure of introductory paragraphs (Scarcella, 1984), the form of essays in various languages (Eggington, 1987; Hinds, 1987; Tsao, 1983), cohesion and coherence (Connor, 1984; Johns, 1984), and topical structure (Lautamatti, 1987) have been investigated in this first approach. Raimes (1991: 409) concludes that this form-dominated approach has the largest body of research to inform and support it.

2.3.2 Focus on the writer

Within the 1970s and mid 1980s new concerns replaced the old. Instead of a focus on accuracy, process, meaning-making and invention became prominent in second language writing classes. Teachers and researchers reacted against the form-dominated approach by developing an interest in what L2 writers actually do as they write. Classroom tasks shifted from form-oriented activities to use of journals (Peyton, 1990; Spack and Sadow, 1983), invention (Spack, 1984), peer collaboration (Bruffee, 1984; Long and Porter, 1985), revision (Hall, 1990), and attention to content before form (Raimes, 1983a; Zamel, 1976, 1982, 1983).

Hyland (2003) believes that the teachers' main concern in this approach focuses on creative expression. Here, the writers' thoughts and feelings are viewed as the main focus of attention. The teachers described their "classroom goals as fostering L2 students' expressive abilities, encouraging them to find their own voices to produce writing that is fresh and spontaneous. These classrooms are organized around students' personal experiences and opinions, and writing is considered a creative act of self-discovery" (Hyland 2003: 9).

Teachers trying to conduct their writing classes according to this creative-oriented conceptualisation will consider their role to include providing students with opportunities to make their own meanings and transfer their ideas, beliefs and feelings into words. Here, writing is something learned, not taught. It is a way of sharing personal meanings and writing courses emphasize the power of the individual to construct his or her own views on a topic. As far as L2 writers' development is concerned, teachers' response to the writings of the students is crucial. Yet, their focus of attention in giving feedback to the students' products is the ideas presented, and feelings expressed rather than formal errors (Murray 1985). Researchers such as Cumming (1989), Friedlander (1990), Hall (1990), Jones (1982 and 1985), Jones and Tetroe (1987), Raimes (1985 and 1987), and Zamel (1982 and 1983) focused their studies on this trend towards instruction in the 1980s. However, the "lack of comparability across studies impeded the growth of knowledge in the field" (Krapels, 1990, p. 51).

2.3.3 Focus on content

A third approach to L2 writing instruction, focus on content, appeared in the mid-1980s. A group of L2 writing researchers perceived that the common approaches of the time were inappropriate

for academic demands and for the expectations of academic readers. Hence, attention shifted from the processes of the writer to content and to the demands of the academy. This was the era of content-based approach in which an ESL course might be attached to a content course in the adjunct model (Brinton, Snow, and Wesche, 1989; Snow and Brinton, 1988) or language courses might be grouped with courses in other disciplines (Benesch, 1988).

The main issue in content-oriented classes of L2 writing is what students are required to write about. The purpose of the course is determined with the themes and topics of interest. Therefore, having relevant knowledge of the themes and topics is a prerequisite for the writers. Teachers' main responsibilities include providing the students with schema development exercises whereby students are expected to obtain the required knowledge of the topic and vocabulary they will need to create effective texts. In this regard, different types of reading activities that help the students to generate ideas for writing and organizing texts form the basic class activities. Reading for ideas in parallel texts, reading to photographs, and various brainstorming tasks are examples of the classroom activities in this approach. Hinkel (2011) states that this model of language and writing instruction is commonly found in the US-based curricula.

L2 reading and writing play a central role, and instruction in these skills is typically combined to improve the quality of L2 prose in terms of both discourse (macro) and morphosyntactic and lexical (micro) properties. For example, combined with instruction in content and language uses in thematically-selected readings, the teaching of L2 writing can address matters of discourse structuring and information flow, as well as the uses of grammar structures and contextualized vocabulary (Hinkel 2011).

As Raimes (1991) states, in this approach, the main emphasis is on the instructor's determination of what academic content is most appropriate, in order to build whole courses or modules of reading and writing tasks around that content. Hence, this content-based approach has a more direct influence on the curriculum than the two approaches described above. Unlike autonomous ESL classes in which students play more active roles in determining the design and content of the courses in their language classes, with ESL attached in the curriculum to a content course, such flexibility is less likely.

2.3.4 Focus on the reader

The fourth approach to teaching L2 writing came up in the mid-1980s, simultaneous with the content-based approach. However, it focused on the expectations of academic readers rather than writers. Horowitz (1986c) states that a reader-dominated approach perceives language teaching "as socialization into the academic community-not as humanistic therapy" (p. 789). More commonly, this approach is known as "English for academic purposes". The teacher runs a theme-based class, uses the terms like academic demands and academic discourse community, and focuses on the reader not as a specific individual but as the representative of a discourse community, for example, a specific discipline or academia in general (Raimes 1991).

For Hyland (2003) this kind of language class is the same as a genre-based class in which first of all a set of communicative purposes is determined. Some well-known features of the classroom are teacher-student talk, different types of writing, and meta-language information exchanges

between students showing their knowledge of the structure and grammar of the texts they want to write or they have written.

The importance of grammar in this approach is to the point that it is "a way of giving learners the language they need to construct central genres and to reflect on how language is used to accomplish this" (Hyland 2003: 22). During the text analysis period of instruction certain pedagogical activities focus on analysing written prose in an array of genres, such as narrative, exposition, or argumentation (Hinkel 2011: 534). The aim of these activities is to increase learners' awareness of how particular grammar and vocabulary are employed in authentic written text and discourse.

2.3.5 General discussion

Different views towards theoretical issues around second language writing and approaches to L2 writing instruction have been reviewed in the two preceding sections in this chapter. Firstly, the well-known, widely discussed dichotomy of process and product theories of second language writing along with discussions on their advantages and disadvantages was examined. It was observed that in spite of the advantages of adapting process models in L2 writing contexts, some researchers and EFL/ESL pedagogues have expressed their doubts and uncertainties about using them in every writing context. Some critics believed that these models tend to emphasize fluency at the expense of accuracy (e.g., Widdowson, 1983: 41-44), ignore the product and structural aspects of writing (Barnes, 1983), and be more concerned with advanced level students developing their creative writing skills (Reid, 1984).

Although the proponents of the process models such as Zamel (1984), Blue (1988), Brookes and Grundy (1988), Canseco and Byrd (1989, pp. 311-312) tried to show how process techniques are useful for teaching writing to ESL students, an integrative model was proposed to ameliorate the situation. This integrative model might have been developed in response to recommendations that urged us to put the L2 learners, especially EFL learners, to attend product as well as process (Raimes, 1985). Within the same line, Kamimura (2000), examining the integrative model in a Japanese EFL context, concluded that maintaining a balance between process and product would meet the needs of EFL writers.

Secondly, four main approaches to teaching second language writing that have been observed in the literature were briefly reviewed. As discussed above (2.3), 'focus on form', 'focus on the writer', 'focus on content', and 'focus on the reader' have been considered as complementary and overlapping approaches to teaching writing each of which could be more appropriate in certain pedagogical contexts.

As far as teaching writing in an EFL context like that of Iran is concerned, it seems to me that the learners' proficiency level, their previous English writing experiences, and their aims of learning the language are important factors to adopt a writing model. For example, in an introductory writing course in which the learners are at the beginning stages of independent writing with few experiences even of dependent writing activities and are still at the sentence level of L2 production, 'the teacher is to choose the appropriate patterns to teach', 'paragraphs are [still] considered as syntactic units composing of a number of sentences', and 'writing classes for these students need to be organised and conducted to teach....how to form the functions into structural

patterns'. In this case, even if an integrative theory of writing (Connor, 1987) is to be taken into account, according to Raimes (1985) we must consider the need to attend to product as well as process. I think she is to the point saying that our students should be taught not only heuristic devices to focus on meaning, but also heuristic devices to focus on rhetorical and linguistic features. The language learning approach of Data-Driven Learning (DDL) which is in question in the present study, as will be seen below, offers a set of heuristic devices that focus on rhetorical linguistic features.

2.4 Assessing Second Language Writing

Since the present study deals with evaluating EFL learners' writing skills improvement in an experiment, and this evaluation would be done through assessing their writing performance, it seems necessary to give a brief review of the nature, and techniques of assessing second language writing as well as its scoring procedures. Therefore, this section focuses on designing a writing test based on the objectives, test tasks, and scoring procedures.

Before proceeding with writing assessment issues, however, it is necessary to make a distinction between second language writing assessment in terms of writing proficiency measures and measures of language development. Confusion between the two types of measurements might prevent us from getting proper answers to the questions of the study.

Wolfe-Quintero et al (1998), in explaining the differences between these two conceptualizations, state that language development refers to characteristics of a learner's output that reveal some point or stage along a developmental continuum. Language proficiency, on the other hand, is a broader concept that is related to separating language users into cross-sectional groups based on

a normal distribution of their language abilities. A language proficiency test includes a broad number of theoretically-motivated linguistic categories that can act as an overall gauge of language proficiency level (Bachman, 1990). Writing proficiency is a subset of language proficiency, with an emphasis on writing-specific abilities such as the production of a variety of genres and rhetorical features, but also including language-specific abilities such as the use of a range of vocabulary and syntactic structures.

Within this framework, aspects of testing writing proficiency are examined in this section and then in section (2.5) components and different measures of language development focusing on writing skill will be reviewed in detail. As far as the present study is concerned, aspects of testing writing proficiency are not dealt with in much detail but components and different measures of language development and scoring procedures focusing on writing skill will be reviewed in the following section, because they will inform the research methods to be used in this study.

2.4.1 Preparing writing tests

The first step in either choosing or designing a writing test is to consider what we plan to use the test for. The basic question would be why we are interested in testing writing ability. What is our purpose? Bachman and Palmer (1996) discuss two main purposes for language tests. The primary purpose is to make inferences about language ability, and the secondary purpose is to make decisions based on those inferences. For example, we use inferences about general language proficiency to make decisions such as admission to academic programmes, placement into different levels of a language programme, or selection for a particular job (Weigle 2002).

Since writing tests are a subset of language tests in general, this discussion seems applicable for writing tests as well.

In designing writing tests the following three main inter-related considerations should be kept in mind: 1. Purpose: What do we want to assess and why? 2. Assessment Scales, and 3. Assessment task and implementation (Storch 2012). Weigle (2007) considers four essential steps in designing a writing test either for an individual classroom or for large-scale administration. These steps are 1) setting measurable objectives, 2) deciding on how to assess objectives- formally and informally, 3) setting tasks, and 4) scoring.

In the first step, test developers need to articulate precisely what it is that they hope students will learn in their courses so that they can develop ways of assessing whether their students have mastered the course objectives. The outcome of this stage will be a list of objectives that the test user is trying to spot within the learners' writing ability. After specifying measurable objectives for a writing test the test developer should focus on the best possible method of eliciting the required data.

In a classification of writing tests, Weigle makes a distinction between timed single-draft (In-class) and untimed multiple-draft (out-of-class) essays. The dilemma of choosing to assess the writing skill through in-class or out-of-class writing has occupied a large proportion of many teachers' focus of attention. Each method has some advantages and disadvantages and therefore it becomes difficult for the teacher to make a decision.

2.4.2 Scoring

Making decision on students' written work is the last and perhaps the most troublesome step in writing assessment. The difficulty of assigning numerical scores to students' writings will increase when the scorer is trying to do so without a clear notion of how to allocate certain points a particular assignment (test task). Therefore, there is a need to have a systematic process for assigning scores to essays or other written work and some sort of rubric that outlines the criteria for grading. In section (2.4.5) below, some common scoring methods (scales) are discussed and then the scoring scale adopted from Jacobs's et al (1981) is presented.

Before reviewing the scoring scales, it is, I think, necessary to take a quick look at different types of writing performance and the distinctions made between the two types of writing sub-skills, Micro- and Macroskills. This survey will help us have a better understanding of the rationale behind the contents, formats and the scoring procedure chosen for pre- and post-tests in this study.

2.4.3 Types of writing performance

Brown (2004) gives a typology of writing performances with four categories: 1) Imitative, 2) Intensive, 3) Responsive, and 4) Extensive. In the Imitative kind of performance the learner must attain skills in fundamental, basic tasks of writing letters, words, punctuation, and very brief sentences. Ability to spell correctly and to perceive phoneme-grapheme correspondences in the English spelling system are two examples of performances in this category. At this stage form is the primary while context and meaning are of secondary concern. The Intensive or as it is called the 'controlled' kind of performances are dealing with skills and knowledge of producing

appropriate vocabulary within a context, collocations and idioms and correct grammatical features up to the length of a sentence. Within this category, meaning and context are of some importance in determining correctness and appropriateness, but most assessment tasks are more concerned with a focus on form and are rather strictly controlled by the test design (Brown 2004: 220). In the third category, the Responsive, the learners are asked to perform a limited discourse level, connecting sentences into a paragraph and creating a logically connected sequence of two or three paragraphs. The writer presumably knows the fundamentals of sentence-level grammar and is more focused on discourse conventions. The fourth type of writing performance in Brown's classification is called the Extensive writing. Successful management of all the processes and strategies of writing for all purposes up to the length of an essay, a term paper, a research project report or even a thesis is the main essence of this type of performance. Writers at this stage are constantly trying to achieve a purpose, organize and develop their ideas logically, demonstrate syntactic and lexical variety

2.4.4 Micro- and Macroskills of writing

The taxonomy of subskills of writing is said to assist language teachers both in teaching the skill and assessing it. Brown (2004:221) has summarized these into the following two groups of micro- and macroskills of writing.

Micro skills:

1. Produce graphemes and orthographic patterns of English.
2. Produce writing at an efficient rate of speed to suit the purpose.
3. Produce an acceptable core of words and use appropriate word order patterns.

4. Use acceptable grammatical systems (e.g., tense, agreement, and pluralization), patterns, and rules.
5. Express a particular meaning in different grammatical forms.
6. Use cohesive devices in written discourse.

Macro skills:

1. Use the rhetorical forms and conventions of written discourse.
2. Appropriately accomplish the communicative functions of written texts according to form and purpose.
3. Convey links and connections between events, and communicative such relations as main idea, supporting idea, new information, given information, generalization, and exemplification.
4. Distinguish between literal and implied meanings of writing.
5. Correctly convey culturally specific references in the context of the written text.
6. Develop and use a battery of writing strategies, such as accurately assessing audience's interpretation, using prewriting devices, writing with fluency in the first drafts, using paraphrases and synonyms, soliciting peer and instructor feedback, and using feedback for revising and editing.

Taking a close look at the above taxonomy of writing subskills and that of writing performance, both described by Brown (2004), we come to the conclusion that the micro-skills apply more appropriately to imitative and intensive types of writing performance and the macroskills cover wider areas of writing, such as the form and the communicative purpose of a written text, main idea(s) and supporting ideas, the literal and implied meanings and so on.

2.4.5 Methods of scoring (Rating scales)

In assessing written performance tasks like writing tests, the theoretical basis upon which the test is founded is a major factor to consider when the test developer or test user is choosing this or that rating scale. This is the theoretical base underlying the test tasks which embodies the test or scale developer's notion of what skills or abilities are being measured (McNamara, 1996). This is the case that either developing a scale and the scale descriptors for each level or choosing an already developed scale is of critical importance for the validity of the assessment (Weigle, 2002).

2.4.5.1 Primary trait scoring

Based on the purpose for which the test is being administered, the number of participants, and the final results of test administration one of the four following common scales has been used in different writing assessment contexts: primary trait scales, holistic scales, analytic scales, and multiple-trait scale. Yet, some researchers do not make a distinction between multiple-trait and analytic scales (Weigle, 2002, 109). *Primary trait scoring* is usually used when the test developer is aiming at understanding how well students can write within a narrowly defined range of discourse such as persuasion or explanation. In this type of scoring, "the rating scale is defined with respect to the specific writing assignment and essays are judged according to the degree of success with which the writer has carried out the assignment". Primary trait scoring is closely associated with the National Assessment of Educational Progress (NAEP) and the work of Lloyd-Jones (1977) developing a large scale testing program for schools in the US. This scoring scale has not been widely used in second-language writing assessment and therefore little

information is available on how it might be applied in second-language testing. Lloyd-Jones (1977) has developed a scoring guide for Primary trait scoring.

2.4.5.2 Holistic scoring

The second type of scoring scale is *holistic scoring*. In order to use holistic scoring, the raters must read the whole script quickly and then judge against a rating scale, or scoring rubric that outlines the scoring criteria. Holistic scales are mainly used for impressionistic evaluation that could be in the form of a letter grade, a percentage, or a number on a preconceived ordinal scale which corresponds to a set of descriptive criteria (Bacha, 2001).

A well-known example of a holistic scoring rubric in ESL is the scale used for TOEFL Writing Test. This scale contains descriptors of the syntactic and rhetorical qualities of six levels of writing proficiency. See Appendix A.1 which illustrates the scale taken from Weigle (2002:113). Polio (1997) also developed a holistic scale rubric in an attempt to find a quick and reliable method of measuring accuracy without having to count and identify errors. (See Appendix A.2) Kretch et al, (2010) developed a holistic scoring rubric to be used by their trained scorers. See Appendix (A.3) for a copy of this four-point rubric.

Using a holistic scoring scale enjoys a number of advantages. The first one is that scoring time decreases because it is faster to read a script once and assign a single score than to read it several times, each time focusing on a different aspect of the writing. The second advantage is this that holistic scoring is intended to focus the readers' attention on the strengths of the writing, not on its deficiencies, so that the writers are rewarded for what they do well (Weigle, 2002; Bacha, 2001). White (1984) argues that holistic scoring is more valid than analytic scoring methods

because it reflects most closely the authentic, personal reaction of a reader to a text, and that in analytic scoring methods, “too much attention to the parts is likely to obscure the meaning of the whole” (White, 1984: 409). Applicability to writing across many different disciplines and high inter-rater reliability are other advantages ascribed to holistic scoring. However, holistic scoring has several disadvantages, particularly in second-language contexts. Weigle (2002) lists these drawbacks in this way: A single score does not provide useful diagnostic information about a person’s writing ability, the main reason is that a single score does not give the raters enough information about the strengths or weaknesses of the writer in various aspects of writing such as control of syntax, depth of vocabulary, organisation and so on. Another disadvantage, according to Weigle (2002) is that holistic scores are not always easy to interpret, as raters do not necessarily use the same criteria to arrive at the same scores. In many cases raters with different criteria in mind may arrive at similar final scores. For example, one piece of writing might be given a 4 score in a holistic scale by one rater because of its rhetorical features while another rater might give the same piece a 4 because of its linguistic features. There are also other disadvantages seen in this scale which I do not go through in this part.

2.4.5.3 Analytic scoring

The third and perhaps the most objective scoring scale in which six major elements of writing are scored is called *analytic scoring*. Brown (2004) calls this scale “*analytic assessment*” in order to capture its closer association with classroom language instruction than with formal testing. Depending on the purpose of the assessment, scripts might be rated on such features as content, organisation, cohesion, register, vocabulary, grammar, or mechanics. Analytic scoring scales provide more detailed information about a test taker’s performance in different aspects of writing

and are for this reason preferred over holistic schemes by many writing specialists (Weigle 2002, Brown 2003).

One of the best known and most widely used analytic scales in ESL was created by Jacobs et al. (1981) (see Appendix A.4). In this scale scripts are rated on five aspects of writing: content, organisation, vocabulary, language use, and mechanics. The five aspects are differentially weighted to emphasize first content (30 points) and next language use (25 points), with organisation and vocabulary weighted equally (20 points) and mechanics receiving very little emphasis (5 points). Cyril Weir (1988) developed a set of scales for the Test in English for Educational Purposes (TEEP). His approach was slightly different from existing analytic scoring scales. In this approach, Weir considered a scheme consisting of seven scales, each divided into four levels with score points ranging from 0 to 3. The first four scales are related to communicative effectiveness, while the others relate to accuracy. In Appendix A.5 a copy of TEEP attribute writing scale developed by Weir (1990) is presented.

Brown (2004) presents an analytical scoring scale developed by Brown and Bailey (1984) in which five major categories and a description of five different levels in each category, ranging from “not college level work” to “excellent” are specified (See Appendix A.6). For each scoring category there is a description that encompasses several subsets. In this scale there are 25 descriptions, each subdivided into a number of contributing factors. The order in which the five categories (organisation, logical development of ideas, grammar, punctuations/ spelling/ mechanics, and quality of expression) are listed may bias the evaluator toward the greater importance of organisation and logical development as opposed to punctuation and style. But the

mathematical assignment of the 100-point scale gives equal weight (a maximum of 20 points) to each of the five major categories.

Michigan Writing Assessment Scoring Guide is another scale developed by Hamp-Lyons (1990) for grading an entry-level university writing examination. The scoring procedure in this scale is based on three rating scales: Ideas and Arguments, Rhetorical Features, and Language Control. The three scales are not combined in a single score, but are reported separately and thus provide valuable diagnostic information to teachers and test takers (Weigle, 2002).

As far as advantages of analytic scoring over a holistic scoring are concerned the following points seem more outstanding. Analytic scoring provides more useful diagnostic information about students' writing abilities (Weigle, 2002). It is particularly useful for second-language learners, because it helps them understand their strengths or weaknesses in each particular aspect of writing skill. "Analytic scoring offers writers a little more washback than a single holistic score" since scores in five or six major elements will help to call the writers' attention to areas of needed improvement (Brown, 2003: 255). Bacha (2001) points out that if analytic scales are applied well, they can be very informative about the students' proficiency levels in specific writing areas.

However, a number of disadvantages of analytic scoring have attracted researchers' attention. The major one is that it is time consuming and therefore more expensive than holistic scoring, since raters are required to make more than one decision for every script. Another disadvantage of analytic scoring is that combining of scores on different scales can lead to the loss of a good

deal of information. The final disadvantage to mention here is that “raters who are experienced at using a particular analytic scoring system may actually rate holistically than analytically if scores are combined into a single score: experienced raters may target their ratings towards what they expect the total score to come out to be, and revise their analytic scores accordingly” (Weigle, 2002: 120).

2.4.5.4 Choosing a rating scale

In order to choose an appropriate rating scale for a certain writing assessment context a number of factors should be taken into consideration. According to Bachman and Palmer (1996) the choice of testing procedures involves finding the best possible combination of the six qualities of test usefulness: reliability, construct validity, practicality, impact, authenticity, and instructiveness. Also, deciding on which qualities are most relevant in a given situation is a matter of great importance.

It is important to note that all of the scoring scales developed by the scholars in the field (reviewed above) aimed at scoring longer texts than a paragraph, at least typical 5-paragraph essays. In the study presented in this thesis, the texts assessed were single paragraphs and consequently a revised version of the assessment criteria devised by Jacobs et al was developed for the purpose of scoring the paragraphs collected in this study. Details of this scoring scale will appear in chapter five (5.2.2).

2.5 Second language writing development

Examining the students' progress in language use features of the writing skill and comparing two groups of students in this regard is the main objective of the study. Here I focus on the issues around development in language use in the writing skill in particular. By language development, as said before, is meant the characteristics of a learner's output that reveal some point or stage along a developmental continuum.

Lu (2010) asserts that language development refers to the process in which the language faculty develops in a human being. First language development is concerned with how children acquire the capability of their native language, while second language development is concerned with how children and adults acquire the capability of a second language. "In the second language development literature, a number of developmental index studies have attempted to identify objective measures of fluency, accuracy and complexity of production that can be used to index the learner's level of development or overall proficiency in the target language. This is generally achieved by assessing the development of second language learners at known proficiency levels in the target language using various measures. Developmental measures identified in such a way allow teachers and researchers to evaluate and describe the learner's developmental level in a more precise way. In addition, they can also be used to examine the effect of a particular pedagogical treatment on language use" (p 186).

The idea of measuring the Complexity, Accuracy, and Fluency (CAF henceforth) components as indicators of language development in an ESL/EFL context emerged from the dichotomy made between two types of developmental studies: *developmental sequence studies*, which examine

the acquisition orders for morphosyntactic features of language based on error and performance analysis; and *developmental index studies*, which attempted to gauge the development of learners at known proficiency levels through the use of the three measures of CAF that are not necessarily tied to particular structures (Wolfe-Quintero et al, 1998).

Studies of morpheme acquisition order (Dulay and Burt, 1973 and 1974; Hakuta 1976; Lightbown 1985 and 2000), performance studies (Bailey, Madden, and Krashen 1974) and the stages involved in the development of negation (Schumann 1978) and relative clause acquisition (Doughty 1991) are examples of the first type and studies that measure certain features such as the length of error-free T-units, or the number of dependent clauses per total clauses in a language sample are examples of the second.

Norris and Ortega (2009, p 557) assert that "the primary reason for measuring L2 CAF is to account for how and why language competencies develop for specific learners and target languages, in response to particular tasks, teaching, and other stimuli, and mapped against the details of developmental rate, route, and ultimate outcomes. In other words, instructed SLA researchers seek to understand phenomena that make a difference in teaching and learning, first and foremost".

Since the third question raised in the present study is associated with the language learners' writing skill in relation to the developmental index features, the CAF measures, the main focus in this section of literature review is on the developmental index studies. The early attempts at constructing a second language acquisition index of development began in the late 1970s

(Larsen-Freeman and Storm 1977, Larsen-Freeman 1978). The main goal of the index developers was to prepare a developmental scale that could determine second language developmental level by means of objective measures (Wolfe-Quintero et al, 1998). According to Larsen-Freeman (1983: 287), the goal was a "developmental yardstick against which global (i.e., not skill nor item specific) second language proficiency could be gauged". Lu (2011), however, warns us that a fundamental issue that needs to be addressed to achieve this goal is the extent to which developmental measures of CAF are valid and reliable indices of a learner's developmental level or global proficiency in the target language (p 39).

The importance of developmental measures of CAF for the present study is that they have been used as dependent measures for examining the effect of a pedagogical treatment on either oral or written language use and in this research I am examining the effect of the DDL method of teaching on the writing skill of a group of EFL learners. Wolfe-Quintero et al (1998) list a number of research studies in which the researchers have tried to find out the effect of a particular instructional context by measuring differences on some of these developmental measures. These measures have been used in studies of the effect of the programme (Carlisle, 1989; Ferris and Politzer, 1981; Storch, 2009), feedback (Kepner, 1991; Robb, Ross and Shortreed, 1986; Storch and Tapper, 2009), task (Chastain, 1990; Foster and Skehan, 1996; Witt and Davis, 1983), grammar instruction (Frantzen, 1995), planning (Crookes, 1989; Foster and Skehan, 1996; Ortega, 1995), audience (Hirano, 1991), topic (Reid, 1992; Tapia, 1993; Tedick 1990), and time (Kroll, 1990; Storch and Hill, 2008; Benevento and Storch, 2011). We now move on to look at each of the most language development in turn: Complexity, Accuracy, and Fluency.

2.5.1 Measures of writing development

In a detailed classification of the measures of writing development that had been used in studies of second language development, Wolfe-Quintero et al. (1998) introduce the three classes of measurements: a) fluency, b) accuracy, and c) complexity. Each one of these classes has been based on a certain assumptions: 1) Regarding fluency, it has been assumed that second language learners write more fluently, or write more in the same amount of time, as they become more proficient. 2) In terms of accuracy, it is believed that second language learners write more accurately, or produce fewer errors in their writing, as they become more proficient. 3) The last assumption which is about complexity says that second language learners write more grammatically and lexically complex sentences as they become more proficient. Lenon (1990) defines fluency as "native-like rapidity", accuracy as being "error-free", and complexity as "using a wide range of structures and vocabulary".

Wolfe-Quintero et al. (1998) observe some kind of correspondence between these three components of development and the two different aspects of language processing: language representation (also known as declarative knowledge, linguistic representation, usage, or competence) and language access (also known as procedural knowledge, access to or control of representations, use, or performance). They maintain that complexity and accuracy reflect the second language learners' current level of language knowledge; while complexity reveals the scope of expanding or restructured second language knowledge, accuracy shows the conformity of second language knowledge to target language norms. And finally, fluency is known as a function of the control in accessing that knowledge with control improving as the learner automatizes the process of gaining access.

Calculating the CAF measures: In order to give a precise and common framework for calculating the CAF measures, Wolfe-Quintero et al. (1998) reviewed thirty-nine second and foreign language writing studies and characterized the measures by considering the method by which they were calculated. The first type of calculation, as they said, is a simple *frequency count* of a particular feature, structure, or unit such as calculating of the number of words, clauses, or T-units in a writing sample. The problem with this type is that they vary as a function of the amount of time allotted to the writer or the nature of the task. The second type of calculation is *a ratio measure*, in which the presence of one type of unit is expressed as a percentage of another type of unit, or one type of unit is divided by the total number of comparable units (e.g., error-free units per total units of the same type). In some studies, the ratio or index figure might be multiplied by 100 to yield a percentage. The third type of calculation is *an index based* on a formula that yields a numerical score. In this latter type, the researcher uses a more complex formula than a simple ratio to calculate a score (e.g., Bardovi-Harlig, 1992).

Within this framework the measures have been labeled with a name and a symbol, with symbol being a representation of the method of calculation. Frequency counts of the number of clauses (C), T-units (T), or error-free T-unit (EFT) are examples of symbols with no mathematical formula. Ratio counts such as the subordination ratio (C/T) can be calculated by dividing the number of clauses by the total number of T-units.

Lu (2010), based on Wolfe-Quintero *et al.*'s(1998) review of the studies conducted on second and foreign language development to the time, believes that the following are the best recommended measures of development:

1. Three measures of fluency, i.e. mean length of T-unit, where a T-unit is a main clause plus any subordinate clauses (Hunt 1965), mean length of clause, and mean length of error-free T-unit;
2. Two measures of accuracy, i.e. error-free T-units per T-unit, and errors per T-unit;
3. Two measures of grammatical complexity, i.e. clauses per T-unit, and dependent clauses per clause; and
4. Two measures of lexical complexity, i.e. total number of word types divided by the square root of two times of total number of word tokens, and total number of sophisticated word types divided by total number of word types.

2.5.1.1 Complexity

Following Wolfe-Quintero et al. (1998) who distinguished between syntactic and lexical complexity, in this section just the measures associated with syntactic complexity are reviewed. By syntactic complexity in second language writing it is meant the range of syntactic structures that are produced and the degree of sophistication of such structures (Lu, 2011). Syntactic complexity has been recognized as an important construct in L2 writing teaching and research, as the growth of a learner's syntactic repertoire is an integral part of his or her development in the target language. For Foster and Skehan (1996: 303) development in syntactic complexity meant "progressively more elaborate language" and "a greater variety of syntactic patterning. Wolfe-Quintero et al. (1998: 70) continue that idea saying "grammatical complexity means that a wide variety of both basic and sophisticated structures are available and can be accessed quickly, whereas a lack of complexity means that only a narrow range of basic structures are available or

can be accessed". Syntactic maturity and linguistic complexity are also the two terms used for syntactic complexity (Ortega, 2003).

In a thorough study of L2 writing development research focusing on CAF, Norris and Ortega (2009) have categorised different complexity measures into global or general complexity, complexity by subordination, complexity via phrasal elaboration, and complexity by coordination. For each category sets of metrics have been introduced and novice researchers have been advised to apply the most appropriate ones according to their research purposes, learners and the educational contexts. They show that overall complexity is measured through calculating mean length of T-unit, complexity by subordination through mean number of clauses per T-unit, and mean length of clause is calculated for complexity by subclausal or phrasal elaboration. Amount of coordination as proposed by Bardovi-Harlig (1992) is a metric for data at initial levels of L2 development. Norris and Ortega (2009, p 558) believe "[that] coordination might be potentially more sensitive than subordination measures, when complexification must be captured at incipient levels of L2 competence". The reason for this claim could be the need for the expression of ideas first by means of coordination or the sequencing of self-standing words, sentences, and clauses at early stages of proficiency. At intermediate levels, subordination should be a useful and powerful index of complexification. This is an index that by definition is a resource to express the logical connection of ideas via grammatically intricate texts. In the following section the procedure(s) applied to assess complexity by subordination is reviewed.

In order to quantify the conceptualization of syntactic complexity different measures have been proposed. These measures aim at quantifying one or more of the following characteristics of a

text: length of production unit, amount of subordination or coordination, range of syntactic structures, and degree of sophistication of certain syntactic structures. Although Wolfe-Quintero et al. (1998) identified over 30 syntactic complexity measures in different L2 writing development studies, in most cases clauses, sentences, or T-units have been considered as production units and have been analysed in terms of length (e.g., mean length of T-unit) or in relation to either one another (e.g., clauses per T-unit) or particular syntactic structures (e.g., complex nominals per T-unit) (Lu 2011). Mean length of production in general and mean length of T-unit in particular, however, have been employed as a measure of fluency, not complexity by a number of researchers (Ishikawa 2007, Storch and Wigglesworth 2007).

One group of researchers conducted cross-sectional studies to investigate how well these syntactic complexity measures discriminate independently determined proficiency levels (Bardovi-Harlig and Bofman, 1989; Ferris, 1994; Henry, 1996; Homburg, 1984; Larsen-Freeman, 1978; Ortega, 2003) while another group did longitudinal studies to pursue learners' language development over time (Casanave, 1994; Hunt, 1970; Ishikawa, 1995; Ortega, 2000, 2003; Stockwell and Harrington, 2003). Although these studies share a common goal, they differ from one another in several dimensions of which large variety of measures, inconsistency of defined production units and syntactic structures, and incomparability of varied conceptualizations of proficiency are the most notable ones.

More recent researchers have focused on the effects of different learner, task, and context-related factors on the relationship of syntactic complexity to language proficiency. See for example, Sotillo (2000) on examining how different modes of computer-mediated communication affect

syntactic complexity in advanced ESL writers' output, Way, Joiner, and Seaman (2000) on the effects of different writing tasks and prompts on syntactic complexity, Ortega (2003) on the impact of instructional setting and proficiency sampling criterion on the relationship between proficiency and syntactic complexity, Ellis and Yuan (2004) on how planning conditions affect syntactic complexity, and Beers and Nagy (2009) on how genre affects the relationship of syntactic complexity measures to rated quality of writing samples produced by middle school students. In Ortega's (2003) study, it was found that ESL learners produced writing of higher syntactic complexity than EFL learners and that studies using holistic rating as the proficiency sampling criterion yielded narrower ranges of complexity values than those using program level.

Several studies examined the role of syntactic complexity in L2 writing instruction or assessment. Buckingham (1979), Perkins (1983), Silva (1993), and Hinkel (2003) are just some of these studies in which various measures of complexity have been calculated. According to Lu (2011) despite all these variations in the measures used in these studies, they suggest that research on developmental measures of syntactic complexity has useful applications in L2 writing instruction and assessment. Ortega (2003: 492), on the importance of measuring syntactic complexity writes:

“In L2 writing research, specifically, syntactic complexity measures have been used to evaluate the effects of a pedagogical intervention on the development of grammar, writing ability, or both; to investigate task-related variation in L2 writing; and to assess differences in L2 texts written by learners across proficiency levels and over time”.

Defining syntactic complexity measures: In the framework developed for calculating the CAF components by Wolfe-Quintero et al. (1998), the three main production units are clauses (C), T-units (T), and sentences (S). Two types of measures are considered for syntactic complexity: those that analyse the clauses, sentences, and T-units in terms of each other (e.g., clauses per sentences, dependent clauses per T-unit, T-units per sentence); and those that analyse the presence of specific grammatical structures in relation to clauses, T-units, or sentences (e.g., passives per sentences, nominals per T-unit). Although different researchers have defined these production units differently, the following definitions have been used more frequently:

Clause = a phrase dominated by VP or S (Bardovi-Harlig and Bofman, 1989)

or

a structure with a subject and a finite verb (Hunt, 1965; Polio, 1997)

With respect to sentence fragments

- a clause can include sentence fragments with no overt verb (Bardovi-Harlig and Bofman, 1989)
- a clause does not include fragments unless they are a complete thought (Ishikawa, 1995)

T-Unit = a main clause plus any subordinate clauses (Hunt, 1965):

With respect to sentence fragments

- a T-unit can include sentence fragments punctuated by the writer (Bardovi-Harlig and Bofman, 1989; Tapia, 1993)
- a T-unit does not include sentence fragments (Ishikawa, 1995; Hirano, 1991; Vann, 1979)

With respect to pronunciation

- a T-unit can occur across sentences punctuated by the writer (Hunt, 1965)

- a T-unit can occur only within sentences punctuated by the writer (Homburg, 1984; Ishikawa, 1995)

Sentence = group of words punctuated by the writer (Hunt, 1965; Tapia 1993)

Bardovi-Harlig (1992) criticized the definition of T-unit as a production unit in the CAF measures because it contains subordination but not coordination which will result in obscuring inappropriate coordination by separating them into different T-Units. She then argues for the sentence as a more psychologically and pedagogically real production unit for adult second language learners. Ishikawa (1995) on the other hand, suggests that the clause may be a better production unit for analysing beginning level writing because it is smaller than a T-unit and therefore, a smaller context for examining language growth in a variety of ways would be provided.

As far as types of clauses and their definition is concerned, Wolfe-Quintero et al. (1998) distinguished four types of finite clauses: independent clauses (i.e. main clauses), adverbial clauses, adjective clauses (i.e. relative clauses), and nominal clauses (i.e. noun clauses, including both that-clauses and interrogative clauses). Accordingly, researchers such as Bardovi-Harlig and Bofman (1989: 20) defined a complex sentence as "a multiclausal sentence exhibiting subordination."

In addition to clause-related measures as indicators of syntactic complexity in writing, other structures and elements such as cohesive devices, pronouns, and articles (Homburg, 1984; Evola

et al., 1980) have been investigated. Perkins (1980) calculated his complexity score on the basis of sentences whereas Flahive and Snow (1980) did so on the basis of T-units.

Regarding the types of measures used in syntactic complexity, as mentioned above Wolfe-Quintero et al. (1998) characterized these measures in regard to 'frequency count', 'ratio', and 'index'. In the studies in which frequency counts were calculated as an indicator of complexity measure one or more of the 15 grammatical structure/item as listed here were calculated: reduced clause, dependent clause, passives, passive sentences, adverbial clauses, adjective clauses, nominal clauses, prepositional phrases, preposed adjectives, pronouns, articles, connectors, transitional connectors, subordinating connectors, and coordinating connectors. In order to increase the validity of these frequency measures as compared with ratio measures, some researchers have counted the number of occurrences of the determined item in a written text within a time limit (Evola et al., 1980; Homburg, 1984; Kameen, 1979; Kawata, 1992).

Three types of grammatical complexity ratios have been used in the studies reviewed by Wolfe-Quintero et al. (1998): 1) the general complexity measures (clauses per T-unit (C/T) and clauses per sentences (C/S)), 2) the dependent clause measures, and 3) the coordination measures. In general complexity measures, the first type, the proportion of all clause types to a larger unit such as the sentence or T-unit is considered. In the second type, the relationship between dependent and independent clauses is calculated. Examples are adverbial clauses per T-unit (Adv C/T), dependent clause per clause (DC/C), dependent clauses per T-unit (DC/T), and dependent infinitives per T-unit (DI/T). Norris and Ortega (2009) consider these complexity ratio measures as complexity by subordination. In the coordination measures such as T-units per sentence (T/S),

coordinate clauses or coordinate phrases per T-unit (CC/T or CP/T) the relationship between coordination and independent clauses is taken into account.

Wolfe-Quintero et al. (1998: 94-97) identified three index based type of measures of syntactic complexity in the studies conducted by Casanave (1994), Flahive and Snow (1980), Perkins (1980), and Tapia (1993). These three complexity indices were '*coordination index*' (number of independent clause coordinations divided by total number of combined clauses-clause minus sentences), '*complexity formula*' (score of weighted structures divided by number of sentences), and '*complexity index*' (sum of T-unit scores divided by number of T-units, where T-unit score = score of weighted structures plus number of words in T-unit divided by number of words in T-unit). Since it has been reported that "none of [these] three grammatical complexity indices significantly relate to second language development", no further review seems necessary at this point.

2.5.1.2 Accuracy

Wolfe-Quintero et al. (1998) have defined accuracy as the ability to be free from errors while using language to communicate in either writing or speech. They believe that the purpose of accuracy measures is the comparison between the learners' ability of using the language in communication with target-like use. Accuracy has been said to arise from the three following interacting sources:

1. The degree of accuracy of the language representation itself,
2. The strength of competing representations, and
3. The degree of automatization of language production (p 33).

The first source here corresponds to the degree to which the learner has internalized the target language system correctly, the second source relates to the strength of different forms internalized in comparison with other representations and the final one comes from the extent to which one or the other form is retrieved automatically. On the relationship between speed of language use and accuracy MacKay (1982) states that when language production is still in the process of being automatized, there are trade-offs between the two. It means that when the learner produces either extremely slowly or extremely rapidly, there are more errors in his/her production. Also, it has been observed that in second language development, some kind of transfer from either the learner's first language representations, or earlier stages of the second language may cause difficulty in the production of the target language representations. Wolfe-Quintero et al. (1998) conclude from these observations that as more correct representations get strengthened over time, they will be more likely to get activated.

In regard to automatization aspect of language production, Ellis (1996) considers 'memory for chunks' as the basis not only of automaticity and fluency, but also of the higher-level restructuring that can result in complexity and accuracy gains. Learners develop their fluency as they automatise access to their encoded language knowledge and improve complexity and accuracy features of their language use when they restructure the learned language representations.

Brumfit (1984) takes a contrasting view between accuracy and fluency and proposes that the former is an explicit display of language usage for evaluation, whereas the latter is an implicit

and automatic use of natural language for communication. He believes that accuracy is the outcome of a conscious attention to form, not an unconscious restructuring process. In Brumfit's view of language pedagogy, the important issue is whether classroom attention is more focused on learning accurate target language forms to achieve accuracy, or to communicating a message to achieve fluency.

For Wolfe-Quintero et al. (1998), however, accuracy can be related to a continuum from more implicit to more explicit forms of language knowledge. A more explicit or conscious access to certain aspects of language knowledge can play a role in the self-monitoring of language production, including the conscious editing of writing. In this view, the conscious application of editing knowledge in writing is part of the higher level control over plans (Schmidt, 1992) that exists in all language production. Editing is a conscious plan, but the language choices made while editing are subject to the same gradual development of automaticity and restructuring as all language knowledge is.

Evidence drawn from research indicates that errors themselves may be automatized (Schmidt, 1992), that the automatic self-correction of low-level errors occurs when basic writers read their writing out loud (Bartholomae, 1980), and that it is difficult to allocate conscious attention to different types of errors when L2 writing products are being edited (Zamel, 1995). Writers are dependent on the state of their language knowledge when it comes to the types of errors they search for notice or are able to correct either automatically or through a conscious struggle.

In second language writing development research, error analysis has been an important technique because of the fundamental assumption that, as writers become more proficient; it becomes easier for them to produce increasingly accurate language which is by definition less erroneous. Larsen-Freeman (1978) considered both structural errors in second language learners' writing and the use of oversimplified sentence structures as indications of incomplete syntactic control. Hence, Wolfe-Quintero et al. (1998) conclude that a lack of knowledge of the second language can manifest itself as simplification which is the complexity issue or as error, the accuracy issue. According to this view the avoidance strategy by which the writer who has not absorbed a syntactic structure completely and shows no tendency to use it in his/her writing is also taken into consideration. Therefore, analysing the accuracy measures by which both errors (as indications of lack of accuracy) and avoidance strategies (as manifestations of lack of complexity) will give the second language writing development researchers a dual picture of understanding the way the second language learners develop their writing repertoire.

It has been generally assumed that there exists a close relationship between the development of accuracy (fewer errors), an increase of fluency (faster rate and greater length), and an increase in complexity (more lexical and grammatical variety). Yet, researchers like Foster and Skehan (1996), MacKay (1982), and Tedick (1990) studied these three components of language development and showed that there is not a necessarily linear relationship between them. In Foster and Skehan's (1996) study the more complex sentences learners tried to produce, the more errors they were likely to make, and in MacKay's (1982) the more rapidly learners produced language that was not fully automatic the more errors they made. In Tedick's (1990) research which was designed to study the effect of prior knowledge of a topic on writing, it was found

that second language learners produce longer T-units, when they are more familiar with the topic of writing assignment though their error-free T-units are fewer. Tedick concluded that familiarity with the topic might have been a factor of increase in risk-taking in the learners making them produce longer T-units and also larger number of errors associated. In contrast with the results of these studies, Wolfe-Quintero et al. (1998) believe that complexity and accuracy may progress together over long-term development and the above mentioned trade-off might be a factor only at certain points in time.

As we see, studying ESL/EFL learners' writing development in terms of individual components of the CAF studies and also the relationship between one component to the others either at a particular time or over time will result in conflicting ideas. Therefore, it is an important issue to consider if the researcher is conducting a cross-sectional or a longitudinal study in order to interpret the results appropriately.

Defining accuracy measures: Two approaches to counting the errors in a written text have been widely used in second language writing development research. The first approach deals with whether a structural unit of some type is error-free, whether clauses, sentences, or T-unit. The measures that are usually searched for in this approach are the number of error free T-units per T-unit (EFT/T) or the number of error free clauses per clause (EFC/C). In this approach the learners' level, the discriminative value of the errors within the population, and the researcher's preferences determine the type of error(s) that should be taken into account (Wolfe-Quintero et al., 1998). Various error types that typically have been counted in different studies within this approach are morphosyntactic, lexical, spelling, and punctuation errors when determining if a T-

unit is error-free. The second approach is the analysis of how many errors occur in relation to production units such as words, clauses, or T-units. In this approach all errors can be considered, as in the calculation of the number of errors per word (E/W), or errors of various types can be considered, as in the calculation of morphological errors per clause (MorE/C). Typical types of errors are syntactic, morphological, lexical, or semantic. Researchers like Homburg (1984) and Zughoul (1991), however, used their own method of error classification.

Bardovi-Harlig and Bofman (1989) criticized the first approach saying that measures such as error-free T-unit per T-unit do not reveal how errors are distributed within the T-unit. They argued that "a single error of any type is sufficient to eliminate a T-unit from the error-free category. In this way, a T-unit exhibiting one error is treated identically to a T-unit exhibiting multiple errors" (p 22). Moreover, Wolfe-Quintero et al. (1998) discuss that error-free measures do not reveal what types of errors are involved, because all types of errors that are being analysed are treated as equivalent for purposes of determining the correctness of a unit. As a result of these criticisms of error-free T-unit measures, the second approach as introduced above was developed by Bardovi-Harlig and Bofman (1989) and Homburg (1984).

The number of error free T-units is the most frequently used measure in accuracy measures. Although it is expected to increase as proficiency increases, Wolfe-Quintero et al. (1998) argue that the assumption may be false, because there may be a trade-off between accuracy and complexity that prevents a co-linear relationship. The evidence they give refers to the results of Tomita (1990) and Sharma (1980). In Tomita's study the third-year students committed more errors because they tried to write longer and more complex sentences in comparison with the

second year students, while in Sharma's study the number of error-free T-units decreased from low intermediate to high intermediate learners.

These discrepancies in the results of frequency measures of accuracy might have called the attention of the researchers to the accuracy ratio measures. Wolfe-Quintero et al. (1998: 43) have given a list of 27 accuracy ratios that have been used in quite a number of studies. Yet many of these ratios have been used in only one or two studies whereas, the two measures of error-free T-unit ratio (EFT/T) and the errors per T-unit ratio (E/T) have been used more frequently. Carlisle and McKenna (1991), Henry (1996), Homburg (1980), Larsen-Freeman (1983), Rifkin and Roberts (1995), and Tomita (1990) are just a few examples using the ratio measures.

One general result gained from the error-free T-unit ratio studies as concluded by Wolfe-Quintero et al. (1998: 45) is this that there may not be a linear relationship between accuracy and proficiency in second language writing. Regarding the studies that counted the ratio of errors (errors per T-unit, E/T), it has been concluded that the measure is less an indication of development than it is an indication of what teachers are looking for when they make comparative judgements between learners at roughly the same level: overall accuracy. Of course, Wolfe-Quintero et al. (1998) suggest further studies to examine this generalisation they have made.

2.5.1.3 Fluency

Fluency has been defined variously by different researchers. Housen and Kuiken (2009) state that fluency typically refers to a person's general language proficiency, particularly as

characterized by perceptions of ease, eloquence, and 'smoothness' of speech or writing. Fluency is the "process of language in real time" (Schmidt, 1992: 358) with a focus on "the primacy of meaning" (Foster and Skehan, 1996: 304).

One group of researchers have defined fluency in terms of the appropriate use of routines. For Ellis (1996), for example, the routine is an automatised chunk of language and for House (1996) it is a pragmatic formula. Wolfe-Quintero et al. (1998: 13) argue that "the use of routines will result in an increase on measures of fluency, because the units of production will be longer and easier to produce within a given time frame".

The problem with measuring fluency starts from the point where different definitions of fluency give a kind of vague understanding of this construct in relation to the other two constructs of CAF, i.e. complexity and accuracy. For example, in Fillmore's (1979) discussion, which focuses on defining (elaborating) native speakers' fluency, fluent speakers are considered in terms of how fast they talk, how coherent and complex their speech is, whether the speech is appropriate, and how creative it is. Here, as we see, there is a combination of complexity and accuracy characterisations involved. Lennon (1990: 390) views fluency as the ability to process the L2 with 'native-like rapidity' and Ellis (2003: 342) considers it as 'the extent to which the language produced in performing a task manifests pausing, hesitation, or reformulation'.

Housen and Kuiken (2009) summarizing research on fluency conclude that language researchers have mainly analyzed oral production data to determine exactly which quantifiable linguistic phenomena contribute to perceptions of fluency in L2 speech (e.g. Lennon 1990; Towell et al.

1996; Cucchiarini et al. 2002; Kormos and Danes 2004). Within this framework speech fluency is a multicomponential construct in which different subdimensions can be distinguished, such as speed fluency (rate and density of delivery), breakdown fluency (number, length, and distribution of pauses in speech), and repair fluency (number of false starts and repetitions) (Tavakoli and Skehan 2005).

A quick look at the relevant literature reveals that a good bulk of research take fluency as an aspect of language involving 'time' and 'speed' and therefore the concepts of time and its measurement are two almost ever-present elements in defining and measuring fluency of speech. In many cases this is true with fluency in writing, though not in all.

Regarding fluency in writing, Wolfe-Quintero et al. (1998) observe the same vague image of the relationship between fluency, complexity and accuracy for "second language writers who may be considered fluent if they can produce written language rapidly, coherently, appropriately, and creatively" (p 13).

Having reviewed different definitions and methods of measuring fluency, Wolfe-Quintero et al. (1998) take an automaticity view towards the construct, the view that characterises fluency as an "automatic procedural skill" (Schmidt, 1992). In this view, fluency means that more words and more structures are accessed in a limited time, whereas lack of fluency means that only a few words or structures are accessed. For Wolfe-Quintero et al. (1998) "fluency is not a measure of how sophisticated or accurate the words or structures are, but a measure of the sheer number of

words or structural units a writer is able to include in their writing within a particular period of time: (p 14).

Defining fluency measures: Three ways of measuring fluency have been introduced by Wolfe-Quintero et al. (1998). In the first and most common way the number, length or rate of production unit would be counted. By production unit here it is meant sentences, T-units, clauses, and phrases. In this method, fluency is measured by considering the length of production units by counting the average number of words in them. Calculating the number of words produced per minute is another way of measuring fluency. This is the rate measure of production as proposed by Arthur (1979). Although length measures such as words per T-unit (W/T) or words per utterance (W/U) had been considered measures of complexity, Wolfe-Quintero et al. (1998) consider all length measures to be measures of fluency. Calculating the average length of complex nominals in T-units (measured as the number of words in complex nominals per T-units, or WCN/T) and the average length of complex nominals per clause (measured as the number of words in complex nominals per clause, or WCN/C) are the other two methods of measuring fluency, although they appear, as Wolfe-Quintero et al. say, to be related more to complexity than to fluency.

The last group of fluency measures is the 'error-free measures' in which the fluency of a writer within the context of writing accurate sentences is examined. In these measures the total number of words within error-free T-units (WEFT) or words within error-free clauses (WEFC), as well the average number of words per error-free T-unit (W/EFT) or words per error-free clauses (W/EFC). Although these error-free measures seem to function as indications of accuracy,

Wolfe-Quintero et al. explain the reason why they have considered them as the measures of fluency referring to Ishikawa (1995) who contrasted measures of quantity (length) with quality (error). Ishikawa stated that "to consider both kinds of measures 'syntactic' is to miss the very real distinction between them" (p 56). They give the example of a writer who may write only one very long accurate T-unit. This writer will have a higher score on words in error-free T-units (WEFT) or words per error-free T-units (W/EFT) than another writer who writes many more accurate but shorter T-units. They conclude that the first writer is more fluent in accuracy context, as the words per error-free T-unit measure would indicate, but the second writer is more accurate overall.

After reviewing the two sets of studies in which fluency frequency measures (the number of words (W), verbs (V), clauses (C), sentences (S), T-units (T), words in T-units (WT), words in clauses (WC), words in error-free T-units (WEFT), and words in error-free clauses (WEFC)) and fluency ratios measures (words per minute (W/M), clause length (W/C), sentence length (W/S), T-unit length (W/T), error-free T-unit length (W/EFT), error-free clause length (W/EFC), complex nominal length per T-unit (WCN/T), and complex nominal length per clause(WCN/C)) have been counted, Wolfe-Quintero et al. conclude that the best measures of fluency are the three ratio measures. These measures are clause length (W/C), T-unit length (W/T), and error-free T-unit length (W/EFT). The main reason for this preference, according to them, is the linear relationship observed between the increase of these measures and proficiency level of the research subjects they have examined.

2.6 Conclusion

This chapter has reviewed theories, definitions, and research concerning the topics relevant to teaching, testing and L2 writing development. In order to give a brief summary of the topics reviewed the whole chapter was divided into two broad areas. In the first three sections (2.2, 2.3, and 2.4) issues around writing skill in general, and second language writing in particular were discussed. Having reviewed the conceptualisations of writing introduced by Rivers (1981), Widdowson (1983), and Zamel (1987), I have given a more detailed description of the two well-known lines of thinking regarding the writing skill, i.e. writing as a product and writing as a process. It was argued that as a result of advantages and disadvantages observed in these theories of teaching writing, an integrative model of L2 pedagogy was introduced to the discipline (Connor, 1987).

Regarding approaches to teaching L2 writing, Raimes's (1991) historical survey of approaches to L2 writing instruction, that is, "focus on form", "focus on the writer", "focus on content", and "focus on the reader" have been reviewed along with Hyland's (2003) conceptualisations of instructional trends towards L2 writing i.e. the 7 orientations he believes should be seen as "complementary and overlapping perspectives, representing potentially compatible means of understanding the complex reality of writing" (Ibid: 2).

With regard to teaching writing in EFL contexts, especially at lower levels of proficiency, the so called "functional approach" (Ibid: 6) in which the teacher chooses the appropriate patterns to teach and the most effective way of using them is considered the most relevant model in comparison with other teaching models. This model is similar to product-oriented models: the

most highlighted principle is to relate structures to meanings, paragraphs are considered as syntactic units composing of a number of sentences in which writers can fit particular functional units into given slots, and students are taught how to form the functions into structural patterns. The model is believed to be influential where L2 students are being prepared for academic writing at college or university.

A key issue for every instructional activity in an academic setting is 'assessment' and there is no exception to this in teaching second language writing. Therefore, attempts were made to elaborate on assessing second language writing. First of all, a distinction was made between second language writing assessment in terms of measures of language development and writing proficiency measures. The former being characteristics of a learner's output that reveal some point or stage along a developmental continuum and the latter a broader concept that is related to separating language users into cross-sectional groups based on a normal distribution of their language abilities.

The second area of the topics examined in this chapter deals with the ESL/EFL learners' progress in language use features of the writing skill. Hence, in section (2.5) characteristics of second language development and its common measures in terms of 'Complexity', 'Accuracy', and 'Fluency', (CAF) within the framework as developed by Wolfe-Quintero et al (1998) were reviewed. In this section components of CAF measures were defined in separate sub-sections, and some research studies that had used them in their analyses were discussed briefly. Having reviewed the main theories of second language writing, assessment and measures of CAF, we now turn to the teaching approach to be investigated in this study.

Chapter Three

Corpora and DDL

3.1 Corpora and language learning/teaching

Data-Driven learning as elaborated on in chapter one was first developed as a pedagogical application of corpora in the early 1990s. Hence, before going on with how DDL works, its theoretical bases, and classroom activities, it is necessary to make it clear what is meant by 'corpus', the different types, and the role they have played in language teaching/learning.

3.2 Corpora

In a general sense of the term, the word corpus has been referred to as a collection of naturally occurring examples of language, consisting of anything from a few sentences to a set of written texts or tape recordings which have been collected for linguistic study (Hunston, 2002). In recent years, however, the element of 'electronically reserved and accessed' has been added to the definitions. Today, different corpora are planned for specific purposes and according to the targeted aims of using them the required texts are collected. Corpora are usually compiled to be analysed both quantitatively and qualitatively, and also studied non-linearly. It means that, usually, there is no need to have an access to the texts in order to read them. This is a distinctive feature of any corpus that makes it different from library or the archive materials.

In regard to the way linguists make use of corpora, Hunston (2002) reminds us that a corpus without computer software can do nothing at all, and does not contain new information about language. Language researchers, however, can process the data (corpus) using software packages

- typically called concordancers - in order to find out the 'frequency' of occurrence of a word or a string of a number of words, 'phraseology' of lexical items, and 'collocation', co-occurrence of words.

Frequency. Perhaps this is the most basic information that a corpus analysis gives the linguist and it is obtained when words are arranged in order of their frequency in that corpus. Frequency counts of a corpus are most useful when compared with those of another corpus.

Phraseology. The phenomenon that words have certain unobserved regularities in use can be explored through concordance lines. This phenomenon is the basis of phraseology. Hunston (2002: 9) gives the example of two phraseological patterns of 'someone is interested in something' and 'an interesting thing' to show that these patterns can be retrieved out of a number of concordance lines without which we may not be aware of.

Collocation. This final method of data manipulation in a corpus deals with calculation of collocation. Hunston (2002) defines it as the statistical tendency of words to co-occur. The main difference between a list of the collocates of a given word - compiled on the basis of intuition of human observers - with the information given by a set of concordance lines of the same word is that more information can be processed more accurately by the statistical operations of the computer than can be dealt with by the human observer.

Another type of information extracted from a corpus is a list of all of the occurrences of a particular search term in a corpus, presented within the context in which they occur – usually a

few words to the left and right of the search term. Technically this type of presentation of language data from a corpus is called a list of '*concordance lines*'. If the particular search word, the key word, is in the middle of the line it is referred to as 'key word in context' (KWIC). Concordances can usually be sorted alphabetically on either the search term itself or to x places left or right of the search term, allowing linguistic patterns to be more easily observed by humans (Baker et al. 2006). Sorted concordances can provide information on collocation patterning as well as reveal different senses of a word type. Moreover, the relative frequencies of different uses of a word type can be calculated.

Quite a wide range of uses of corpora have been identified in a variety of linguistic studies in recent years. Researchers in the areas such as phraseology, translation studies, discourse analysis, and language pedagogy have been using different types of corpora to obtain detailed linguistic information. From the early days of flourishing corpus linguistics, various types of corpora have been developed in order to apply for various types of linguistic studies as listed above. One type of classification of corpora is based on the size of the corpus, that is, how big the corpus is i.e., the number of words it contains. A second type of classification is according to the purpose(s) for which the corpus has been developed. The following is a list of different types of corpora as classified by Hunston (2002): 'specialised corpus', 'general corpus', 'comparable corpus', 'parallel corpora', 'pedagogic corpus', 'historical or diachronic corpus', 'monitor corpus', and 'learner corpus'. Since it is beyond the scope of this study to explain and elaborate on each type of the corpora, I am describing learner corpora due to its direct relevance to the data collection procedures of this study.

A learner corpus consists of language output produced by learners of a language. Most learner corpora consist of written essays using pre-set topics produced in language-teaching classrooms. Learner corpora are useful in studies of second language acquisition as they help to build a profile of learner language, particularly in terms of error analysis or for ascertaining what words, phrases, parts-of-speech etc. are over- or under-used by learners, compared to native speakers (Baker et.al 2006). Hunston (2002) points out that, through the use of learner corpora and a comparable corpus of native-speaker texts, learners' differences from each other and from the language of native speakers becomes possible to study. The most well-known learner corpus is the International Corpus of Learner English (ICLE). It is a corpus of writing by higher intermediate to advanced learners of English. It contains 3.7 million words of EFL writing from learners representing 16 mother tongue backgrounds. In order to compare the learners' language products the comparable corpus of essays written by native speakers of English, the Louvain Corpus of Native English Essays (LONBESS) is often used by the researchers.

Two different pedagogical applications of learner corpora can be observed in the language teaching literature. First, the learner corpus has been used as a diagnostic tool for identifying common errors made by particular groups of students. Granger and Tribble (1998) argue that information from a learner corpus has advantages over the teacher's intuition in identifying learners' errors and problems in the target language.

A second application concerns using the information obtained from the learner corpus or using the concordance lines directly to design DDL materials. For example, Sripicharn (1998) analysed 60 samples from compositions written by Thai intermediate learners of English and listed five

types of common errors (prepositions, collocation, confusing words, tense, and clause/sentence structure). 10 teaching units based on concordances from a native-speaker corpus were then written to guide the learners to make corrections on these types of error. Learner-corpus based DDL materials have been designed in different forms. In one form the students can be presented directly with concordance lines taken from a learner corpus. Tribble and Jones (1990: 53) identified some inappropriate use of relative clauses in learners' academic essays. Concordance lines containing relative clauses were drawn from the learners corpus presented and the learners were asked to replace the clauses with participle phrases where appropriate.

Since the focus of attention in this study is not on more specific methods and procedures applied in corpus linguistics, no more details of the issues around are discussed here. However, a brief review of using corpora in language teaching/learning is discussed below. This discussion will then lead to introducing Data-Driven Learning (DDL) and the use of concordancing in language teaching/learning.

3.3 Corpora and language teaching

Corpus use contributes to language teaching in a number of ways (Aston, 2000; Leech, 1997; Nesselhauf, 2004). One basic contribution has been viewed as providing a more accurate language description which can lead language pedagogues to the compilation of pedagogical grammars and dictionaries (Hunston and Francis, 1998, 1999; Kennedy, 1992; Owen, 1993). The analysis of learner language via learner corpora provides insights into learner needs in different contexts, which then inform learner dictionaries and grammars (Gabrielatos, 2005). Granger et al. (2002) also propose that research on learner corpora contributes to our understanding of

language learning processes. Another contribution of using corpora in language teaching/learning contexts is that an analysis of a pedagogical corpus makes it possible to examine the details of the language to which learners are exposed to and, when compared to L1 corpora, facilitate the development of more effective pedagogical materials (Gabrielatos, 2005). Contribution to construction and evaluation of language tests (Alderson, 1996) as well as language teaching/learning materials (Aston, 1997; Johns 1991a) are other instances of direct use of corpora in language pedagogy.

3.3.1 Corpora in the classroom

Leech (1997) has made a distinction between two types of corpora usage in language teaching, that is, the *soft version* and the *hard version* (cited in Gabrielatos, 2005). The former requires only the teacher to have access to, and the skills to use, a corpus and the relevant software. In this version which is also called a corpus-based method, the teacher decides what language point(s) to be taught. This decision comes from the teacher's corpus research, error analysis of learners' work, learners' queries, or language points relevant to the learner's syllabus. The teacher prints out examples from the corpus and devises the tasks. Learners work with these corpus-derived and corpus-based materials (Bernardini, 2004; Granger and Tribble, 1998; Osbourne, 2000; Tribble, 1997b; Tribble and Jones, 1990). Corpus examples are presented in the form of a concordance either in a KWIC or full-sentence format. According to the topic and the time allotted to the classroom session both formats can be used. The students can work either individually, in pairs, or as groups.

The *hard version* requires learners to have direct access to computer and corpus facilities and have the skills to use them (Aston, 1996). In this version the learners have the chance to choose the topic(s) and the kind of activities that have already been devised by the teacher (Tognini-Bonelli, 2001). In some cases tasks are presented within a CALL programme (Hughes, 1997; Milton, 1998) with or without the teacher's guidance (Bernardini, 2002). Gabrielatos (2005) points out that, because both the learners and the teacher have direct access to corpora, the topic(s) of the lessons can be more varied to reflect the learners' preferences and needs. A notable point in this version is this that there is a possibility for the teacher and the learners to modify the aims and direction of the lesson based on what happens in the classroom. In fact, they are not dealing with a fixed pre-planned syllabus.

3.3.2 Presenting the concordance lines

There are two common formats of presenting concordance lines in language teaching materials. In the *Key-Word-in-Context* (KWIC) format, the collocation and pattern of the search word are the main focus of attention while in the *full-sentence* format in which the key word (search word) is not necessarily aligned vertically through the lines the user is more interested in the meaning of the word in the sentence.

It may not be so necessary to read a complete sentence to find the collocation of the search word or the pattern in which it has been used. Therefore, a concordance list of the word '*reason*' in the KWIC format such as the one taken from Sripicharn (2002: 76) in figure 3.1 below would be enough for the learners to spot the patterns 'reason + to + V', 'reason + for + N', 'reason + for +

V-ing', and 'reason + why-clause'; and the typical words that precede it, words such as 'some', 'any', 'only', 'possible', 'every', 'good', and 'main'.

Figure 3.1: Concordance lines for 'reason' (taken from Sripicharn 2002: 76)

ual ledgers of the account. For some reason Barclays is keeping them under wraps
ft the BBC virtually unmolested, the reason being that politicians sent to tame
e in America". Now there's another reason for putting Vail at the top of the A
n the Bush Administration offered no reason for his surprise withdrawal. Mr Chen
fatter and fatter and that the only reason for his weight gain was that he was
tion. On Saturday, Fjortoft had more reason for satisfaction, emerging with nine
computer since 1988. One possible reason for this dearth of information is th
rpassable acoustic remains the prime reason for its musical pre-eminence. "Until
mpionship and I never wanted it. The reason for the change was to stop us going
Rail and a Government which for some reason has made it more expensive to go to
s at the Halifax, said: "There is no reason that we can see for raising interest
many a Scottish fortune has had good reason to thank Westminster ever since. I
vents. But it adds: "There is little reason to fear that a few suggestive questi
Tony Blair had every reason to be cheerful as he enjoyed a New Y
een fully vindicated. There is every reason to think that export-led output coul
for such a talented player. Another reason was that Caplan is such a doughty pi
in the DIY form, costs, there is no reason why the consumer should not be entit
committed suicide, I cannot see any reason why they should not go ahead now."
d techno fan as well. But the main reason why jungle has remained such a well-

Although a full-sentence format may not be as helpful in highlighting immediate collocates and patterns, it has certain advantages over the KWIC format. One advantage is the familiarity of language learners with reading and understanding at least a full sentence. In KWIC format they may not be as confident as they need to go further to the other lines. Another positive point in full sentence format is that they are better examples for the teaching of clause or sentence structures. The following example (Figure 3.2) is a set of full-sentence citations that illustrate the use of the semi-auxiliary 'is to' and 'are to' in if clauses.

Figure 3.2: Full-sentence citations for 'if' (taken from Sripicharn 2002: 77)

1. If they are to be forced to work, then provision must be made for their children.
2. France will have to bring down interest rates down if there is to be a recovery in output and employment.
3. If there is to be devolution it should be administrative rather than legislative.
4. The problem is that the Treaty of Utrecht requires Spain to have first option if there is to be a change of sovereignty.
5. Fundamental reforms are necessary if sustainable and equitable development is to be achieved.

3.3.3 Concordance-based activities

Tribble and Jones (1990) developed a series of paper-based classroom concordance activities and tried to illustrate how different language points such as word collocations and grammatical patterns can be presented to language learners who are not necessarily familiar with corpora and concordancers. Even ELT teachers with no experience in corpus techniques can use the activities. The learners are usually asked to look at a number of concordance lines and do the assigned task which might be guessing out a missing word, underlining some parts of a the lines, or answering some questions in a row leading to a pattern. The following is a summary of different types of activities as introduced by Tribble and Jones (1990).

There are three main types of concordancing activities: *Identification* activities, *Pattern noticing* activities, and *fill in the blanks* activities. In the first type the students are asked to look through the concordance lines and work out the meaning of the key word in the middle and/or its grammatical features. Homonyms and synonyms, words with the same spelling but different meanings and different grammatical features, can be presented in blocks of concordances in order to be distinguished by the students according to their linguistic contexts in which they appear.

The second type, pattern noticing, is mostly involved with grammatical features of the word and the pattern in which it is used. The students are asked to draw a general grammatical pattern out of a certain number of concordances. As for the last type of activities, students are asked to fill in the gaps of the concordances with the correct word. The missing word is the key word. Students either fill in the blank with the words of their own or choose the most appropriate one from among the given list. Concordances are usually blocks of 5 to 7 lines in which the key word is masked. The following is a sample of different activities used in some DDL-based materials.

1. Deducing the meaning of the key word

In this type of activity, the learners are asked to supply the meaning of the keyword. The ability to deduce the meaning of unfamiliar words by means of contextual clues is a key point in language learning. Deducing meaning from context will train the learners to be able to cope with texts with unfamiliar words which would otherwise turn out to be too difficult for them to understand. Another benefit of this kind of activity is making the learners aware that it would be possible for them not to rely too much on the dictionary.

Tribble and Jones (1990), however, point out that it is not always possible to guess the exact meaning of a particular word from the context. In many cases, the context in which a new word is found does not necessarily contain sufficient information for even a native speaker to deduce its meaning. Concordance output, however, by presenting several contexts of the same word simultaneously, greatly increases the chances of success, while making the process of deduction a strange but interesting problem-solving task. In the following block of 6 concordance lines (taken from Tribble and Jones, 1990: 37) the key word has been replaced by a nonsense word.

Figure 3.3A meaning deducing activity

* ntary benefit, maternity grant and spag and vitamin tokens. (This has recent
* relatively cheap, on tides of free spag and orange juice, but good cloth in
* nimals give us painlessly, such as spag and eggs. The proposition that meat
* consisting in large part of eggs, spag, cheese or other spag products is hi
* art of eggs, spag, cheese or other spag products is high in protein. Lentils
* ee a bus stopped, or near a parked spag float or mobile shop. Watch out for

As we see not much information can be obtained from individual lines more than the syntactic information that the word in question, *spag*, is a noun. Reading each line in conjunction with the others, however, makes it possible for the learner to narrow down his/her guesses from 'some sort of food' to 'some sort of drink' and finally to the original word (*milk*). On the possible advantages of this kind of activity Tribble and Jones argue that even if a particular concordance does not enable you to pinpoint meaning, it is likely to reveal all sorts of other information about the keyword: grammatical features, common collocations, different meanings, idiomatic and metaphorical uses, stylistic features, connotations.

2. Gapfill exercises

In this sort of exercise the learners are asked to supply the keyword. A concordance output can be turned into a gap fill exercise by simply deleting the keyword. See figure 3.4 below, taken from Tribble and Jones (1990: 50).

Figure 3.4 A gapfill exercise, blocks of concordance lines (Tribble and Jones, 1990: 50)

5. Can you identify the missing keyword in each of the following printouts?

1.

* lay? <Evelyn:> Well. Percussion _____ covers 600 and over 650 instrument
 * 't _____ hit people and don't _____ kill people, er, permeates and the
 * t would the change in legal form _____ mean? A Instead of a mutual inst
 * ace to let him pass, the man had _____ reached out and lightly touched hi
 * e of twelve I had a bit of a job _____ starting percussion because er whe
 * luence that they, British people _____ think that other countries are les
 * over 650 instruments and umm I I _____ try and play as many as I can but

2.

* capital easier. Q If you had to _____ in one short sentence "Why PLC?" w
 * ible with him in hospital you can _____ step by step what is happening. Ma
 * less strange if you are there to _____ what is happening in words he unde
 * ible and comprehensible; they can _____, or show to children what they do
 * s fall in pregnancy rate has been _____ed by the greater use of contracept
 * surroundings show, and nothing is _____ed. It is also about a period of re

3.

* can either settle your account in _____ by writing one cheque, or just pay p
 * many greetings cards. Most are in _____ colour and some have distinctive gol
 * tely to the nearest VISA bank. For _____ details and a written quotation plea
 * Servicing & Valet Leaflet, giving _____ details of all our services, will be
 * You can enjoy your holiday to the _____ knowing that if something does go wr
 * It is a rich and various cuisine, _____ of many marvellous dishes with defin
 * competing, be able to provide the _____ range of personal financial services
 * ember setting out our proposals in _____. Q In 1986, the Members voted by a

4.

* t is in many ways - in London - an _____ and a tolerant society. <Interviews
 * ng. If the green light is showing, _____ both gates or fully raise both barri
 * in and Ireland. Think of it as an _____ door A door into the world of books
 * doors, the doors of his mind flew _____ one after another, like living insid
 * g distance shown below. But on the _____ road, in good conditions, a gap of o
 * our side lights on as well. Do not _____ the doors nearest to the carriageway
 * r new purpose-built Service Centre _____, day and night, is the ideal answer
 * concentration, his mouth slightly _____. At other times he simply sat still

This exercise can be made more difficult by mixing together lines from different output files. In the following block of concordance lines, figure 3.5, the learner knows which words have been deleted and simply has to place them in the right context.

Figure 3.5 A gapfill exercise, mixed lines from blocks

1 daily life. It is more often the ___ conditions that many young mothers a
 2 he had nothing else, he was still ___ because he had this space which allo
 3 in the 1950s. We believed we were ___ because we children were expensive i
 4 of 'education for leisure' in the ___ countries, and of 'the transfer of t
 5 the transfer of technology' to the ___ countries. The liquidation of these
 6 , power- ful or powerless, ___ or ___, influential or uninfluential. To ta
 7 e has nothing to gain. Are not the ___, the exploited, the oppressed most l
 8 our own flesh. The message to the ___ and discontented is that they must n
 9 ough from time to time to help the ___, because this is the way by which th
 10at far off when everybody would be ___. We shall then, he said, 'once more
 11a substitute for anything. It is a ___ and various cuisine, full of many ma
 12is phenomenal! Nearly all nuts are ___ in pro- tein,as are many seeds. In
 13 The palate should find variety in ___ and light, sharp and mild But also c
 14 from serving two or three courses ___ with cream and eggs, or a sweet tart
 15 drivers to see you at night or in ___ light, so when visibility is ___, w
 16 ___ light, so when visibility is ___, wear something light-coloured or br
 17sors) at night or in conditions of ___ visibility. 33 Tinted glass does n
 18ions, or where the road surface is ___. Do not overtake motorcycles, pedal

1. In the above concordance output keywords **rich** and **poor** have been removed. Can you put them back in the right contexts?
2. Make a note of all the contexts where rich or poor are used metaphorically (that is, where they do not mean "having a lot of money" and "having very little money"). What the two words mean in their metaphorical senses?

RICH.....
 POOR.....

3. Homonyms and synonyms

In this kind of exercise a block of concordance lines in which the key word in centre is a homonym is given to the students. They should determine different meanings of the homonymous words based on the context in which they have been use. In figure 3.6 below, the students should make a distinction between the words 'like' as a verb and 'like' as a preposition.

Figure 3.6 A concordance of homonymous words (Trrible and Jones, 1990: 42)

- In which of the contexts below is 'like' a verb (as in *I like chocolate*), and in which contexts is it a preposition (as in *My brother eats like a horse*)?

1 00'. If we are now using something like 7,000 million tons of coal equivale
 2 away from their homes, and treated like outcasts. So don't break up a fr
 3 nable to make it. I wanted to walk like that, a short skirt, high heels, br
 4 n you are younger than usual. So I like to think I'm helping somebody else.
 5 than you think - 50 mph may feel like 30 mph - so be sure to use your spee
 6 e desk. It was a damp mouldy smell like a dirty wet dog or a saddlecloth ca
 7 ther, the boy imagined that he was like a space traveller in baggy clothes
 8 enly placed into another which was like a suit many times too large and to
 9 ils xylophone, marimba - which is like a xylophone except lower in pitch -
 10 ld or visit as often as they would like because they work or have other chi
 11 tical principles into practice, I like meeting people, and I'm pleased to b
 12 There are increasing numbers who, like myself, are for one reason or anoth
 13 know about Stravinsky or something like that then they're quite lost. <I
 14 verything. I don't think of myself like that. I'm lucky it's worked out qui
 15 lodger's room already occupied. I like the idea of being the daughter of a
 16 et for another reason: he did not like the old man. In fact he feared and
 17 n my case I can sleep as long as I like the rest of the time. <File Seven
 18 book. Testing hundreds (it seemed like thousands) of recipes in my own kitc
 19 Young people are often curious and like to experiment with the latest craze
 20 cial offer for everyone. If you'd like to find out more about Holidays in
 21 lies in the people we employ. We like to make our branches friendly and we
 22 what others have gone through. I like to think I've been helpful to somebo
 23 call kitchen sink things which is like woodblocks and castanets and gurious

VERB.....

PREPOSITION.....

This type can also be used to familiarize the learners with distinguishing between different meanings of the same word, or identifying the precise differences in meaning between words that are almost synonymous. The next sample exercise (figure 3.7) includes both of these activities, using a combined concordance for *over* and *above*.

Figure 3.7A concordance of synonymous words (Trrible and Jones, 1990: 43)

1. 'Above' and 'over' mean the same thing, don't they? Here is a concordance of the two words from the same corpus of texts. Study it, and then answer the questions below.

1 ow men but also with nature and, above all, with those Higher Powers which
 2 ays, his dirty merino collar rose above his shirt, and he smelled the same
 3 oad accidents have alcohol levels above the legal limit for driving. Drivi
 4 lights as well. If the red lights above your lane flash, you must not go be
 5 es, for I saw her once as if from above, moving through a kind of square, o
 6 state agency business. We now have over 160 offices under the Cornerstone n
 7 ly injured are either under 15 or over 60. The young and the elderly may no
 8 n unlikely proposition. I did it, over a period of time, by having at least
 09 . This process should be repeated over a two week period. If there are any
 10 rveys divide teenagers into those over and those under sixteen, which is th
 11 late 1950s - went on being handed over every Friday until his death, even
 12 on of paying for larger purchases over several months. The minimum amount p
 13 child may do the same. Don't be over-suspicious and try not to over react
 14 s response. I got letters from all over the country, from young mothers of
 15 , as it were, throw their rubbish over the fence into the neighbour's garde
 16 ded for pedestrians. Do not climb over the guard rails or walk outside them
 17 use of the children we played with over the road was given to the youngest
 18 irls leave home. When they've got over the shock, most are mainly con- cer
 19 eglect that I remember feeling was over the top at the time) and tie a piec
 20 eans work for dozens of people all over the world. And every year, hosts an
 21 to many parts of Britain and met over thirty girls, mainly in their home
 22 that looks pretty good,' so I went over to the ski jumps and just had a loo
 23 s from local control and hand them over to unaccountable bodies and private
 24 do have problems, please talk them over with Sister or the social worker. T
 25 visitors all at once, which will over-excite him. Some hospitals welcome b
 27 s has worn off or the operation is over. What you can do for your child i
 28 tlessly - until it is suddenly all over. The guests go home and the beautif
 29 ed headlights on larger machines (over 150cc - 200cc). 29 Do not drive

1. In which of the contexts of above (1-5) could you substitute *over*?

2. Make a list of the contexts in which *over* means:
 - a. at a higher level or covering.....
 - b. More than.....
 - c. From one side to the other.....
 - d. During (from beginning to end of a period of time).....
 - e. Finished.....
3. What does *over-* mean when used as a prefix, as in numbers 13 and 25?

4. What do these phrasal verbs mean?

Hand over (11 and 23)

Get over (18)

Take over (24)

5. What does *all over* mean in numbers 14 and 12?
6. What does *over the top* mean in number 19?

4. Matching activity (Re-ordering the left or right context)

In this task the right-hand context of the key word is shuffled and students are asked to match the two sides of the key word in each line. In the example below (Figure 3.8) the contexts after the word *such* have come out in the wrong order. Students are required to put them back in order so that the first part of each context matches the second part. Students should write a number in the brackets at the end of each context to show which ending goes with each beginning.

Figure 3.8 A sample exercise of re-ordering concordance lines (Tribble and Jones 1990: 52)

In this concordance something seems to have gone wrong with the printer! The contexts after the word *such* have come out in the wrong order. Can you put them back in order so that the first part of each context matches the second part? Write a number in the brackets at the end of each context to show which ending goes with each beginning. The first one has been done for you.

1	Burnley; 'but think how she felt, such things as salad, vegetables and bread (12)	()
2	did not mind. To him the old man was such thing as a ones meal. The recipes th	()
3	and this applies to other countries such richness of choice that a Book Toke	()
4	iron clothes. - Empty containers, such as his nickname or what foods he lik	()
5	the road to warn drivers at places such a little girl, she was only eleven,	()
6	anything she should know about him, such as aerosols or tins. A combination	()
7	gifts animals give us painlessly. such times the boy did not laugh. He was	()
8	thin a year or two from illnesses such dinners, optimism is restored, and o	()
9	one remains. Friend- ships bloom at such as skin cancer or pneumonia which th	()
10	act under the sun. This is world of such as Aus- tralia, New Zealand and Can	()
11	dish-Suppers There really is no such an object of fascination that he se	()
12	red accompaniment to the meat, are such as bends and brows of hills where t	()
13	dark rosewood and mahogany floor. At such as milk and eggs. The proposition	()

5. Grammatical features

In this type of activity students are required to study the concordance lines and pay attention to grammatical features of words in question (key word). This kind of exercise will help them to understand the rules and explanations given by the teacher. The principle is the point that many of the grammatical features of a word are immediately apparent from its context, for example, whether a verb or adjective is followed by a particular preposition or the position which a

particular adverb usually occupies in the sentence. In the following example (figure 3.9) which is taken from Tim Johns's 'Kibbitzers' (cited in Sripicharn 2002: 86) the differences between 'stress' as a transitive verb and 'stress' as a noun has been suggested in the revised sentence and concordance lines are used as post-comment examples.

Figure 3.9 An example of concordances used as illustration of grammatical features (from Tim Johns's 'Kibbitzers' available at <http://web.bham.ac.uk/johnstf>)

Kibbitzer 74 **Stress on**

This Kibbitzer is based on a point in a draft dissertation by a Turkish-speaking postgraduate student of Theology.

Original	Revisions
... Ibn Sina stresses on the absolute oneness and simplicity of God Ibn Sina stresses the absolute oneness and simplicity of God ...
...	... Ibn Sina lays stress on the absolute oneness and simplicity of God ...

The following citations show the difference between the transitive verb *stress* (no preposition) and the expressions using the noun: *lay (place, put, impose etc.) stress on*:

1 ement, Lady Cumberlege said she wanted to stress that she did not believe condom
2 areas of Labour policy which for 20 years stressed the value of pre-school educa
3 firmed a sense of the divine. The Hebrews stressed the majesty and power of an a.
4 ek. the english collective of prostitutes stresses that much of a woman's earning
5 languages) and linguistics. Brian Cooper stresses that potential TEFL teachers :
6 ant to maintain the unity of the party by stressing the inclusiveness of the tea

7 s, say the new system is placing enormous stress on both teachers and inspectors
8 White Paper on Competitiveness laid great stress on the importance of education .
9 -scientific view of socialism" which laid stress on class interests and public o
10 er a new training regime, which puts more stress on conditioning and speed from
11 am play it would be wrong to lay too much stress on the influence of individuals
12 ppearance, her health, and imposed severe stress on her personal and family rela

Mistakes are frequently caused when students attempt to use the preposition with the verb that is used, quite correctly, with the noun. I shall hold this Kibbitzer open for more examples as and when they occur

3.4 Data-Driven Learning (DDL)

So far I have tried to give a brief review of pedagogical intersection between corpora and language classroom activities. 'Corpora' in a general term was first described, and then a number of classroom activities based on some kind of corpora were reviewed. In this section, a rather detailed history of the proposed approach of making use of concordance-based materials in ESL/EFL language teaching contexts, known as Data Driven Learning (DDL), introduced by the late Professor Tim Johns is first given. After that an introduction on how it works and its theoretical underpinnings are examined.

DDL is a computer-based approach to foreign language learning through “the use of computer generated concordances to get students to explore the regularities of patterning in the target language, and the development of activities and exercises based on concordance output” (Johns and King 1991: iii). DDL was first developed as a pedagogical implementation of corpora used with international students at the University of Birmingham by Johns (1991a).

In his *'English for international students'* classes, Johns (1991a) prepared a set of teaching materials in the form of concordance lines and gave them directly to students as part of a process of inductive learning about how language is used. He was trying to actualise his older conceptualisations of language teaching/learning in a way that students would get involved directly in the process of learning. Most of Johns's writings in the mid-1970s and 1980s show that his main concerns in language teaching were focused on concepts such as induction, problem-solving, learning by doing, communication and collaboration and the importance of authentic language (Johns 1976, 1980, 1981b; Johns and Davies 1983; Johns and Dudley-Evans

1985). He also paid attention to the potential uses of corpora in language learning in Higgins and Johns (1984) and Johns (1988) where the term *classroom concordancing* found its way into the discourse of language pedagogy. The term *Data-Driven Learning* was first used in Johns and King (1991) to emphasise the methodology used in this newly proposed approach whereas *classroom concordancing* described the technique (Boulton 2010). Finally, Johns in his last paper used the term “*corpus-based language learning*” (Johns et al. 2008: 495) to refer to the same approach. For the purpose of avoiding any kind of inconsistencies regarding terminology, I will use the term DDL throughout the thesis as it is the most common of the three.

The basic notion underlying the DDL approach is that the task of the learner is to "discover" the foreign language and the task of the teacher is to provide a context in which the learner can develop strategies for discovery – strategies through which he or she can "learn how to learn" (1991a: 1). A close look at Johns's writings in the mid-1980s shows his emphasis on this concept in the approach. The metaphors of “learner as researcher” (Johns, 1986), “language detective” and “every student a Sherlock Holmes”(Johns 1997b: 101), and their development alongside “exploitation” (Johns 1988:25) and “discovery learning (Johns 1988:14) help us to a better understanding of his position.

3.4.1 How DDL works

In a DDL-based classroom language learners are asked to spot some kind of patterning among a certain number of concordance citations. The language data presented to the learners can be in different types of arrangements, exercises and classroom tasks as reviewed briefly above (2.6.2).

In any DDL context two types of resources are needed: a corpus as the authentic language resource and concordancing software to exploit the corpus. Although it is possible to use any type of corpus in a DDL classroom, particular corpora may be most suited for certain purposes (Gilquin and Granger 2010). For example, bilingual corpora may be used for translation purposes as well as in language classes in which students have the same mother tongue. Written corpora would be appropriate for writing and academic courses and spoken corpora for oral communication and topic based language classes. A tagged corpus seems to be more helpful for a grammar class as compared with an untagged one. “Pedagogic corpus” (Willis 2003) and the “learner corpus” (Seidlhofer 2002) are two types of corpora helpful for the process of authentication. The former may consist of textbooks and materials as well as transcriptions of the lectures (Flowerdew 1993) used in classroom. The latter includes data produced by non-native speaker of the language. Learner corpora can be useful for form-focused instruction (see e.g. Granger and Tribble 1998 or Seidlhofer 2000) and particularly is in line with what a task-based approach to language learning seeks for, that is, consciousness-raising. An advantage of learner corpora is the interlanguage features which they present especially when the data were produced by learners from the same mother tongue.

The second type of resource in a DDL context, concordancing software, is also of crucial importance. Stevens (1995: 2) lists a number of characteristics that a concordancer should possess to be used for pedagogical purposes: “the concordancer should be fast and responsive, it should load quickly and allow interruption at any point (with the option to work with the data already loaded at that point), it should be possible to look for more than one word at the same time and for strings of words.....and to sort the output instantaneously”. A classroom

concordancer should also be user-friendly. Multiconcord (King and Woolls 1996), WordSmith Tools 4 (Scott 2004), and AntConc 3.2 (Anthony 2012) are the most common concordancers used by language teachers to prepare DDL materials.

It is probably justifiable to say that providing the learners with appropriate materials and DDL activities which meet the required assumptions of the approach are the major responsibilities of the teacher. As Johns (1991a: 3) suggests, the teacher becomes a 'director' and 'coordinator' of student-initiated research, at least in the *hard version* in which the learners may choose the topics and the kind of activities in the classroom. The teacher provides learners with concordance data and challenges them to use the data to answer their language questions, and thus creates the environment where learners take charge of their own language learning.

The most common method of presenting language data to the learners in this approach involves concordances of some sort. "The concordance lines may be truncated (so-called KWIC – Key-Word-In-Context – view) or take the shape of a complete sentence [view], the whole concordance may be provided to the learner or just a selection of it, the concordance lines may be edited or presented in their original form, and they may be shown on screen or printed on a handout" (Gilquin and Granger (2010: 4). KWIC view, though, the most common format, may be confusing especially for beginners as Johns (1986) reports that his students were frequently complaining about the 'unfinished sentences'. In many cases some kind of manipulation, editing, or simplification should be carried out (cf. Gabrielatos 2005). However, some scholars believe that manipulating the data "undermines the 'authenticity' advantage of DDL and does not

prepare learners for the realities of the authentic language we are presumably preparing them for” (Boulton 2009a).

3.4.2 Theoretical basis of DDL

As explained above DDL is an approach developed out of a series of practical implications of authentic language presented through different kinds of corpora. It is not an approach with a predetermined theorization. According to Sripicharn (2002) DDL is more practice-oriented than theory-based, and therefore its theoretical bases may have to be discussed on an 'ad hoc' basis. If this is the case, based on common frequently used practices in the DDL classroom, the most compatible theories in language learning and teaching providing a rationale for these practices should be sought for.

In almost all DDL activities the following two functions are expected to be carried out by the learners: 1) paying attention to language items presented in the concordance lines, 2) finding out language patterning and use by themselves. The first function associates with theoretical bases of the Noticing Hypothesis (Schmidt, 1990, 1993) and Grammatical Consciousness Raising (CR) (Rutherford and Sharwood-Smith (1988) and Ellis (1993)). The second function deals with issues of generalization, and inductive learning as well as Discovery Learning. The main issue in these theories is the importance of the learners' attention to language forms while being exposed to whether the authentic instances of language or pedagogically-oriented data, i.e. oral or written presentations in the classroom. In order to examine the theoretical bases of DDL, therefore, it is essential to take a look at these theories of second language learning.

3.4.2.1 The Noticing Hypothesis

Schmidt (1990) examining the role of consciousness in second language learning recounted three levels of awareness: *perception*, *noticing*, and *understanding*. Perception is believed to imply mental organization and the ability to create internal representation of external events.

Noticing was described as focal awareness and associated with the level at which stimuli are subjectively experienced. It is 'the necessary and sufficient' condition to allow 'input' to become 'intake'. Learners are likely to acquire the language forms that they have noticed in the language input, although the process by which input becomes intake may take some time.

'*Noticing*', according to Schmidt, refers to private experience of the stimuli that might be manifested as verbal report although it is not necessarily the case. On the importance of noticing, Schmidt (1990) states that one may notice that someone has a regional accent without being able to describe it phonetically, or notice a difference between two wines without being able to describe the difference.

The Noticing Hypothesis has been applied in language learning in two areas: a) learners' identification of linguistic features, and b) learners' comparisons between their interlanguage and the model target language (Schmidt and Frota, 1986). As for linguistic features identification the learners' attention was drawn to linguistic features in the input. The 'input enhancement' method (Sharwood Smith 1993) in which target items are highlighted, underlined, or coloured, was frequently used.

In order to compare the learners' interlanguage and the model target language a number of tasks such as 'reformulation task' in which the learners compare their own writing with the reformulated version prepared by the teacher; and the 'reconstruction task' in which the learners are asked to read a text, rewrite it in their own words, and finally compare their versions with the original one were quite common.

The Noticing Hypothesis has received both positive and negative comments since its development. On the one hand, Robinson (1995) and Bowers (1984) support this hypothesis in respect to the 'nature of attention and memory' and 'information processing' respectively. Schmidt and Frota (1986) provide empirical evidence for the role of noticing in learners' production. Doughty (1991) also suggests that increasing the saliency of target forms (in this case, by highlighting and capitalization of texts on computer screens) was as successful as providing explicit rules in helping learners to acquire relative clause structures.

On the other hand, some researchers have argued against strong claims that noticing is necessary for the acquisition of the target language in general, and suggest that noticing seems to be necessary only for the learning of 'metalinguistic knowledge' via a controlled exercise rather than for the acquisition of language competence or 'genuine knowledge' of the language. See for example Altman (1990), Truscott (1998), and White (1998).

Sripicharn (2002: 30) having reviewed arguments for and against the Noticing Hypothesis, concludes that 'noticing has a role in facilitating language learning, although it may not be the "necessary" and "sufficient" condition for converting input into intake'. He then argues that there

are factors that may enhance the effects of noticing. Presenting a lot of language data to help the learners in making generalisations is a technique in this regard.

This is where we can see how DDL can contribute to second language learning. Taking Johns's (1991a; 1997b; 2002) premise - every learner a researcher - in mind, DDL is thus essentially an inductive approach encouraging hypothesis forming and testing. In an approach with these characteristics one can realise the principles of noticing as proposed by Schmidt (1990; 1994). KWIC concordances, which might be considered as a core kind of activity in a DDL classroom, 'can increase saliency of the target language items by the layout and repetition of the key words'. In this technique the key item either a word or a phrase is placed in the middle of the lines and a number of contexts of the same key word are given so that the target linguistic feature(s) could be noticed by the learners. As far as learners can notice the repetition of the same language feature in a certain number of concordances, they make and internalise generalizations about the item in their own way and at their own pace.

3.4.2.2 Grammatical Consciousness-Raising (CR)

The belief that believes to teach a language is not to teach a body of knowledge but to teach how to learn, or to teach learners how to become better managers of their own learning formed a new conceptualisation in the field of second language learning (Rutherford 1987). The concept of Consciousness-Raising (CR) as defined by Rutherford and Sharwood-Smith (1988: 107) deals with 'the deliberate attempt to draw the learner's attention specifically to the formal properties of the target language'. Regarding L2 instruction CR can be applied to any form of instruction

which aims to raise learner awareness of rules or generalizations about language (Sharwood Smith, 1981; Rutherford, 1987).

During the three recent decades, different researchers have tried to elaborate on this concept with their own perspectives and have applied it in their research. Rutherford (1987) raised the issue of CR within a framework of interlanguage development or what he calls 'grammaticization' (Rutherford 1987: 42). Grammaticization is a longitudinal process in which learners become familiar with lexical, grammatical, or discoursal differences between their first language (L1) and the target language (L2). It is believed that this gradual awareness helps learners to produce more correct L2 outputs. Rutherford argues that the key issue in L2 instruction is calling the learners' attention to differences between language features of L1 and L2. According to him L2 learners should be aware of the differences between features such as 'word order', 'negation', or 'cohesion' in their L1 and L2. To do so, he suggests that language data should be presented to learners in 'somewhat controlled and principled fashion' (ibid: 18), so that learners can test hypotheses and form generalisations.

Text manipulation is a common technique to help learners notice various aspects of the target language. Rutherford (1987: 162-167) proposed two groups of CR activities in order to facilitate the grammaticization process: 'Observation group' (e.g. spotting errors, identifying similarities and differences, noticing relationship in a discourse) and the 'Production group' (e.g. constructing sentences).

Despite the well-grounded theoretical basis of Rutherford's version of CR (the interlanguage theory), the following drawbacks have been observed in the activities he has developed. First, the activities are too manipulative and too controlled. In both groups of activities, students are expected to be aware of the hidden grammar points within the language data. Second, lack of enough example cases for each language item may cause difficulties for the learners in their generalisation process. The third disadvantage deals with the authenticity issue of the texts. Especially in 'observation group' of CR activities, almost all texts are invented and therefore, students are being exposed to textbook-like materials which may not represent typical use of the target language.

Ellis (2002) uses the term CR as an attempt to equip the learner with an understanding of a specific grammatical feature- to develop declarative rather than procedural knowledge of it. Elsewhere, he contrasts CR as a method of explicit instruction with implicit instruction whereby teachers expect learners to learn about language structure by indirect means, such as the negotiation of meaning in recasting and clarification requests (Ellis, 2003). The following five main characteristics have been considered for CR activities by Ellis (2002: 168):

1. There is an attempt to isolate a specific linguistic feature for focused attention.
2. The learners are provided with data which illustrate the targeted feature and they may also be supplied with an explicit rule describing or explaining the feature.
3. The learners are expected to utilise intellectual effort to understand the targeted feature.
4. Misunderstanding or incomplete understanding of the grammatical structure by the learners leads to clarification in the form of further data and description or explanation.

5. Learners may be required (although this is not obligatory) to articulate the rule describing the grammatical structure.

This list shows that the main purpose of CR is to develop explicit knowledge of grammar. Learners will be able to develop an explicit understanding of how a grammatical structure works without learning much in the way of grammatical terminology. Ellis distinguishes between the teaching of grammar through 'practice' and the teaching of grammar through 'CR'. For him practice is primarily behavioural while CR is essentially concept-forming. In practice-based activities, the learners are required to produce sentences to illustrate targeted grammatical features. By contrast, in CR activities, the students are not expected to learn and use the target structure immediately, but to be aware of and understand how such features work or consist of.

A third version of CR was introduced by Willis and Willis (1996). In this version, learners are typically asked to consciously observe samples of language and draw their own conclusions about how the language operates. Increasing learners' 'awareness of and sensitivity to language' (Ibid: 69) is the key issue, and not an immediate use of language rules after explicit descriptions is sought for. The main point in a CR activity according to Willis and Willis is calling the learners' attention to language features such as grammatical patterns in which particular words appear: patterns like 'Noun + that clause' as in 'the idea that...' or 'the impression that. ..'. Other features such as lexical phrases (e.g. 'as a matter of fact') and collocation (e.g. the word 'hard' often occurs with words like 'work' or 'luck') are of important aspects of this version of CR.

The three distinctive characteristics of Willis and Willis's notion of CR are as the followings: 1) Authentic texts are the main sources of presenting data. 2) Language features brought to learners' attention should come in texts that learners have seen and processed for meaning in previous tasks (a 'pedagogic corpus'), although supplementary examples may be needed from a general corpus of authentic texts. 3) CR tasks are mostly within the task-based framework as a language focus activity (Willis 1996), rather than as a grammar exercise on its own.

Typical CR tasks developed by Willis and Willis include three types of activities. In 'identification/consolidation' activities, learners should identify patterns or uses of language data. In 'classification', they need to sort data in terms of similarities and differences based on formal or semantic criteria, and in 'hypothesis building/checking' the students are asked to make a generalisation about language and check it against more data.

Regarding advantages of Willis and Willis' CR, using less manipulated texts or controlled exercises helps to increase the level of authenticity. There are more activities that deal with language features and patterning such as collocation than in traditional pedagogic grammar.

In addition, since most of the samples are taken from a pedagogic corpus, learners are familiar with the target item and the contexts from which they are taken.

A crucial concern for this type of CR is the infrequent instances of data presented to the learners. In most of the exercises, a single text is given to the learners for the analysis purposes whereas more instances of the language feature in question seems necessary in order to avoid overgeneralisation.

3.4.2.3 DDL and CR

Johns (1991a: 3) considered DDL a 'new style of grammatical consciousness raising by placing the learner's own discovery of grammar at the centre of language-learning, and by making it possible for that discovery to be based on evidence from authentic language use'.

The same idea was promoted by Meunier (2002: 130) where she stated that language classes in which students are provided with data in the form of concordance lines from which language patterns are expected to draw are 'particularly well suited for consciousness-raising activities'.

DDL tasks are typically similar to CR tasks. For example, in both types similar techniques such as observing similarities and differences, classifying meaning and use, and forming and testing hypotheses are frequently used. There are, however, some differences between the two. The data presented in DDL tasks are extracted from some kind of corpora (either general, pedagogic or learner corpus) whereas in CR tasks the texts are normally constructed for teaching materials to illustrate the target structure. Another distinction is that through DDL tasks, the data are presented in a number of concordance lines through which learners are required to notice the occurrence of a language pattern hidden among the lines. In this case, DDL can be seen as a strong version of CR because their success in finding out the target pattern lends itself to raising their consciousness.

A final distinction can be seen in materials development procedures. In DDL, language learning topics and classroom tasks are either chosen by the teacher or raised by the learners themselves while in CR most language focus is usually determined by the teacher or materials developer. In fact, learners play the least role in determining the topics and/or task types in CR-based classes.

In DDL, in its hard version at least, however, learners can find opportunities to specify the language topics as well as the kinds of classroom activities.

3.5 Researching DDL

Sripicharn (2002) has reviewed the research conducted on various aspects of DDL up to the time and gives a framework that takes account of both quantitative and qualitative data collection procedures to evaluate concordance-based tasks. In this framework two types of evaluation are discussed: the intuitive and empirical evaluation on the basis of qualitative and quantitative research.

Intuitive evaluation is a non-empirical analysis of usefulness and effectiveness of DDL. Chapelle (2001) calls this type of evaluation the 'judgemental evaluation' and demonstrates how it can be carried out. The followings are the criteria that she recounts for this evaluation: 1) examining the software and the task in which the program is used in terms of their objectives, characteristics, and uses, 2) outlining evaluation criteria based on research and findings in second language acquisition, 3) analysis process by which judgement is made to check if such criteria is met. Chapelle uses the following six criteria for judgemental analysis of Johns's (1988, 1991a,b) version of concordancing: 'language learning potential', 'learner fit', 'meaning focus', 'authenticity', 'positive impact', and 'practicality'.

According to this analysis Johns's classroom concordancing meets most of these criteria. 'Language learning potential' is described '*good*' because the software and the task present sufficient opportunities for the learners to pay attention to language form presented in

concordance lines. Since the difficulty level of the targeted linguistic forms perceived to be appropriate for the learners and the tasks match the characteristics of the students most of whom are advanced learners of English and are highly motivated, the second criteria, i.e. 'learner fit' is also met. Both the instructor and the learners are intended to have positive teaching and learning experiences with concordancer because it is supposed to offer many relevant examples of linguistic form, thereby enriching the scope and flexibility of classroom materials. It means that the criterion of 'positive impact' is also met considerably. As for the 'practicality' criterion, the resources are accessible because the teacher needs only a single computer, a concordancer programme and some texts, while the students can work on concordance printouts or concordance-based materials prepared by the teacher.

In her analysis regarding 'meaning focus' and 'authenticity', Chapelle argues that the concordance task is designed to draw attention primarily to form, not the communication or the meaning of the language and therefore the 'meaning focus' criterion is not met. She then concludes that this type of linguistic task is less likely to be the type of task the learners engage in outside the classroom.

Although this judgemental analysis is considered useful for an overall evaluation of concordancing, Sripicharn (2002: 103) believes that it fails to take into account different types of activities of classroom concordancing. If activities such as 'one-to-one' concordancing and 'independent concordancing' had been considered in this analysis, it could have helped in meeting the 'meaning focus' and 'authenticity' criteria. Another limitation, as mentioned by

Sripicharn, is that judgemental evaluation only offers a methodology for making hypotheses about the effectiveness and usefulness of the tasks.

Whatever the merits or demerits of this intuitive, 'judgemental evaluation' would be, discussions around DDL approach in general and using concordance-based materials in EFL classes in particular reveal that more empirical evidence in support of its applicability and usefulness is needed (Boulton 2007).

Empirical research conducted on concordancing is divided into qualitative and quantitative evaluation. In qualitative research the main questions surround the learners' behavioural reaction toward and their experiences with concordancing, (how they react to the approach). More recent researchers and reviewers involved in DDL and its impacts on mainstream language teaching/learning have tried to examine the approach from a wide range of positions. Chambers (2007) reviews 12 papers claiming to evaluate the efficiency of DDL, and finds them for the most part small-scale and essentially qualitative in nature. Boulton (2007) on the other hand, has surveyed 39 empirical studies of DDL many of which were primarily concerned with attitudes toward the approach, or examined the processes involved, with limited attention to language learning as such. Although issues such as learners' attitudes and processes involved in DDL approach are important and quite worth studying, more evidence showing that it will lead to effective learning, the final goal of the approach, is required. In the following section a brief review of research done on DDL from different viewpoints is presented. The first sub-section is on DDL and individual styles and differences and attitudes. Researchers such as Thurston and Candlin (1998), Sun (2000), Kennedy and Miceli (2001) Bernardini (2001), Chambers (2005),

Yoon and Hirvela (2004), Cresswell (2007), and Boulton (2009a) have shown their interest in studying this aspect of DDL. The subsequent sections will be on DDL and learners' training level of language and familiarity with concordancing and concordancers. The final section is allocated to studies conducted on DDL and language learners' lexico-grammatical and writing development.

3.5.1 DDL and individual differences and attitudes

Individual differences such as learning styles and cognitive styles have been studied by some empirical DDL researchers. Chambers (2005: 119) focuses on differences in motivation or learning styles and explains the considerable variation in the success of the activity. Having reviewed a number of studies on the effects of individual differences and cultural backgrounds on learners' learning through DDL, Boulton (2009a) concludes that 'learners ...may live within culturally diverse pedagogic traditions not compatible with DDL but it would seem ethically dubious to deny learners the opportunity even to try a potentially useful set of tools and skills on the assumption that they will all adhere to the precepts of that culture' (Boulton 2009a:7). In regard to learning styles, Cresswell (2007) proposes that reticent learners might take advantage of teacher-mediated paper-based materials in a 'deductive DDL' class.

By deductive DDL, Cresswell means the version of DDL, comprising "a series of less autonomous activities in which learner discovery was directed by teacher-designed exercises" (Johns 1994). In this version within which "top-down processing" is involved, conclusions are reached via deductive reasoning (Mishan, 2004). Learners might set out to test a personal hypothesis, or one given in a reference book or by a teacher.

Boulton (2009 b) in another study aiming at exploring possible impacts of learning styles on different outcomes of DDL, conducted a study on learners of English at a French architectural college. The participants' reactions were compared against their learning preferences as measured by the Index of Learning Styles [(ILS) the model first developed by Felder and Silverman (1988/2002)]. The learners were encouraged to explore the BNC (<http://corpus.byu.edu/bnc/>) for 15 minutes at the end of each class for specific points which had come up during the lesson. The learners completed a French version of the Index of Learning Styles which is quick and easy to administer, and provides numerical scores for each learner on four scales (Active–Reflective, Sensing–Intuitive, Visual–Verbal, Sequential–Global). The results were described in detail, followed by a discussion of the implications for the introduction of DDL in similar contexts. The researcher concludes that DDL is particularly appropriate for certain learner profiles, it may help teachers to tailor its implementation in class for more or less receptive learners, and perhaps increase the appeal of DDL to a wider learner population.

Bernardini (2001) maintains that many learners are of the kind who prefer to be told what to do, rather than to seek for finding relationships between ideas, words and other linguistic items. They resent having to take any responsibility for their own learning. Learners' cultural background can be an influential factor in this regard as well. Brown (2007) tries to make a distinction between Anglo-Saxon individualism and oriental collectivism, and call our attention to possible effects of these intellectual trends on learning orientations. 'Different cultures may exist at more local levels in different regions different institutions even at the level of individual classroom, each with its own dynamic' (Boulton, 2009a: 7). In an experimental study Flowerdew

(2001) concluded that science and engineering students took to DDL quite easily while business students from the same institute had more difficulty mastering the approach and the software.

As far as learners' attitudes toward DDL is concerned studies such as Thurstun and Candlin (1998), Sun (2000), Kennedy and Miceli (2001), Sripicharn (2002) and Yoon and Hirvela (2004) showed some diverse results from the learners' point of view. In Thurstun and Candlin's pilot study (1998), for example, participants reacted positively toward this innovation in vocabulary teaching. However, they also reported some negative reactions, such as, "some students were puzzled by the cut-off sentences of the one-line concordances and daunted by the difficulty of the authentic academic texts" (p. 271).

In order to pursue the EFL learners' attitude towards DDL materials, Sripicharn (2002), in an experimental study, used two methods of data collection. Firstly, he asked his students to complete a questionnaire which asked them to evaluate the DDL teaching units they had been working with throughout the period of the experiment. Secondly, a number of in-depth interview sessions were conducted with six DDL students who took part in one-to-one discussions with the teacher. The aim of the interviews was to elicit more detailed comments on the DDL materials, which could be used to support the results of the questionnaires. The results of this study showed that the DDL materials received positive feedback from the DDL students. Although it was the first time for the participants to work on concordance-based materials, they reported that they adapted well to the newly introduced teaching units. A number of reasons for this positive attitude were mentioned by the learners themselves. For example, they were aware that DDL materials could help them pay more attention to meaning and patterning of words in context.

Another advantage of DDL materials over conventional materials that led to a positive attitude of the learners was the variety of DDL tasks in comparison with non-DDL materials (conventional). Since different learners may have different preferences to the types of data and materials such as KWIC vs. full-sentence citations, or discussion-based vs. exercise-based materials, DDL units comprising a series of different types of materials might have pleased them to the point they maintain higher level of attitude compared with conventional materials. Sripicharn concluded that it is important for the teacher to design a variety of DDL tasks and make sure the learners know advantages and limitations of each task type.

3.5.2 DDL and training learners

The relationship between learners' skills and trainings necessary for applying DDL materials and software has also called the attention of some researchers of whom Ma (1993), Gavioli (1997), Bernardini (2001), Sealey and Thompson (2004), Frankenberg-Garcia (2005) and Boulton (2009) are a few.

Assuming that learners' familiarity with technical issues such as working with computer and the software would be met as a need in educational contexts of today, processing a corpus of authentic texts, as Gavioli (1997) mentions, "involves a range of levels of linguistic and metalinguistic knowledge which can enable students to categorize occurrences, identify regularities and generalize from them" (1997: 84). In this regard teachers can be expected to provide their students with necessary training for reading concordance lines and make them aware that reading in DDL approach is not a left-to-right linear movement of the eyes but it involves a top-to-bottom vertical one in which they should try to search for what happens around

the key word in the middle of the lines, the node. Students would be taught to focus on a word span of 4 to 5 words before and after the key word. Perhaps the main role of the teacher who is using this approach is training the learners in reading the concordance lines aiming at analysing text corpora and interpreting computer-derived data. Gavioli (1997) gives a number of examples of such activities that she has used at the school for Interpreters and Translators of the University of Bologna.

Ma (1993), whose main focus was on students' use of concordancing as a tool in academic writing, conducted his research focusing on observation of students, questionnaires, in-depth interviews, and student diaries and analysis of student writing. Learners in his study were severely limited in the use of concordancing as an aid in their writing because they were unable to make use of many of the possible search techniques available to users of a concordancer. The researcher makes the conclusion that if concordancing is to achieve optimal results, adequate time must be devoted to familiarizing learners with the sort of things they can find out by using the concordancer.

In response to many who worry about learners' difficulties in reading authentic language found in corpora, especially in interpreting the truncated concordance lines of key words in context (KWICs), Boulton (2009a) asserts that the important point is that learners do not need to understand everything in each line. Reading vertically and focusing on a few words either side of the node are the two major requirements of working out concordance lines. For Bernardini (2001: 243) lack of training in implementation of DDL 'should not be overestimated; learners should quickly acquire the skills needed'; and for Sinclair (2004: 297), "any teacher or student

can readily enter the world of the corpus and make the language useful in learning.” Frankenberg-Garcia (2005) did research on this issue and found that learners were just as good with minimal training on concordances as they were with dictionaries they had been using all their lives. Sinclair (2003) provides extensive tips and techniques in this regard. Following a number of studies done on the very issue of learner’s frustration in reading concordance lines, Boulton (2009a: 10) supports the idea that “training is of the essence for hands-on DDL to be effective and efficient”. He points out that “the introduction of corpora is probably best conducted piece-meal rather than plunging the learner straight in at the deep end” (Ibid: 11).

3.5.3 DDL and learners’ level

As for the appropriateness of DDL for language learners’ level, Boulton (2008a) suggests that more research is needed since increasing quantities of empirical research are starting to question the traditional assumption that DDL is only useful for advanced, sophisticated, adult learners. St. John (2001) also suggested that DDL can be of great benefit for beginners, although it has been presented as readily suited for advanced proficiency level. The importance of such kind of studies goes back to the early notion of DDL as proposed by Johns (1991a) who was working with a particular type of well-motivated, sophisticated adults, with particular needs in a particular learning/teaching situation (enquiry-based learning in the University of Birmingham where he was developing his ideas).

A small number of DDL studies in school contexts have been reported. Some studies have found school students to be enthusiastic about DDL (e.g. Braun; Sun and Wang 2003; Ciezielska-Ciupek 2001). Sealey and Thompson (2004) gained quite similar results. Working with primary

school L1 students they concluded that children can exploit corpora in their mother tongue suggesting that no great level of sophistication is necessary.

Boulton (2008a) conducted an empirical study on lower level learners using paper-based materials to compare this DDL approach with more traditional teaching materials and practices. The learners in the study were second-year architecture students in France with no prior experience of DDL. Pre- and post-tests show both are effective compared to control items, with the DDL items showing the biggest improvement. Although this experiment shows that learners at lower levels of language ability with no prior training could gain significant benefit from prepared paper-based DDL materials, Boulton warns us that results seem to contradict the received wisdom that DDL is best reserved for more advanced, sophisticated learners. Therefore, as he mentions more studies in this regard need to be done.

Boulton (2008b) found eight other studies conducted on beginners with positive reactions of the students to DDL. Another group of studies traced some sort of negative responses toward DDL. EstlingVannestal and Lindquist (2007) and Whistle (1999) are of the second group. There are also reports from some studies that a number of factors such as tediousness and laboriousness might cause students dissatisfaction. One possible solution to this latter problem might be decreasing the time duration of any class session doing DDL (Allan, 2006; Whistle 1999).

In order to examine the extent to which lower level learners can benefit from aspects of DDL and also the degree of training needed to make use of the approach, Boulton (2009c) conducted a study in which university students requiring English for specific purposes were tested on a

specific language point, that of linking adverbials. For each of the target items, different groups were provided with either corpus data (KWIC concordances or short contexts) or traditional pedagogical information (bilingual dictionary entries or grammar/usage notes).

The tests were a simple multiple-choice gap-fill of concordance and sentence-length questions. A first test was conducted prior to the experiment as a control of existing knowledge and ability. A second test was conducted with the information to hand in order to see how learners fared using it for reference purposes. Recall of the different information types was tested at a later date using the same test format. This experiment design allowed comparison of the results between the three test sessions for the four different information types, as well as by level as measured by an in-house placement test. The overall results of the experiment can be discussed as the following:

a) Data-driven learning can be appropriate for a wider range of learners than usually assumed. It may be most suited for advanced learners trained in using corpora, but it can bring something to the learning process even at lower levels of ability. b) Training in use of concordances would presumably lead to substantially greater benefit, but lack of opportunities for this does not mean DDL should be abandoned. In other words, Boulton's final conclusion in this study is a step forward towards more popularization of DDL. However, he emphasises that "after years of interest in the research community, DDL has yet to make significant inroads into mainstream teaching environments" (Boulton 2009c; 47).

3.5.4 DDL and learners' lexico-grammatical development

There have been a number of studies on vocabulary, collocations and grammar development through the use of DDL in the two recent decades. The uses of concordancing as the main

technical device in these studies have been prevalent. Cobb (1997b, 1999a and 2007), Aston (1998), Allan (2006), Chujo et al (2006), and Gavioli (2001) have focused on vocabulary development. Kita and Ogata (1997), Sun and Wang (2003), and Koosha and Jafarpour (2006) were concentrating on collocation learning and Schmied (2006) was one of the few researchers interested in grammar. In this section, first a brief review of a number of studies on vocabulary is given and then collocational studies will be reviewed. Attempts have been made to review experimental studies with the main issue of language learning through the DDL approach.

Cobb (1999 a) asserts that learning the vocabulary for second language learners specially for Academic Purposes is a major challenge and therefore needs careful attentions. The need for large numbers of vocabulary – measured in thousands – in limited amount of time of instruction – measured in months – has placed course developers and language teachers in a dilemma of choosing between explicit learning of words on list and implicit learning of words through extensive reading. The dilemma derives from the fact that list-learning in a de-contextualised fashion ends in superficial knowledge and learning through extensive reading although deep and contextualised, but is too slow and time consuming for the instructional time available. Cobb tries to solve this paradox of breadth and depth, as he calls it, using an instructional technology through DDL approach.

According to Cobb (1999a: 346) the breadth-depth paradox in L2 vocabulary has been seen as insoluble so that Krashen (1989) complained that “vocabulary teaching methods that attempt to do what reading does – give the student a complete knowledge of the word – are not efficient, and those that are efficient result in superficial knowledge” (p.450). In his research to examine

the effectiveness of DDL in teaching vocabulary, Cobb conducted a research on first-year commerce students at Sultan Qaboos University in Oman. The participants had already known 1000 words as established by Nation's (1990) Vocabulary Levels Test while they needed about 3500 to begin academic reading. That is, they had to learn about 2500 words in a year. The participants in the experimental group used the software, based on the 2000 frequent words in English, with the aim of maximizing vocabulary learning; the control group used word lists and dictionaries. The experimental group did better on definitional knowledge and transfer to new texts, both short and long-term.

The researcher finally concludes that DDL is best suited for depth of knowledge (extending knowledge of known items) rather than breath (adding new items), and it seems axiomatic that less advanced learners are more likely to be occupied with the latter. Here, it might bring to mind that DDL can be more promising for more advanced learners in learning vocabulary.

In Allan's (2006) study the experimental group worked with printed concordances from a small newspaper corpus over 12 weeks. Detailed analysis of results showed the experimental group making greater gain than the control group. However, conditions between the experimental and control groups were not identical, and there was considerable variation in the number of concordance tasks completed and the time spent on them. Allan (2009: 24) believes that for lexical learning, DDL is particularly helpful because it gives learners multiple exposures to words in context, offering potential for deepening word knowledge through the information provided about collocations, contextual behaviour, and register. In teaching vocabulary to second language learners through the use of DDL approach especially for intermediate language learners, Allan (2009) created a graded reader corpus to overcome the disadvantages of using the

British National Corpus (BNC) for lower level students. It is said that language learners at lower levels of proficiency are unlikely to be able to deal with the peripheral linguistic content of a search from the BNC or other large corpus. Allan's corpus consisted of graded reader texts which contain a limited number of headwords. She believes that this corpus enables us to adjust the ratio of known to unknown words for learners with a more limited vocabulary, making them more able to work with the data, without the need for filtering through the teacher. The idea here seems to be in line with what Krashen (1982) proposes in his Input Hypothesis¹.

Allan's main focus was on learning lexical chunks as defined by O'Keeffe, Carter, and McCarthy (2007). "*Lexical chunk* is used to refer to a continuous sequence of two or more words that frequently occur together, which 'display pragmatic integrity and meaningfulness regardless of their syntax or lack of semantic wholeness' (2007: 78). Based on this definition a number of two- and three-word clusters that could be called chunks were identified. They mainly consisted of preposition + article, subject + verb, subject + verb + complement, noun phrase + of. These showed relations of time and place, other prepositional relations, interpersonal functions, and linking functions. In fact, these are the major lexical chunks that are representative of the most commonly used authentic language (see Carter and McCarthy 2006: 829). Allan claims that for the teacher looking for a way into DDL with lower-level learners it seems that graded corpora may offer a reasonable balance of accessibility and authenticity in the data it provides even though she reminds that a much more detailed analysis would be needed to define the true limitations of the graded corpora.

¹This is perhaps the most important of Krashen's five hypotheses in second language learning theory. The thrust of the input hypothesis is that in order for language acquisition to take place, the acquirer must receive comprehensible input through reading or hearing language structures that slightly exceed their current ability (Brown, 2000:278).

Chujo et al (2006) in order to answer their own research questions on the effectiveness of concordancing tools with beginning-level learners developed a Japanese-English parallel corpus to produce a set of corpus-based activities. The activities were vocabulary-based and used as a set of DDL activities in English as a Foreign Language (EFL) classes at three Japanese universities. The researchers' aim was to demonstrate that combining corpora usage – applying the DDL method – with CALL-based activities can be effective with beginning level students in an EFL learning context. The study investigated the learning outcomes and student responses to concordance-based teaching activities in various learning contexts, and explores the optimum interface features between the corpus and the user.

The methodology employed by Chujo et al (2006) in using concordancing tools to teach vocabulary to Japanese EFL learners, though promising, requires well-equipped teaching contexts. Teachers should have required knowledge and skills of using concordancers and parallel corpora and classes must be equipped with computers and other necessary audiovisual devices. The results gained from their study show that DDL approach employed long with other CALL activities such as CD-ROM listening and vocabulary activities would be both powerful and highly motivating (Chujo et al., 2006: 16). In language teaching/learning situations of this type with different techniques and methods using various types of tools we should take the time limitations into account and be careful not to employ technology at the cost of teaching/learning time.

On the importance of the acquisition of collocational knowledge for second language learners, Kita and Ogata (1997: 230) assert that “collocational knowledge is particularly important for

developing language skills, which are already difficult to acquire for second language learners.” They present a method for extracting or compiling collocations from corpora based on the cost criteria measure (Kita et al, 1994). Their method facilitates computer-based language learning activities. They also describe an application tool that provides language learners with collocation correspondences between the native and the foreign languages.

Sun and Wang (2003) designed an experimental study to investigate the relative effectiveness of inductive and deductive approaches to learning collocations by using a concordancer. It might worth mentioning that using concordancers and concordance texts/materials are taken as forms of DDL approach in practice. 81 second-year high-school students in Taiwan took part in their study. The subjects were assigned into two groups of experimental and control group. The experimental group used an inductive approach from concordances and the control group used traditional methods of rule explanations, examples and exercises. The experimental group showed greater improvement in the collocations tested. The researchers suggest that concordancers create effective discovery learning possibilities for language learning and teaching.

Koosha and Jafarpour (2006) conducted an empirical study on DDL and its pedagogical gains in an Iranian EFL learning context. The purpose of their study as far as DDL is concerned was “to see if concordancing materials presented through DDL have any effect in the teaching/ learning collocation of prepositions” (Ibid: 192). 200 university students of English in Iran took part in this large-scale test for prepositional collocations over 15 classes. The participants were classified as control group with conventional instructional materials and experimental group

using concordance-based materials (print-outs). The participants' performance in Cloze tests focusing on collocation of prepositions were compared before and after the experimental condition as well as between the two groups. The experimental group scored significantly higher in the use of the target language. The researchers concluded that DDL instruction had an advantage over the conventional one, since students in the DDL groups outperformed those in the conventional groups. This finding showed that DDL techniques and activities would be more reliable in teaching the use of collocation of prepositions.

Thus, the possibility of developing a new approach (such as DDL) towards the teaching of collocations, and specifically collocation of prepositions using concordancing materials was given rise to. Of course it should be pointed out that the researchers have mentioned a number of problems in their research such as: 1) their participants' partial access to linguistic data, 2) difficulty level of some words and structures within concordances used in the experiment, and 3) the problem of understanding culture-bound concordances which make the comprehension difficult for the subjects attended in the research. All of these problems relate to the difficulty of interpreting concordances (Boulton 2009c).

However, even if this is the case, DDL proponents can seek solutions to resolve the problem of interpreting concordancing lines. It is not a problem with the very nature of using concordancing materials in a DDL approach. Perhaps selecting simpler lines of concordances, editions or even some kind of omissions can be considered as possible solutions to cope with the problem.

3.5.5 DDL and Learners' writing development

Gaskell and Cobb (2004), Yoon and Hirvela (2004), and O'Sullivan and Chambers (2006) examined the efficiency of DDL technology in developing second language learners' writing skill. Gaskell and Cobb (2004) in their study tried to see how well learners can make use of concordance information to correct their errors in their writing assignments. To do so, they conducted their research in a lower intermediate level English writing course which followed a process approach consisting of 10 assignments over a 15- week semester. Assignments were completed in two-week cycles, with a first draft and peer feedback in Week 1, and revision and electronic submission in Week 2. The instructor then gave feedback to each student's assignment, including online concordance links for five typical errors. The students were required to revise the text for final submission, and for each of the concordance-linked errors to submit a form explaining specifically what correction had been made based on what concordance information. Errors were indicated on students' essays on the writing course for the first 4 essays; concordances were prepared for each student for each of 5 errors and made available online; after this, students were expected to create their own concordances for self-correction. Tracking showed the students did make use of the pre-cast concordances, but were less keen on making their own; these generally resulted in an appropriate revision, even for their own concordances. Over 1/3 of the learners became independent concordance-users and claimed they would continue in the future. Learners may well have integrated specific language points, but error types did not significantly decrease over the course as a result of concordancing; recommendations include longer training and a longer time-scale for such results to be seen. The researchers finally concluded that although concordancing could not be seen as a final solution to learners' error feedback, it is at least an attempt to pave the way for the them 'to work on a

database of approaches [and] interfaces.....within a research- and-development perspective' (Ibid: 317).

In a study conducted by O'Sullivan and Chambers (2006) learners first wrote an assigned 600-word text in the L2 with access to traditional resources, and errors were highlighted. They were then trained in corpus use over 9 hours, following which they were allowed 2 hours to use concordances to correct their original texts. A general positive reaction was observed from the learners' side as far as lexico-grammar development is concerned. However, negative reactions were also noted from a number of students (especially from those who had missed several training session). The results of this study suggest that it is possible to make the learners more active in the development of their writing skills through training, guidance and giving them suitable consultations in making the best use of appropriate corpus. The researchers believe that this active participation could be enhanced by integrating corpora and concordancing into the word processing environment, as suggested by researchers such as Garton (1994), Levy (1990), and Milton (1997).

Both Gaskell and Cobb (2004) and O'Sullivan and Chambers (2006) focused their attention on the power of concordancing in learners' error correction. In fact, concordancing in this kind of pedagogical implication might not be used as a teaching device but as an error-seeking device. It means that, learners use the device after the time when they have written and made their potential mistakes.

Yoon and Hirvela (2004) conducted a study on ESL learners' attitude toward corpus use in L2 writing. Participants, in an extensive 4-week introductory course, got ready to work in their own with feedback during class. A detailed questionnaire was complemented by hour-long interviews with one positive and one negative student in each group. The researchers were in fact seeking appropriate answers to the posed questions: (a) In what ways do ESL students think corpus use is beneficial for learning L2 writing? (b) What difficulties do students have in using a corpus? (c) How do students feel about using a corpus in writing instruction? (d) What are students' overall evaluations of corpus use in L2 academic writing?

Learners were generally positive and claimed that they would use corpora in the future. The majority of them found corpora most useful for lexical usage and phrases as well as writing. The intermediate learners seemed more favourable than the advanced group, perhaps as they had received more guidance, considered crucial here. The findings of the study, as the researchers mention, suggest that the students perceive corpus activity to be beneficial for their English writing, particularly for learning common usage and collocates of words and for building confidence in their writing. The study also reports some negative reactions, most of which arise from frustration, the perceived time-wasting, and difficulty of interpreting truncated concordances.

Cresswell (2007) conducted an experimental study to evaluate the effect on learners' knowledge and use of language of DDL. He set out his research in an academic writing course at an Italian university. He divided his students into a DDL group and a non-DDL group. The students in the DDL group used a concordancer to investigate the meanings, uses, and syntactic patterns of English logical connectors (e.g., in fact, and on the contrary) in corpora while the non-DDL

group followed the course without concordance consultation. The course was claimed to be communicative, being based on the process-model of writing skills instruction with a three-draft approach including peer evaluation and discussion. Students worked in small groups on sub-sets of connectors. They wrote referenced essays from sources. The DDL group was introduced to corpora and required to investigate the meaning and usage of various connectors. About half attempted an inductive approach, starting with the data and comparing back to traditional references, the others starting with the references in a deductive approach. Learners of both types (especially inductive) generally succeeded in the task, with some qualification, although their findings proved difficult to convey to others. Furthermore, the overt knowledge was not found to translate well into use, as the DDL group performed only very slightly better than the non-DDL group on use of connectors in essays. Cresswell concludes that his subjects were successful in understanding the connectors both procedurally and declaratively. This conclusion can be interpreted as a reason for admitting the learners' derived inductions in describing their declarative knowledge of the item as well as showing metalinguistic knowledge. If this is the case, they would be able to generalise this kind of induction in describing other items of the language using the same method (DDL).

However, drawing such a general conclusion out of a single research can absorb harsh criticisms for a variety of reasons unless more empirically-based evidence supports it. Boulton (2009c: 51) takes the same position saying that "after years of interest within the research community, DDL has yet to make significant inroads into mainstream teaching environments ...more empirical studies are needed to indicate different conditions for use of DDL – for what types of learners,

what minimum resources, what language points, how it can be integrated with other techniques, and so on".

In a more recent review of the studies on examining the potential benefits of DDL such as providing authentic contexts and serving as a reference tool that students can use for language problems in L2 writing, Yoon (2011) explored how and to what extent this potential of concordancing has been realized by reviewing the relevant studies. The main attention was on studies that provide information on the effects of corpus concordancing by learners of L2 writing and on learners' evaluation of it. First of all, a collection of 12 studies on corpus use by L2 writing/EAP learners published in the six journals that are most relevant to the topic (Computer Assisted Language Learning, Journal of English for Academic Purposes, Journal of Second Language Writing, Language Learning and Technology, System, and TESOL Quarterly) was collected. In the second step, the researcher divided the collected studies into three broad categories based on research methodologies, the focus of investigation, and the type of corpus used.

One group of the studies explored whether and to what extent corpus use by learners promotes inductive learning and further learner autonomy. Cresswell (2007) as summarised above and Turnbull and Burston (1998) are two studies in this category. The aims of the study by Turnbull and Burston (1998), which was a case study of two non-native English speaker (NNS) MA students (Student M and Student A), were to investigate 1) how far students can take charge of their own learning through concordancing and 2) how much help students need to develop appropriate research methods. Both participants received a similar training session at the

beginning of the study. They then used a concordancer independently to search for problematic language items in their own choice. The corpus they used was compiled from their own English essays that were corrected by one of the native-speaker researchers. At the end of the study, the participants expressed two opposing ideas in regard to using concordancing as a tool to find patterns of usage. Student M was very comfortable with independent inquiry strategies, conducted many productive searches with the concordancer and saw the potential of concordancing as a tool to find patterns of usage systematically. By contrast, Student A expressed frustration over his unfamiliarity with the concordancer and the limited amount of examples it provided. One conclusion drawn out by the researchers was this that using concordancing does not necessarily promote inductive learning because different learners have different abilities and familiarity with inductive learning strategies.

Yoon (2011: 313) integrates the results of these two studies (Cresswell (2007) and Turnbull and Burston (1998)) ‘to confirm the popular assumption that concordancing may not be for all students, but rather it is more useful to students who “prefer unstructured, discovery-oriented learning”’ (Bloch, 2007, p. 187). Other studies such as Watson Todd (2001), Lee and Swales (2006), Kennedy and Miceli (2001), Tribble (2002), and Yoon (2008) reviewed by Yoon (2011) helped confirming the conclusion that applying concordancing in the classroom does not necessarily foster learners as researchers. It has been concluded that in order to determine the degree of success of corpus driven DDL in L2 writing, an interaction between appropriate training, students’ learning styles, and motivation is a requisite.

3.5.6 Research on DDL in the Iranian EFL context

Since pedagogical use of corpora in general and applying concordancing materials in EFL classrooms in particular have not been so popular in Iran, few investigations by the researchers have been conducted in the Iranian EFL contexts to the time. Lack of technological facilities at the educational centres and unfamiliarity of the teachers with corpora and corpus-based materials are the main reasons for the scarcity of this type of research. However, some EFL teachers, especially academic researchers have set out to investigate different aspects of the corpus use in educational contexts as far as its learning effects and learners' attitudes among Iranian EFL learners are concerned. To the best of my knowledge, only the following empirical studies have been conducted in the area.

As explained above (2.6.3.4) Koosha and Jafarpour (2006) found that using DDL-based instructional materials had an advantage over the conventional ones in the teaching/learning of collocation of prepositions. Similarly, in a more recent study by Zaferanieh and Behrooznia (2011) teaching collocations through web-based concordancing proved to be more efficient than traditional method of using a list of words along with their collocations and some examples.

Ashtiani and Tahriri (2013) conducted a study to examine the impact of using concordancer on [Iranian] EFL learners' reading comprehension. The aim of this study was to investigate the effectiveness of using concordancer in an extensive reading course. To do so, the researchers conducted an experimental study in which the experimental group was assigned to read a story at home every day. The data obtained from their pre- and post-test performances were compared with that of the control group. The results showed that the experimental group utilizing

concordancer improved significantly better than the control group in terms of reading comprehension.

3.6 Conclusion

This chapter was allocated to corpora and pedagogical implications of corpus linguistics in general and the development of the DDL approach in EFL pedagogy in particular. First, general descriptions of the terms 'corpus' and 'corpora' as well as the way linguists make use of them in different areas of linguistic studies were given. Second, it was discussed that language researchers can process a corpus using software packages - typically called concordancers - in order to find out the 'frequency' of occurrence of a word or a string of a number of words, 'phraseology' of lexical items, and 'collocation', i.e. co-occurrence of words. These different kinds of information are the building blocks of various types of uses of corpora. Since the main topic of this study is the pedagogical uses of corpora within the DDL approach, arguments around corpora and language teaching/learning as well as the ways of presenting the concordance lines to EFL learners and different kinds of concordance-based classroom activities were examined. Third, a historical background of the DDL approach as introduced by Johns (1991a) and its theoretical bases were reviewed in 3.4. Finally, in the last sub-section (3.5), a review of research studies conducted on DDL and its learning effects on different themes were given.

Although different researchers have been involved with both intuitive and empirical studies, according to the research questions raised in the present study, more emphasis was put on reviewing the empirical studies. This review was done on the themes such as "DDL and

individual differences and attitudes" focusing on the relationships between DDL and learning styles and cognitive styles as well as learners' attitudes towards the approach; "DDL and training learners" scrutinising the relationship between learners' skills and trainings necessary for applying DDL materials and software; "DDL and learners' level" examining the appropriateness of DDL for different proficiency levels, and "DDL and learners' lexico-grammatical development" reviewing the development of learners' knowledge of vocabulary, collocations, and grammar through the use of DDL.

The final and the most relevant theme to this study, that is, "DDL and learners' writing development" reviews the research studies, mostly empirical, conducted to examine how effective different formats of DDL in the development of learners' writing skills might have been. It was argued that few empirical studies have been conducted on the learning effects of soft version of DDL, the version in which concordance-based teaching materials in a hand-out format prepared by the teacher, in a writing course. Therefore, the present study has been designed to answer the following four questions:

1. Do Iranian EFL learners achieve higher improvements in their declarative knowledge scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
2. Do Iranian EFL learners achieve higher improvements in their analytic writing scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
3. Do Iranian EFL learners achieve a greater improvement in their Complexity, Accuracy, and Fluency (CAF) scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
4. What is the Iranian EFL learners' attitude towards using the DDL approach in a 'Paragraph Development' course?

The next chapter describes the research design, participants, instrumentation, and data collection procedures to find appropriate answers to the research questions.

Chapter Four

Research Method

This chapter describes the methodology of the study. It gives a detailed account of the research design, subjects, materials, and data collection procedures.

4.1 Research design

A pretest posttest control group design (Hatch and Farhady, 1981) supplemented by a set of interviews with members of the Experimental Group was employed to collect the required data. In this design, two groups of EFL university students attending their ‘Paragraph Development’ course were compared as far as their micro-level writing skills are concerned. The Control Group (Non-DDL) received instructions through conventional method of textbook usage, teacher explanations and classroom exercises. The Experimental Group (DDL) received a certain number of classroom concordance-based handouts in addition to textbook usage. Both groups were assigned to similar weekly assignments, and attended the same pretest and posttest examination sessions, on the second and final term sessions respectively.

4.2 Subjects

Two groups of undergraduate Iranian EFL students who had registered for their ‘Paragraph Development’ course functioned as participants of the study. The Non-DDL participants, 24 male and female, are majoring English at Azad University-Shahreza Branch and the DDL participants, 26 male and female, are doing the same at Shahrekord University. The course was being offered by the English Departments at both universities in the first term of the academic year 2012- 2013 (October 2012- February 2013).

In order to meet the Ethical requirements of the research project according to the rules and regulations of the University of Birmingham, all participants in both groups were asked to give their consent to the researcher to use their written products as the required data for research purposes. A consent form was prepared by the researcher in the participants' native language, Persian, in which they were first familiarized with the aims and data collection procedures of the research, and then invited to allow the researcher to use the scripts of their exams as the data for the research study. They were reassured that the written scripts would be analysed anonymously (See Appendix J for the consent form in Persian and its English version).

4.2.1 How comparable the two groups are

Although the two groups of participants were not randomly assigned to the Experimental and Control groups, they seemed to be comparable in many aspects according to the information collected from questionnaire 1 given to both groups (See Appendix B). The aim of conducting this questionnaire was to obtain information about the participants' personal information, their English learning background, their learning strategies preferences, their familiarities with different language learning techniques and skills, etc. This questionnaire could help the researcher in determining the extent to which the participants groups (experimental and control) are comparable.

4.2.1.1 General Information

The experimental group (DDL) consisted of 26 students, 18 female and 6 male aged between 18 and 22 years old. The control group (Non-DDL) included 24 students, 20 female and 4 male. Around fifty per cent of the control group were aged above 22 (11 out of 21 who filled out the

questionnaire). All participants were majoring English within the Teaching English as a Foreign Language (TEFL) programme. Most of the participants (90% of the control group and 96% of the experimental group) were the second-year students in a four-year first-degree system.

4.2.1.2 Language proficiency and exposure to English

All participants have been through similar English as a Foreign Language (EFL) courses. According to the results of the first questionnaire that they completed about their personal information, English learning experiences and their learning strategies preferences in the second session of the term (See Appendix E), the majority of the participants had been studying English for 4-9 years. More than 70% of the Non-DDL group and 87% of the DDL group have never been to an English speaking country and had no chance to use their English in a real authentic context of use. Few numbers of students in both groups have taken English courses outside university (3 out of 21 in the Non-DDL group and 4 out of 24 in the DDL group). In the present term, most of the participants in both groups have taken 3 to 5 English courses extra than ‘Paragraph Development’.

For the purpose of evaluating the participants’ exposure to English, they were asked about their outside-class English practicing activities. Three students in the DDL group and three in the Non-DDL group have taken some English classes in private language schools. The questions asked their involvement in all four language skills: listening, speaking, reading, and writing. Both groups asserted that they sometimes read English language newspapers and other written media, sometimes speak English outside classroom, sometimes watch films and TV channels in English, and almost never go to language lab or self-study room after class. The chi square

analysis as illustrated in table 4.1 showed no significant difference between groups in terms of background information, exposure and language skills involvement. (More detailed analyses appear in Appendix E.)

Table 4.1 Groups comparisons in terms of English background information, exposure and language skills involvement

Chi-Square Tests		Participant's grouping		Total	Pearson Chi-Square		
					value	df	Asymp. Sig. (2-sided)
1	Academic performance (average grade out of 20)	non-DDL	21	45	3.705	3	.295
		DDL	24				
2	How long have you been learning English (Years)?	non-DDL	21	45	6.497	4	.165
		DDL	24				
3	How many times have you been to countries where you have to use English language?	non-DDL	21	45	3.817	2	.148
		DDL	24				
4	How many English courses have you taken so far at your University?	non-DDL	21	45	2.787	5	.733
		DDL	24				
5	How many hours per week are you taking English courses outside University this semester?	non-DDL	21	45	4.018	4	.404
		DDL	24				
6	How often do you read English-language newspapers, magazines, Internet information, or other English texts, outside classroom?	non-DDL	21	45	6.161	4	.187
		DDL	24				
7	How often do you speak English outside classroom, watch English movies or listen to English songs?	non-DDL	21	45	2.685	4	.612
		DDL	24				
8	How often do you watch English movies or listen to English songs?	non-DDL	21	45	1.922	3	.589
		DDL	24				
9	How often do you go to language lab or self-study room after class?	non-DDL	21	45	2.436	4	.656
		DDL	24				
10	How often do you write letters in English or chat via the Internet in English?	non-DDL	21	45	.703	4	.951
		DDL	24				

4.2.1.3 Attitudes towards English in general

Participants' answers to the questions on their attitudes and motivation towards learning English indicated that the majority of them in both groups have intrinsic (internal) motivation as most of them announce that they learn English because '[they] like the language', 'it helps [them] to be able to communicate with foreigners' and 'it is very widely spoken in the world'. Reasons such as 'getting a well-paid job', 'getting information or pleasure e.g. reading English-language newspapers, watching films, etc.' represent around half of the participants' motivation in learning English. And finally, very few participants in the two groups are learning English because 'it helps [them] pass the exam' or 'because it is fashionable'.

4.2.1.4 Experience of and attitude towards inductive and deductive learning

In the two final parts of questionnaire 1 (filled out in the beginning of the term) students' educational experiences in terms of inductive and deductive learning were elicited. This was done through 10 questions about the kind of activities and language teaching/learning techniques they had been through. The chi square analysis of the results showed that there was no significant difference between the groups as far as frequencies of inductive and deductive learning activities are concerned. Both groups have had more deductive learning activities than inductive ones. Detailed information is available in Appendix E.

Inductive learning activities such as finding missing words, guessing unfamiliar words from context, and observing grammar points by themselves showed quite similar frequencies. Both groups had few opportunities to play language games or communicative activities. However, the DDL group had been asked to do more translation exercises whereas the Non-DDL group had

been exposed to more teacher explanations and had been asked to read grammar books more than the DDL group. One possible explanation for these minor differences between the groups can be departmental or teacher preferences or even perhaps because of previously taken courses.

Both groups showed similar levels of attitude towards deductive and inductive learning strategies. As far as deductive-oriented strategies are concerned, the two groups agreed that teachers should give language rules first and then ask the students to do some practice. Although more respondents in the DDL group agreed with teacher-centred classes than the Non-DDL group do, the difference was not outstanding. Similarly, with regard to inductive-oriented strategies, no significant differences between groups could be found in terms of learner-centredness, learners' self-correction, and learners' self-discovery of rules. The two groups of participants in the study showed roughly similar positive attitude towards some combination of deductive and inductive learning strategies such as learners' self-correction with teacher's help, learners' active involvement in self-discovery activities and teacher's explanations. For more precise information, see Appendix E.

4.3 Materials

In order to collect the required data for this study the following four different types of materials were developed during the material preparation stage and then used in appropriate stages of data collection phase. These materials are DDL units, pre- and posttest exams, two questionnaires, and a set of interview questions. The sections below first give an account of materials preparation stages and then describe the data collection procedures.

4.3.1 Teaching materials preparation stage

DDL-based materials, henceforth DDL units, can be considered as central to this research project since by definition the researcher's aim is to evaluate the approach via a set of instructional newly developed materials. As it was mentioned in the previous chapter/s the focal linguistic issues and elements in second language writing for some researchers has been the micro level elements, i.e., language patterns. This is where one might think of the importance of investing a considerable amount of classroom presentations, time, and activities on micro level skills of writing, that is, structural and lexical features of the language involved (issues discussed in 1.2 and 2.3.5 above).

Therefore, there was an urgent need to determine the linguistic contents of the DDL units. To do so, a rather widely used textbook titled as 'Paragraph Development: A Guide for Students of English as a second Language' by Arnaudet and Barret (1990) was critically analyzed. The results of this analysis along with the results obtained from an error analysis done on a sample of written paragraphs by four similar groups of students comprised a list of 18 target linguistic patterns. After that, the 18 target patterns were sought for in the compiled learner corpus and the ICLE (International Corpus of Learner English). These two corpora were used as corpora resources for retrieving the target patterns in the concordance lines format. This was done through the use of the corpus linguistic software, AntConc (3.2.4.w) developed by Anthony Lawrence (2012).

It should be borne in mind that all of the participants as announced in the first questionnaire had passed Grammar I, and II in their previous terms attending the university classes and had few

free writing experiences, if any. Considering the participants' language learning background, previously passed courses, and language proficiency in general and the fact that they were about to start writing paragraphs of up to 250 words length - not longer essays of a few paragraphs in which they might need to observe the coherence issues of essay writing - it was decided to follow up a paragraph development course with an emphasis on connecting ideas via different grammatical constructions (grammar patterns). Moreover, the literature on different approaches to writing (discussed in detail in chapter two) reveals that writers at the beginning stages rely on sentential constructions and connecting sentences to form larger strings of meaning leading to paragraphs. In short, a product approach towards teaching writing was adopted in this study.

In order to prepare the DDL based teaching materials suitable for this writing course in the present study, the soft version of DDL - as described by Leech (1997) and Gabriellatos (2005) - has been chosen because of lack of enough computers in the classrooms on the one hand and incapability of a considerable number of students to work with computers and concordancers on the other hand. The following sub-sections are giving an account of all the above steps.

4.3.1.1 Textbook analysis

At this stage, I tried to take a critical look at the widely used textbook of 'Paragraph Development' by Arnaudet and Barret (1990) in Iran. The writers describe the book as an integrated guide for high intermediate to advanced learners of English. They based the book on the assumption that if a student is able to write a unified, coherent paragraph, transferring this skill to full composition writing will not be difficult. The approach in each chapter is direct and

functional: a model is provided and graphically explained; then the student is asked to imitate the model.

The book has 8 chapters in 182 pages. Chapters 1 and 2 introduce '*the topic sentence*', '*mechanics of paragraph writing*', '*elements of a good paragraph*', and '*supporting the topic sentence*'. Chapters three to six deal with the rhetorical patterns commonly found in expository writing. Chapters 3 and 4 are allocated to the process of *Enumeration* and *types of enumeration*. Chapters 5, 6, and 7 present how to write different kinds of paragraphs as far as rhetorical patterns are concerned. '*cause and effect*', '*comparison and contrast*' and '*definition*' are the main topics of these chapters respectively. The final chapter of the book, '*expanding a paragraph*', is concerned with transferring the patterns of paragraph development to full composition writing. The writers remind the users that although this book is not intended as a grammar text, some structures are reviewed in these units as they apply to the specific type of paragraph being discussed.

As we see the main topics of the book are rightly focused on macro level skills of writing. Yet, a closer look at each chapter reveals that there are quite a few sections and sub-sections presenting structural features relevant to wider topics of developing ideas in writing activities. In the analyses below I illustrate the structural features and elements of chapters 3 to 7- excluding chapters 1, 2, and 8. This is because the first two chapters are on general topics of paragraph writing, and chapter 8 is on how to put a number of paragraphs together to compose an essay, not addressing any particular text type or rhetorical pattern.

4.3.1.1.1 Chapter 3: Enumeration

In this chapter one of the most common methods of paragraph development in English, that is, enumeration, is introduced, exemplified and practiced. In this type of paragraph development, a writer starts with a general; class, then proceeds to break down by listing some or all its members or parts. There are two key elements in an enumerative paragraph: *enumerators* and *listing signals*.

Enumerators: Writers frequently wish to make a list of *classes/ factors/ divisions/ parts/ characteristics/ elements/ aspects /categories etc.* in order to develop their ideas when writing a paragraph. These words are called enumerators.

Listing Signals: In most formal writing, a list is not usually made with numerals (1, 2, 3....). Words like first, second... next, another, then, etc. which are usually used in an enumeration are called listing signals. The two following tables show the most frequent patterns of enumeration.

Group 1

Listing signal	a complete sentence
First, Second, Third, Then, Next, Finally,	there are we have we should consider _____ etc.

Group 2

Listing signal	enumerator	verb phrase
The first The second The third The next The last	type reason point group decade development	Is _____.

Ascending versus Descending Order

In an enumerative paragraph, the enumerator(s) might be listed in either an ascending or descending order. In descending order, the writer lists the most important point first, then goes on to speak of the other points. The writer usually thinks that the other points are important, too; he simply wishes to mention the most important one first. The following table shows a very common sentence pattern used in a descending order.

The	most essential most important primary largest chief Etc.	kind reason etc.	is.....
-----	--	------------------------	---------

In ascending order, the writer lists the minor points first, saving the most important for last. The following sentence patterns are also given for an ascending order.

he	most essential most important primary largest chief Etc.	kind reason etc.	, however , is.....
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But the	most essential most important primary largest chief Etc.	kind Reason etc.	is.....
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4.3.1.1.2 Chapter 4: Types of enumeration

In chapter 4, two specialized types of enumerative paragraphs: the process paragraph and the chronological (or narrative) paragraph have been introduced, exemplified and worked out.

- **The Process Paragraph:** For the process paragraph appropriate uses of listing signals and three other linguistic features have been given. These are 'Time clues', 'Repetition' and 'Pronoun reference'. 'Time clues' include choice of verb and tense. 'Repetition' and 'Pronoun reference' provide links between sentences to help the reader follow the writers' train of thought.

Listing signals are exemplified and patterned as illustrated below:

Pattern 1

Listing signal,	a complete sentence
First,	children make bad friends at cyber cafes(simple present form)
Second,	They should be able to imagine people's reactions. (should, must ,can + verb)
Third,	Fill out the forms with your personal details. (command form of the verb)
Then,	The recommendations are sent out by the committee.(passive form)
Next,	

Pattern 2

Listing Signals	Process Enumerators	Verb phrase
The first	step	is about outdoor education
The second	stage	is getting to know the foreign country better
The third	phase	has just opposite direction
The next		is that you have your own harvest
The last		

As for 'Time Clues' four groups of linguistic elements (Verb Choice: *begin, start, continue, finish etc.*, Time Clauses: *while, as, until, etc.*, Participle Phrases: *while + gerund, Having +PP*, and Sentence Connectors: *at the same time, then, etc.*) have been explained and patterned. See Appendix F.

- **Chronological (Narrative) Paragraph:**

When the order in which things happen, or a time sequence is used to develop a paragraph, this is called chronological order. Like process, this is a special form of enumeration, since it is really a

list of events. Hence, listing signals and time clues are two main linguistic features which could be focused on in a materials development stage.

Listing signals: In most cases listing signals used in chronological (narrative) paragraphs are the same as in pattern 1 above (process paragraph).

Time clues: In addition to the past form of the verbs, prepositional phrases of time are frequent.

The followings are some forms of these phrases:

in	1998 January, February... the afternoon, the morning,	at	9:00 noon night midnight,	on	Monday, Tuesday..... July 6 July6, 1998
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4.3.1.1.3 Chapter 5: Cause and Effect

In addition to listing signals (First..., Second..., Finally...) a number of basic structures are used commonly in writing cause-effect paragraphs. The structural signals as described and exemplified in the textbook are: sentence connectors (as a result, consequently, hence, etc.), conjunctions (so, for), clause structures (so + ADJ + that, such +NP+ that), phrase structures (because of, in view of, etc.), and predicate structures (CAUSE result in EFFECT, EFFECT follow from CAUSE etc.), and participle phrases (CAUSE, leading to EFFECT/ EFFECT, resulting from CAUSE). Table 3.1 gives a list of the patterns observed in this chapter (rows X to Y). More detailed explanations with example sentences can be seen in Appendix F. Other topics in chapter 5 on cause-effect development are 'Focus on Cause' and 'Chain Reaction'. Since the aim of this analysis is to have a list of linguistic elements, structural patterns, and lexicogrammatical items which seem most appropriate to focus on in a teaching materials preparation via corpora and concordancing techniques, I discarded those sections that might not lend themselves to the technique.

4.3.1.1.4 Chapter 6: Comparison and Contrast

Writers may also want to support their topic sentences by arranging the supporting sentences according to either the similarities or the differences between two things, or between two aspects of one thing. In this chapter, several ways of organizing comparative and contrastive paragraphs have been examined. In the first section of the chapter a number of *Comparison Paragraphs* and different structures which are usually used in these paragraphs are given. The second section is on *Contrast Paragraphs* and the last section familiarizes the students with paragraphs that develop both similarities and differences between things, people and methods. These paragraphs are *Comparison and Contrast Paragraphs*.

Structures of comparison (pointing out likenesses)

In addition to listing signals and the enumerator similarities, certain other basic structures are commonly used in writing paragraphs of comparison. The following six groups of basic structures were observed in the textbook: 1) adjective/preposition (the same NP as, similar to, and like), 2) attached statements (and SUBJECT AUX too, and SUBJECT AUX NEG either, and neither AUX SUBJECT), 3) correlative conjunctions (both, Neither...nor), 4) predicate structures (to have SOMETHING in common, resemble, similarities between), 5) sentence connectors (similarly, likewise, in the same way, etc), and 6) punctuation only. For detailed explanations and examples see Appendix F.

Structures of Contrast (pointing out differences)

In a paragraph of contrast, the writer concentrates on the differences between two things, people, or methods. The most common structures used in these paragraphs are 1) comparative adjectives (-er....than, more ADJECTIVE than, as ADJECTIVE/ADVERB as), 2) prepositions (unlike, contrary to, etc.), 3) adverbial clauses (whereas /while CLAUSE 1, CLAUSE 2), 4) verbal

structures (contrast with, differs from, is different from, etc.), 5) sentence connectors (however, on the other hand, in contrast, etc.), 6) conjunctions (but), and 7) punctuation only.

4.3.1.1.5 Chapter 7: Definition

In this chapter language learners are getting familiarized with the techniques of writing a paragraph of definition in which they may need to explain what a term means or how it can be used in a particular situation. A paragraph of definition may be either a formal definition, which explains the meaning as one might find it in the dictionary, or a stipulated definition, which explains how you are using a particular term within a specific context. In both cases, definition often involves a combination of the kinds of development presented in the previous chapters of the book.

Formal definition: A formal definition includes three kinds of things: the term to be defined, the class to which a thing belongs, and the features which distinguish it from other things in that class.

Model Definition: *A wristwatch is a mechanical time-telling device which is worn on a band about the wrist*

In this definition the term is '*wristwatch*', the class to which it belongs is '*device*', and the distinguishing features are '*mechanical*', '*telling time*', and '*worn on a band about the wrist*'.

Regarding structures of definition, the following commonly used basic structures have been identified. They can be divided into two basic groups: those associated with distinguishing features and those associated with the choice of verb.

Group 1. Structures which identify distinguishing features

- Adjectives and adjective clauses: A wristwatch is a mechanical, time telling device which is worn on a band about the wrist.
- Reduced adjective clauses: A wristwatch is a mechanical, time telling device worn on a band about the wrist.

Group 2. Verbs used in definitions:

- Verb 'be':
E.g. A wristwatch is a mechanical, time-telling device (which is) worn about the wrist.
- Common verbs of defining: 'mean', 'signify', 'refer to', 'designate'.
E.g. the term wristwatch means/signifies/refers to/ designates a mechanical, time-telling device worn about the wrist.
- Passive structures with 'to be called', and 'to be known'.
E.g. A mechanical, time-telling device (which is) worn about the wrist is called/ known as a wristwatch.

The extended definition: When the general class and distinguishing features have been given, the writer may then go on to expand or extend his formal definition by giving additional information about the term being defined. This might include such things as a physical description or a list of the advantages of the item. In the case of a wristwatch, for instance, the writer might want to comment on variety in appearance and popularity. An example paragraph including an extended definition of the word '*wristwatch*' can be seen in the Appendix L In these paragraphs different kinds of information such as various kinds or types (Enumeration), historically interesting information (Chronology), how it works (Process), and advantages and disadvantages (Cause and effect) are given. The chapter finalizes the discussion on paragraphs of definition with problems of definition such as circular definition and overextended definition. Since these issues are not directly relevant to the structural features of writing and linguistic patterns to deal with in concordance-based materials, I am not going into the details of them in this analysis. The final output of this textbook analysis was a list of 18 patterns, that is, linguistic structures, which are frequently used in various text types and being taught, explained,

exemplified and exercised in writing classrooms. Therefore, these 18 patterns were considered as the ‘target patterns’ for the DDL units to correspond with the teaching materials presented in the Non-DDL group. These patterns are listed in table 4.2. See Appendix F for the complete list of the patterns and example sentences extracted from the textbook.

Table 4.2 The 18 target patterns

No	Pattern	No	Pattern
1	LS*, sentence.	10	Because of CAUSE, EFFECT
2	The LS enumerator V	11	CAUSE cause/ lead to/ result in EFEECT
3	The adj enumerator V	12	EFFECT, resulting from
4	But the adj enumerator VP	13	IDEA 1[degree of similarity]the same NP as IDEA 2
5	The adj enumerator, however, VP	14	IDEA 1[degree of similarity]similar to IDEA 2
6	CAUSE, linking word, EFFECT	15	IDEA 1 V [degree of similarity] like IDEA 2
7	CAUSE so adj/adv that EFFECT	16	NEG SENTENCE, and neither AUX SUBJECT.
8	CAUSE such (a) NP that EFFECT	17	HAVE STH in common
9	since CAUSE, EFFECT	18	as ADJ/ADV as

* LS= Listing signal

4.3.1.2 Error Analysis

Before compiling the DDL units, it seemed necessary to do a survey on previously written paragraphs in similar classrooms by students roughly similar to the participants of the study. The aim of this survey was to determine the common and more frequent erroneous structures that students might make at this level. The results could also help the researcher with a precise understanding of Iranian EFL learners’ linguistic needs in a Paragraph Development Course. The results of this survey helped making a practical framework for the teaching materials

development stage (DDL units preparation) of the research project. 50 paragraphs written by EFL students in a Paragraph Development Course from 2 universities in Iran were collected. The students' errors were classified into micro level and macro level errors. Since micro level errors showed a higher level of frequency than the macro level ones, the researcher's focus of attention led to the students' needs in developing lexico-grammatical and structural features of writing. A full account of this error analysis appears in Appendix M.

The results of this survey show that 90% of total errors made by the learners are at micro level and about 10% are at macro level errors. As we see in Table 4.3, 'structural', 'lexical', and 'mechanical' are the three main types of micro level errors with 46.3, 16.2, and 27.5 per cents respectively. It was revealed that 'false structures' (FSTR), 'false word form' (FWF), 'count/un-count nouns' (C/UN), and 'articles' (ART) are the major types of structural errors that EFL learners at the same proficiency level of the research participants are likely to make.

Since the aim of this analysis was to have a general view of the most frequent types of errors and to determine the linguistic elements that I would need to focus on when preparing the units, no more detailed analyses were carried out.

Table 4.3 the results of error analysis done on a sample of EFL writers' written paragraphs

	Micro level errors												Macro level errors	total
	Structural							lexical		mechanical				
Error type	FSTR	FWF	C/U N	REI CI	CONJ	PP	ART	WRD	COLLC	PUNC	SPL	CAP		
frequency	46	25	24	5	12	9	34	20	34	54	23	15	33	334
Per cent	13.7	7.5	7.2	1.5	3.6	2.7	10.2	6	10.2	16.1	6.9	4.5	9.9	100
	46.3							16.2		27.5			9.9	

The findings of this survey along with the textbook analysis described above composed the required framework for DDL units.

4.3.1.3 The need to compile a learner corpus

Seidlhofer (2002) cites Granger's (1998:7) criticism of global materials in which the designers are "content with a very fuzzy, intuitive, non-corpus-based view of the needs of an archetypal learner" and calls our attention to the idea that an appropriate pedagogy needs to be fine-tuned to specific learners and local conditions of relevance (cf. Holliday 1994; Kramsch and Sullivan 1996). An issue of concern in preparing concordance lines has been that of authenticity. Widdowson (2000) makes a distinction between text production and text reception, and argues that corpora may lack authenticity at the receptive end, even though they were initially authentic. Thus, learners may find it hard to relate to texts that were produced in a different culture, within a context that is not necessarily familiar to them. The texts are therefore likely to remain an "anonymous mass" to the learners' (Braun 2006: 26). Although Nesselhauf (2004: 140) believes that learner corpora have remained relatively less common on the DDL scene up to the time, Granger and Tribble (1998) and Seidlhofer (2000) assert that they can be extremely useful for form-focused instruction because they present students with typical interlanguage features, especially when the data were produced by learners from the same mother tongue background as the students. In addition, local learner corpora contain data produced by the very same students who will be using the corpus. They are thus 'both participants in and analysts of their own language use' (Seidlhofer 2002: 213), and the interlanguage features represented in the corpus are the features of their own interlanguage. This also means that the teacher can provide 'tailor-made feedback' (Mukherjee 2006: 19) to the learners, either as a group or individually.

For the following reasons, then, the decision was taken to build a learner corpus for use in this study. The reasons are: a learner corpus comprised mainly of texts produced by Iranian students would be culturally familiar to the students in this study, with values, concepts and references that are shared, and therefore much easier to relate to; similarity in the interlanguage features of the learners would also allow the teacher to focus on problems that are relevant to the students in the study; finally, the learner corpus would feature texts with similar purposes and text types to those that the learners are required to produce.

4.3.1.4 Learner corpus compilation

As has been pointed out above (see 3.4.1), the main focus of each DDL unit would be a grammatical pattern (form-focused instruction). The learners would be led to identify a structural pattern through working on a set of concordance lines. In order to facilitate these processes, it was considered necessary to reduce the difficulty level of the materials as far as topic, content, and vocabulary are concerned.

Al-Lawati (2011) in her investigation of the learning strategies used and observations made by EFL Arab students while working on concordance-based grammar activities, compiled a corpus of written texts written by EFL Arab students at the same college where the research participants were studying. The importance of preparing a specific corpus for the purpose of a particular study is to ensure that the concordances are appropriate to students' needs and therefore can facilitate their task of analyzing concordances (Aston 1997) and as Seidlhofer (2002: 220), notes, "FL pedagogy, and presumably any pedagogy, has to be local, designed for specific learners and settings."

Al-Lawati postulates that one of the reasons for the participants' success in managing to deal with concordance-based teaching/learning is the appropriateness of the concordances to the learners' needs. She refers to prior research which found that concordance-based teaching/learning was difficult for students, such as the studies by Granath (1998) and Hadley (1996). In these studies the researchers made use of readily published corpora, which could have been inappropriate to the participants' needs. Also, general corpora contain texts written (or spoken) in a range of different genres, for a variety of purposes and often containing references to concepts and events that are opaque to language learners in another cultural context. Therefore, following Granger and Tribble (1998) and Sripicharn (2002) who proposed that learner corpora concordance lines can be used directly in the design of DDL materials, it was decided to make use of the ICLE corpus as a reference corpus and to retrieve the required concordance lines based on the 18 target patterns discussed above. However, it then became evident that some unfamiliarity issues such as cultural aspects behind the written materials by writers from other languages/ nationalities for the Iranian learners of English could create problems for Iranian learners in understanding the concordance lines.

Since the ICLE corpus is a collection of EFL learners' argumentative essays written by native speakers of 14 languages other than Persian (native language of the participants) a complementary learner corpus of Persian speakers was deemed necessary for the study. A mini learner corpus (IrCLE) comprising of the Iranian EFL writing assignments from 4 universities was compiled. The corpus contains 120,000 word tokens (9411 word types). The paragraphs collected were of the same text types as outlined in the textbook. These are the text types the participants were supposed to work on through the term. The paragraphs were written by other

language learners at the same level in the two recent previous academic years. These paragraphs had been produced digitally in Word-doc context as classroom assignments. In order to prepare them for the intended corpus, major grammatical errors and structural patterns deteriorations that might cause comprehension problems were corrected. Although the size of the corpus was a matter of concern, using the two corpora, ICLE and IrCLE could make the researcher sure of having access to as many concordance lines as necessary for compiling the class hand-outs.

4.3.1.5 Preparing DDL units

As mentioned above a 'soft version' of DDL (Leech, 1997 and Gabrielatos, 2005) was chosen to follow in this study. Six DDL units (handouts) were prepared to be taught in six weeks along with 3 units prepared by Sripicharn (2002). The handouts were used in the first 15-20 minutes of each session in the DDL group. Language items used for presentations and tasks were extracted and adapted from the two corpora described above.

This stage of materials preparation involved the operationalisation of data-driven learning following certain stages: selection of relevant lines, minor editing and then the presentation and formatting of the lines (key words highlighted in bold, and centred, decisions about cut-off points at either, end and the alignment of the lines. Manipulation may involve the selection of a subset of the concordance, often with the aim of reducing the data to manageable quantities (Gilquin and Granger, 2010) or removing the lines that may cause difficulty in the learners' comprehension because of strange vocabulary, or culturally-unfamiliar topic. This could happen especially in the lines extracted from the ICLE corpus.

It should be pointed out that following Gilquin and Granger (2010), the criteria listed here were taken into consideration in preparing the units using the concordance lines from the corpora: readability (the most difficult concordance lines [were] discarded, (Kuo et al. 2001), frequency (only the concordance lines illustrating the most frequent uses [were] kept (Levy 1990: 180), and usefulness (only those concordance lines that [were] judged useful [were] kept (Tribble 1997a: 4).

In cases where needed some concordances were edited or even simplified so that the learners' attention was not diverted from the main intended task, which was to identify the grammatical pattern in question. Editing and simplifying the concordances were recommended by Gabriëlatos (2005: 18). Techniques such as careful selection of the concordance lines based on the nodes rather than the periphery, and checking the language problems such as misspelling, and choosing the lines selectively took a considerable amount of time while preparing the DDL units. As an example, in order to select sufficient number of concordance lines containing the pattern 'so + ADJ + that + clause', in unit 6 (Appendix N), 13 lines would have been selected out of a total instances of 469 lines (technically called hits) containing 'so' as the key word. First of all the lines should have been sorted based on two words to the right hand side of the key word and then careful attention should have been paid to select the lines that could help the students easily generalise the pattern underlying the concordance lines. Attempts were made to select as many grammatically correct lines as possible in order to avoid exposing the language learners to incorrect or inappropriate strings of the target language, English. However, since any learner corpus would inevitably contain some erroneous items, the main focus was placed on the node and the context around it and fewer corrections seemed necessary for the periphery. However,

some minor editions and corrections were made to those in which an erroneous item might cause misunderstanding. Instances of non-standard collocations and/or misspellings were edited.

Before preparing the units, a course lesson plan was devised for a 13-week term. The topic of each lesson was determined based on the textbook syllabus and the 18 target patterns drawn out of the textbook analysis described above (4.3.1.1). Appendix K illustrates an outline of the lesson plan for the DDL class. The outline shows the lessons by their names and the topics covered in each session. A variety of concordancing presentations and activities as described in chapter 3 (3.3.2) were used in these lessons. However, since the main focus of attention in class activities for the DDL group was learning the listed target patterns (table 4.1), the majority of activities were in the form of *pattern noticing* as introduced by Tribble and Jones (1990: 37-41). In this type of activity students are presented with the concordance lines in which the grammatical features of the key word is in question. The aim is to help the learners to generalize the pattern in which the word is being used. The technique requires the learners to answer a series of simple questions about the concordance lines and get closer to the target pattern while answering each question and finally generalize the target grammar pattern.

According to the principles of the DDL approach no explanation is given to the students at the beginning of the tasks and they are asked from the beginning to look at concordance lines to find out any regularities. They are informed that the lines are not interconnected and that it is not necessary to read the lines completely. In the beginning stages they are helped through raising questions leading to the pattern(s). The aim of the researcher is to train the learners to be independent autonomous learners.

Appendix N illustrates a complete version of the units prepared for the DDL group according to the prepared lesson plan shown in Appendix K. Here, I am trying to illustrate how the DDL units were prepared and how different types of activities were used for the purpose of teaching the target patterns. Unit 6 includes 7 tasks with a range of different types of concordance activities. Each task is explained separately based on the type of the activities. The theme of this unit is teaching how to connect 'cause and effect' clauses through the use of the words '*so*' and '*such*'. A short exercise introducing the words '*since*' and '*because*' as connectors of cause and effect is also given at the end of the unit.

Task 1: Familiarizing stage

The unit starts with a 'familiarizing stage' with the aim of helping students to notice the pattern in which the word '*so*' is being used. In task 1 students are asked to look at a concordance block of the word '*so*' with 13 lines and try to answer the 9 questions which follow.

The first three questions that require the students to identify the part of speech of certain words and underline some parts of the lines are aimed at familiarizing them with the context around the key word, *so*. Question 4 is on familiarity with a word collocation (*a source of energy*), and questions 5, 6, and 7 focus on the meaning relationships between the clauses before and after the key word. Question 8 asks the students to generalize the grammatical pattern (Cause-- *so* + adj + that-- effect) based on the previous questions asked and their answers. The main goal in this task is to train the learners to search for grammatical regularities among the concordance lines.

Unit 6

I will become so experienced that...

Task 1: Take a quick look at the following sentences and try to answer the questions below. (Do not read through the lines completely.)

1. beautiful paintings. They were so amazing that I even did not notice the passing of time.
2. flames, and redness of fire are so attractive that nobody likes to miss them. Let's say group activities.
3. like to Saderat. Cash cards are so beneficial that worth trying. Pay your bills and draw money from your bank.
4. lives in our lane because it was so easy that we could play everywhere but the children nowadays can buy things from the internet.
5. a dorm is that I will become so experienced that I can solve my problems easily.
6. broadcasting in television is so high that some businessmen with that money sponsor producing programs.
7. who really believes it. It is so important that it needs to be more seriously treated as of energy.
8. around these flickering screens so interesting that they spend much of their time in front of them, and they don't have time to study.
9. use a computer to chat, which was so interesting that I did not leave myself enough time to study. In a word, my wishes for future are so many that I cannot count. But first of all, I have always wished to use them.
10. use they rejected him. He was so unhappy that he could not eat for about 3 days. To make a long story short, he was so sad that he had to go to the hospital.
12. fortunately, sometimes it was so unscheduled that results in not doing any beneficial thing, and was not planned.
13. The love of the king to his wife, Montaz Mahal, was so great that Shah Jahan ordered to build the most beautiful mausoleum for her.

1. What is the part of speech of the word after 'so'?
2. What is the second word after 'so'?
3. Underline the complete sentence after so in lines 1, 9, and 11.
4. In line 7 the best word for the missing part is.....
a. an origin b. a source c. a root d. an aspect
5. In sentence 10, what is it that the writer cannot count? Why?
6. In line 13, why did Shah Jahan order to build the mausoleum?
7. According to the answers given to questions 5 and 6, can you guess the relationship between the clauses after and before 'that'?
8. Can you write a general pattern for the sentences in this concordance? Please show the relationships between the clauses around 'so'.
9. In the above concordances, underline the verb in the cause clause.

Task 2: Expanding stage

In task 2, the learners are required first to answer the 3 questions from the concordance lines and then, considering the previous pattern, generalize the pattern (so + adv + that).

Task 2: Look at the following concordances and then complete the activities.

1. reactions directly: 'So was that a yes or a no?' whilst the majority of sentence moods used by the students were negative.
2. we did not react. So, after that, vast killing of animals started for the sake of epicures.
3. because they grew so slowly that he couldn't tell what they planned to do. His mind learned to be more patient.
4. one society more so than that of the Greeks, most notably that of the Athenians. Consider the fact that the Athenians were so much more advanced than the Greeks.
5. it at home, I got so anxious that I wanted to go back home immediately. Now, cellular phones have changed so completely that a blind adherence to some of the rules, torn out of their context, is no longer valid.
7. Bodichon states so strongly that women held no importance or status in Victorian society that she was also personified, so does that make him the Devil? I think it does not. William Blake, on the other hand, was so much more of a poet than a philosopher.
9. development took place so slowly that it is difficult to know the point at which they became unrecognizable.

1. Which line follows the pattern as in the previous activity?
2. Underline the verbs before 'so' in lines 3, 6, 7, and 9.
3. How are these verbs different from the verbs in question 9 above?
4. Write a general pattern for lines 3, 6, 7, and 9 similar to the previous pattern.

As we see this is an extension pattern from the one in the previous task. The questions have been arranged from the easiest to the most difficult one so that generalizing an abstract rule could be possible when the students assemble their answers to the previous questions.

Task 3: Meaning relationships

In the first two tasks the concordance lines are presented in KWIC format whereas in this task, 4 concordance lines in full-sentence format are given to the students. The aim of the task which includes two sections (A and B) is to ascertain that the students can follow the meaning relationships between clauses in each sentence. In section A they should find either the reason for an effect or the result of a cause. In section B they are required to paraphrase the same sentences as in section A. They should produce a sentence which is closest in meaning to the sentences with the key word in question, that is, 'so'.

Task 3: Read the following sentences.

- 1 Video games can be so addictive that children spend almost all their free time playing them.
- 2 The intrusive noises of a television show are so annoying that you cannot concentrate on your work.
- 3 Protagonists are so brave that they physically eliminate their antagonists
- 4 Today technology is so developed that manpower is not needed any more.

A) Answer the questions below.

- 3A.1. In sentence 1, children seem to waste their free time. Why?
- 3A.2. In sentence 2, what is the reason 'you cannot concentrate on your work'?
- 3A.3. In sentence 3, what is the result that protagonists are brave?
- 3A.4. In sentence 4, why is manpower not needed?

B) Paraphrasing: Write a paraphrase sentence for the above sentences. (Sentence 1 has already been done for you.)

- 3B.1. *Children spend almost all their free time playing video games because they are very addictive.*
- 3B.2. _____
- 3B.3. _____
- 3B.4. _____

Task 4: Pattern noticing: such + adj phrase+ that

Task 4 is similar to task 1 presenting a concordancing block of the word 'such' functioning as a pre-determiner showing a cause and effect relationship between two clauses. In section A the students will notice that there is a pattern they need to discover. For this, they should first identify the key word (question 4A.1), underline the word 'that' after the key word (4A.2), and recognize the grammatical structure of the words between the key word and 'that' (4A.3). The last question (4A.4) is triggering a minor difference between the two forms of the pattern, i.e. 'such' followed by an article and/or without an article. In section B the students will identify the kind of meaning relationship within the sentences while writing answers to the three questions. Questions 4B.1 and 4B.2 are in fill-in-the-blank format and 4B.3 an essay type question for which they need to write an appropriate answer, here, 'cause and effect'

Task 4: Take a look at these concordances and then answer the questions that follow.

1. In short, make yourself **such** a valuable worker that neither your clients nor your boss and colleagues want to lose you
2. t you should bear in mind. He is **such** a kind teacher that we can get help from to discover our forgotten values
3. lution. Some criminals committed **such** awful crimes that the only sentence can be death. Not the cruel death
4. ybody wanted to meet him. He was **such** a kind man that he hadn't even a minute for himself. The two soc
5. ey of most of things. We are in **such** terrible living conditions that people are used to bad things with the
6. Southern hemisphere always faces **such** great financial problems that they are in crises that cannot be credi
7. d them that my parents came from **such** poor families that they had had to earn their own living since they w
8. argue that nuclear weapons have **such** destructive potential that war should be abolished to avoid the possi
9. Indeed, individual adjustment is **such** a complex phenomenon that it cannot be tested in experiments. Moreove
10. in an up-to-date way... It has **such** a great influence that we don't exchange ideas anymore during an even
11. Indeed, individual adjustment is **such** a complex phenomenon that it cannot be tested in experiments. Moreove
12. New species are appearing at **such** a rapid rate that the important process of scientifically identifying spe

A) Pattern noticing

- 4A.1. What is the key word in the above concordance lines?
- 4A.2. Underline the word 'that' after the key word.
- 4A.3. What is the grammatical structure between the key word and 'that'?
- 4A.4. In which lines 'such' is followed by an article?

B) Fill in the blanks

- 4B.1. In line 3 criminals would be sentenced to death because.....
- 4B.2. In sentence 5, terrible living conditions have caused.....
- 4B.3. What is the meaning relationship between the clauses before and after 'that' in these lines?

Task5: Matching Activity (Re-ordering the right context)

In this task the right-hand context of the key word, '*that*', is shuffled and students are asked to match the two sides of the key word in each line. There is some kind of cause and effect relationship between the clauses before and after the word '*that*' and the students need to figure it out. This task is a follow-up task to the 4 previous tasks aiming at deepening the learners' understanding of the patterns in question in this unit.

Task 5: Matching Activity. Match the right hand side clauses below (numbered 1 to 5) with the left hand clauses (lettered A to E).

1	My father has so much money	that	I wanted to go back home immediately.	A
2	I expect the president to have such a strong self-confidence		it is impossible to overlook the problem.	B
3	He is such a kind teacher		he can buy millions of dolls if I just ask him to.	C
4	When I left it at home, I got so anxious		we can get help from to discover our forgotten values.	D
5	we are now in such a critical situation		he dares to say his opinions aloud.	E

1. 2. 3. 4. 5.

Task 6: Gap filling activity:

This task is similar to gapfill exercise as in Tribble and Jones (1990: 50) in which the students are required to provide the key word. The context that helps the students to guess the missing word is a block of 5 to 8 concordancing lines with a KWIC format. In this task, however, the missing part is a phrase including one of the target patterns of the unit, ((cause-- so + adj + that-- effect) and (such + adj phrase+ that)).

Task6: Gap filling activity. Fill in the blanks between the two parts of each linen with the appropriate given phrases.

- A. So advanced that B. such a success that C. so desperate that
 B. D. so addictive that E. so abstract that F. such a way that

1.	So I wonder if the theoretical knowledge is		the students nearly learn nothing.
2.	Video games can be		children spend almost all their free time in front of the screen.
3.	People began to build robots and by time they became		they could think.
4.	People are		they cannot see real values of our life. Values turned up
5.	Our pupils behave in		we would like to smack them or send them to a loony-bin.
6.	This experiment has been		it is going to be continued and expanded.

Task 7: What does the word ‘since’ mean in these sentences?

A) Read the sentences below and try to figure out the meaning of the word ‘since’ in each line. Put **B** in the box in front of each line if the word ‘since’ means **because**, and put **F** if it means **from the time**.

1	Since everyone's life experiences are unique, people can make their lives as they like if they believe their thoughts.	
2	Since the very ancient time, fire has been the symbol of light, hotness, and also beauty.	
3	Besides this personal experience, religious people believe in after life since God warned them that their life is continued after death.	
4	I've decided not to continue my studies since I delivered my speech last Friday.	
5	Among the best stories I have ever read, Jane Eyre is the pick of the bunch since I have found it fascinating in many aspects.	
6	Since I will become familiar with different thoughts and cultures in the dorm, my thought will improve.	
7	Cosmetics surgery has been increased uncontrollably in Iran since last year.	
8	In the end, natural order of life and death says: "People must die, since some others are about to be born"!	
9	After more than half a century since the innovation of the first TV in the world, and after its worldwide acceptance in all	
10	Music has been a part of people's lives since the time civilization began.	

B) Rewrite sentences in which ‘since’ means because in the spaces provided below. Replace since with other words or expressions with the same meaning.

Task 7: Meaning recognition (Full-sentence format)

This task is very similar to 'Homonyms and synonyms' exercise in Tribble and Jones (1990: 41). The key word is a homonym, here, the word '*since*', in 10 full-sentence concordance lines. The students are asked to differentiate between '*since*' as a preposition meaning '*from a point in time*' and '*since*' as a conjunction meaning '*because*'.

As it is shown in all these activities (tasks) no explanation is given in the hand-outs. The learners are guided to find out the pattern hidden among the concordance lines. The teacher can function as a learning facilitator answering the learners' questions and helping them in answering the raised questions in the hand-outs. Of course, it should be born in mind that these DDL units have been prepared to work out as a part of class presentations for 15 to 20 minutes and in the rest of the class time the textbook exercises and explanations would be worked out.

4.3.1.6 Preparing pretest and posttest

Two similar tests as for pre and post-test were prepared to be administered in both groups. In all parts of the tests the language points in question as well as the item format were exactly the same. The differences between the tests were at the wording level to avoid any possible practice effect that might lead students to memorise the items and answer the questions in the post-test. The pre-test was administered in the third session and the post-test in the final session of the term. Each test is composed of six parts. See Appendix G

Before I go on to explain the 6 parts of the test, it is, I think, necessary to give a brief account of the two types of L2 knowledge conceptualisations, i.e. declarative and procedural knowledge.

Ellis (1994, p32) defines declarative knowledge as 'knowledge stored as facts'. He states that learning a language, like any other type of skill learning involves the development of procedure that transform declarative knowledge into a form that makes for easy and efficient performance. He emphasises that it is important to be able to distinguish between learners' implicit and explicit knowledge of an L2. In his research on measuring implicit and explicit knowledge of L2 learners, he considers the distinction made between declarative and procedural knowledge as put by Anderson (1983). Anderson characterizes the language declarative knowledge as 'knowledge that consists of factual information about the L2 that has not yet been integrated or automatised'. Procedural knowledge refers to knowledge that has become proceduralised so that it is available for automatic and unconscious use. In his attempt at measuring implicit and explicit knowledge of a second language, Ellis (2005: 168) concludes that it is possible to develop tests that will provide relatively separate measures of implicit and explicit knowledge. Therefore, what I have tried to test in the first 5 parts of the test was aimed at measuring the participants' declarative knowledge of linguistic units of words, connectors, and phrases frequently used in developing a paragraph. Since three types of paragraphs - enumerative, compare and contrast, and cause and effect- had been chosen to work on during the term, the linguistic units for testing were chosen accordingly.

4.3.1.6.1 Testing declarative knowledge:

Multiple choice and short answer questions

In part 1, there are 12 multiple-choice questions to be answered in 12 minutes; in part 2 students are asked to connect the sentences using sentence connectors given. Part 3 asks them to paraphrase sentences and part 4 makes them complete sentences with their own words. The focus of attention in all of these questions is connecting ideas through logical relationships between

sentences. In part 5 students read a paragraph with 4 missing words. They are asked to choose the best word from among four given choices. Table 4.4 below gives a summary of these 5 parts of the test.

Table 4.4: A summary of pre- and post-test items (testing declarative knowledge)

Part	No. of items	Type/ format	Measurement (objectives of measurement)
1	12	Multiple-choice questions	familiarity with the target linguistic elements and patterns in question during the class sessions
2	4	Sentence connection	familiarity with inter and intra sentential connectors of ideas and clauses
3	4	Sentence paraphrasing	ability to use substitution words/expressions in sentences of cause and effect
4	4	Sentence completion	ability to use appropriate words or expressions to fill the blanks connecting contrasting ideas
5	4	Guided paragraph writing	ability to recognise correct linking adverbials

There are some minor changes between pre-test and post-test. In part 1, the stems of multiple-choice questions have been changed for post-test in order to reduce the possible memory effect. The purpose of the first 5 parts of the test was to evaluate the participants' declarative knowledge of language rules of use, familiarity with elements of language in general and frequently used patterns and structures and also organisational elements in a paragraph such as connectors in particular.

4.3.1.6.2 Testing procedural knowledge:

Paragraph writing task

The 6th part of the test which asked the participants to write on one of the given topics aimed at evaluating the participants' procedural knowledge of the language. That is, their ability to

produce language, and to communicate in writing. The students were divided into two groups of equal size in number for this part and they were asked to write a paragraph of about 150 to 200 words in length. Group A was given three similar topics to write a paragraph of comparison. They were allowed to choose one topic from the three given: 1) Compare two of your teachers, 2) Azad versus state universities in Iran, and 3) Similarities and differences between you and another member of your family. Students in group B were asked to write a paragraph of cause and effect. The followings are the three given topics which they had to choose from: 1) Possible reasons for Iranian young people to stop higher education, 2) The effects a teacher has had on your character, your feelings about school or your approach to life in general, and 3) The results of increasing population in Iran in near future. It is to say that the very same topic that each subject had chosen to write in the pre-test was given for the post-test. This was done because I was interested in following up their progress in developing the same ideas after the term trainings, instructions and practices.

4.3.2 Questionnaires

Two questionnaires were developed to elicit some qualitative information in addition to the quantitative data collected from the pre- and post-test. Both questionnaires were taken from Sripicharn (2002) with some revisions to meet the requirements of the present study. Since the main focus of Sripicharn (2002) was on learning vocabulary and collocations through DDL approach, he included a number of questions which directly address the issues of vocabulary learning. These questions were replaced with the alternative ones focusing on questions regarding developing writing skills.

4.3.2.1 Questionnaire One

Questionnaire one (Appendix B) was distributed among both groups in the beginning of the term. The aim was to obtain information about the participants' personal information, their English learning background, their learning strategies preferences, their familiarities with different language learning techniques and skills, etc. This questionnaire could help the researcher in determining the extent to which the participants groups (experimental and control) are comparable.

There are 5 main topics sought for in this questionnaire. In topic one (question 1) participants are asked to give general information about their names, age, gender, year of studies at the university, and Grade Point Average (GPA) in the previous terms. Topic 2 (question 3) elicits the participants' reasons and motivation for learning English (Why do you learn English?). They are asked to select any number of the 9 statements given to indicate their reasons for studying English. The last item in this topic requests them to write down any other possible reason if they have.

In order to determine the participants' language learning motivation, the framework introduced by Nelas et al (2000) was used. In this framework which is based on 'self-determination theory' (Deci and Ryan, 1985), there are two general types of motivation, one based on intrinsic interest in the activity per se and the other based on rewards extrinsic to the activity itself. Intrinsic motivation generally refers to that kind of motivation that engages the learner in an activity because that activity is enjoyable and satisfying to do whereas extrinsically motivated behaviours are those actions carried out to achieve some instrumental end, such as earning a reward or

avoiding a punishment (Nelos et al, 2000, p 61). Hence, the respondents' response to anyone of the questions in section three of the first questionnaire could be interpreted as an indication of the person's inclination to any of these two kinds of motivation. Table 4.5 shows the allocation of each statement to intrinsic or extrinsic motivation categories.

Table 4.5 Indicative statements of intrinsic and extrinsic motivations used in questionnaire 1

Why do you learn English?	Motivation
Because it helps me to get a good and well-paid job	Extrinsic
Because it helps me to prepare myself for studying abroad	Extrinsic
Because I like the language	Intrinsic
Because it helps me to be able to communicate with foreigners	Intrinsic
Because it is very widely spoken in the world today	Extrinsic
Because it helps me to pass the exams	Extrinsic
Because it helps me to get information or pleasure (e.g. reading English-language newspapers, watching English films)	Intrinsic
Because it is fashionable	Extrinsic
Because it helps me to learn about other cultures through English	Intrinsic

In the third topic (questions 2, 4, 5, 6, 7, 8, and 9), information about participants' experiences of learning English is being asked. They have to specify the number of years they have been learning the language, if they have been to an English speaking country, English courses they have taken at the university and outside of the university (and the number of hours if they have). Question 6, which is in a 5-scale frequency format, asks the participants' frequency of learning activities outside classroom. For example, they need to answer how often they 'watch English movies or listen to English songs'.

Topic 4, question 10, focuses on the kind of learning styles and strategies that the participants have been through during the previous terms. The main purpose of this section is to seek for the degree to which they have been involving with inductive and deductive learning styles. Questions such as how often your teacher ‘ask[ed] you to observe grammar points by yourself from songs, newspapers, or other given examples’ are concentrating on inductive-oriented learning strategies whereas questions like how often your teacher ‘[Gave] and explain[ed] grammar rules or ask[ed] you to read grammar books’ are surveying participants’ involvement with deductive-oriented learning strategies.

In the final topic (question 11), students are asked to announce their attitudes and feelings towards the above mentioned learning strategies, i.e. inductive and deductive. The questions appear in a statement format and the students are asked to announce their degree of agreement within a 5-point agreement scale from “totally disagree” to “totally agree”. There are 9 statements in this question ranged from the inductive extreme to the deductive extreme. Respondents who agreed with the statements: ‘The teacher should be the centre of English classes’, ‘the learners should be given some rules first and then do some practice’, and ‘the teacher should obviously correct the student's errors’ were considered as deductively oriented learners and those who believed that ‘The students should try to find and correct language errors all by themselves’, ‘The learners should discover grammar rules from examples by themselves without any help from the teacher’, ‘The students should be the centre of English classes’, ‘The teacher should let the students learn from examples first and then give and explain language rules’, and ‘The teacher should point out errors for students and ask them to correct the mistakes by themselves’ were deemed inductively oriented language learners. Response to the statement

that said 'The teacher and the students should play an equal role in English classes' showed no exact inclination to any one of the two strategies and therefore considered as a neutral statement.

4.3.2.2 Questionnaire Two

The second questionnaire was administered to the DDL group (experimental group) in the final session of the classroom attendance. Participants were asked to give their ideas, comments and attitudes towards the new method being taught by through the term (See Appendix C). The purpose of collecting this kind of data was to answer the fourth research question which concerns about the participants' ideas, and attitudes towards the DDL-based teaching materials.

This questionnaire consists of three parts. The first part with 4 questions (1 to 4) elicits the participants' attendance in the DDL sessions asking them if they missed any session, whether they have been late to class, if they did the exercises as homework, and if they had have any experience of working with concordance lines before this term. The second part appearing in question 5 involves participants' evaluation of the DDL units in terms of format and presentation, appropriateness, and relevance of the DDL units. There are 21 statements in this question. Each statement associates with a 5-point agreement scale and the participants are asked to tick the box which best applies to their ideas. For example, they have to indicate the extent to which they think the units have been interesting, well formatted, easy or difficult to understand, too lengthy or short enough to do, and helpful to improve their writing and reading skills (statements 1 to 6). They are also required to show their agreement or disagreement with the statements such as 'the units should be used every time you come to writing class', 'the units are

relevant to paragraph writing course’, and ‘the units help you discover new patterns’ (statements 7, 8, and 9). Statements 10 and 11 seek for the students’ agreement on whether the DDL units help them learn certain linguistic features such as new vocabulary, idioms, expressions, and grammar or structure.

The direct relevance of the DDL units to the ‘Paragraph Development’ course syllabus is elicited with statements 12 to 16. In these questions the participants are asked if they agree that the units help them to ‘define something in [their] paragraph’, ‘connect cause-effect clauses’, ‘connect clauses of comparison and contrast’, ‘make a list in [their] writing (enumeration)’, and ‘narrate an event that has happened to [them]’.

The easiness of the instructions of the units and usefulness of language points selected are asked through statements 17 and 18. The three final statements 19, 20, and 21 make the participants think about concordance lines in the units and voice their agreement or disagreement if the concordance lines are ‘not difficult to read’, and ‘well chosen’, and also ‘observing concordance lines is an interesting way of learning English’.

In the third part of the questionnaire the participants have the chance to answer 5 questions in their own words. Questions 6 and 7 ask them to mention the units they like most and the one they do not like or consider it too difficult to work out. In question 8 they need to say what they have learned from DDL exercises, if any. They can give their preferences for the language points and aspects to be presented in the units in question 9 and finally they can give their suggestions of

how to improve the units in question 10. The results from the analyses of this questionnaire appear in chapter 6.

4.3.3 Interviews

The oral interview session was conducted right after the post-test session in the DDL group. The aim was to supplement questionnaire two in regard to evaluating the participants' attitudes towards the DDL method. The rationale behind conducting the oral interview in this study lies in the idea that collecting data through consecutive and interrelated questionnaire and interview, an example of a mixed method research, would help overcome possible weaknesses of each individual method (Dornyei, 2007: 24). Moreover, it has been suggested that we can gain a better understanding of a complex phenomenon (learners' attitudes towards a new method of language learning) by converging numeric trends from quantitative data (questionnaire two in this study) and specific details from qualitative data (the interview). According to Dornyei "mixed methods research has a unique potential to produce evidence for the validity of research outcome through the convergence and corroboration of the findings" (2007: 45). Hence, the interview session was designed for this study in order to collect a set of complementary qualitative data to triangulate its results with those of questionnaire two (explained in 4.3.2.2). These are all attempts to find an answer as concise as possible for the fourth research question: What is the Iranian EFL learners' attitude towards using the DDL approach in a 'Paragraph Development' course?

The interview session was intended to be an informal Q & A meeting between the teacher and the interviewees. A sample of stratified randomly selected participants in the DDL group (experimental group) was asked to participate in an informal interview with the researcher (the

class teacher) right after the post-test session. Nine students (7 female and 2 male) out of 26 (20 female and 6 male) participated in the interview session and answered the questions raised by the researcher. All of the interviews were conducted in the participants' native language, Persian. The audio recorded materials were transcribed and then translated into English for analysis. Before the interview session the interviewees were all individually informed that they would be voice recorded during the session. An English language expert, a university colleague, was asked to check the reliability of the translation of the transcriptions. All cases of concerns raised by him were resolved after making necessary revisions.

As far as the interview questions are concerned, the researcher knew that in a semi-structured interview like this 'topics and issues rather than questions determine the course of the questions' (Nunan, 1992, p 149) and usually "there is a set of pre-prepared guiding questions and prompts, the format is open-ended and the interviewee is encouraged to elaborate on the issues raised in an exploratory manner, and the interviewer will ask the same questions of all of the participants, although not necessarily in the same order or wording, and would supplement the main question with various probes" (Dornyei, 2007: 136).

In choosing either a semi-structured interview or a fully structured one it was taken into account that although the latter would have precluded any unanticipated responses yet at the same time I wanted to delimit the number of topics so that I could make comparisons across the data. Therefore, having a set of general topics and guiding questions in mind, I conducted the interview sessions. The general topics of how the students might have felt at the end of a term getting familiar with DDL units, the kind of activities they had done, and their expectations of

such kinds of units could form the questions of the interview. The list of the questions asked during the 9 interviews can be seen in Appendix D.

4.4 Data collection procedures

The data collection procedure took a complete educational semester starting from 10th September 2012 and ended on 9th January 2013. The subjects were all Iranian students majoring English as a foreign language. They were taking a 2 credit “Paragraph Development” course as a compulsory course at their third semester of their university attendance. The subjects were from two universities, Shahreza Azad University (SHAZU) and Shahrekord University (SHKU). Shahreza Azad University (SHAZU) is one of the 150 branches of the Islamic Azad University across Iran and other countries. Students are admitted through a nationwide entrance exam prepared and administered by the central office of the Islamic Azad University. Shahrekord University is a state run university under the control of The Ministry of Science, Research and Technology. Students are admitted from among the candidates taking part in the national entrance exam for the universities which is administered by the office of Educational Assessment (SAZMAN-E-SANJESH).

Since I was about to teach two groups of students in these two universities on the one hand and I needed a control group and an experimental group in order to get the necessary data for my research on the other hand, I considered the SHKU students as the experimental group (DDL) and the SHAZU students as the control group (Non-DDL). The control group attended the class on Saturdays from 29th September and the experimental group on Mondays from 24th September.

Both groups attended class for 13 sessions including two sessions of pre-test and post-test. The control group is composed of 27 students and the experimental group 30.

4.5 Conclusion

The chapter gives a complete description of the research methodology and its instrumentation (the corpora used for the materials preparation stage, the textbook analysis before teaching materials development, the DDL units prepared for the experimental group, the tests, questionnaires, and interview questions) used for the data collection procedures. The data collection stage took place in Iran from September 2012 to January 2013. Questionnaire one was completed by both groups in the beginning of the term. The results of this questionnaire could help the researcher in determining the extent to which the groups of participants (experimental and control) are comparable. In order to evaluate any possible learning effect of DDL method pre- and post-tests were administered to both groups for the purpose of comparing their results in the data analysis stage of the research. As for evaluating the DDL participants' attitudes towards DDL method, questionnaire two and interviews were used to elicit the required information. The results of the pre- and post-tests will be reported in chapter 5 aiming at answering the first three questions of the study. Chapter 6 will give a detailed account of the analyses done on questionnaire two and the interviews in order to answer the fourth question of the study.

Chapter Five

Quantitative Data Analysis

5.1 Introduction

The data collected for this study can be classified into two basic types: the quantitative data through the two tests administered at the beginning and at the end of the semester, i.e. pre-test and post-test, and the qualitative data which included questionnaires and 9 one-to-one interviews. The first type of data was analyzed using certain statistical operations. The aim of these statistical calculations was to reach appropriate answers to the first three research questions:

- 1) Do Iranian EFL learners achieve higher improvements in their declarative knowledge scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
- 2) Do Iranian EFL learners achieve higher improvements in their analytic writing scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
- 3) Do Iranian EFL learners achieve a greater improvement in their CAF scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?

Table 5.1 shows a schematic framework of all types of quantitative data for each participant. By ‘declarative’, in this table I mean the first 5 parts of pre and post-test which is aimed at measuring the participants’ declarative knowledge regarding the target grammatical points and patterns taught in both DDL and non-DDL groups.

Table 5.1: different types of collected data through pre- and post-test

Declarative						Procedural												
						Analytic scoring					CAF Study							
Complexity		Accuracy		Fluency														
Part 1	Part 2	Part 3	Part 4	Part 5	Total	Cont.	Org.	Voc.	language use	Total	C/T	DC/C	EFT/T	E/T	MLT	MLC	MLEFT	

‘Procedural’, here, means the actual writing part of the tests in which participants have been asked to write on a relevant topic and show their writing skill in use.

This chapter reports and discusses the analyses done for the above three questions. The data collected after administering pre- and post-tests (Appendix G) were first quantified in three steps (see section 5.2 and its sub-sections (5.2.1, 5.2.2, and 5.2.3) below). Following this, relevant statistical operations, reported in 5.3, were conducted to get the intended results. A summary of the main results will be given at the end of the chapter which leads us to chapter 6 for the qualitative analysis of the collected data.

5.2 Quantification of the data

5.2.1 Declarative parts of pre- and post-test:

Multiple-Choice Questions (MCQ) and Short answer items

In order to quantify the participants’ performances on pre- and post-tests three steps were taken. Firstly, the first 5 parts of the tests, which were intended to measure the participants’ declarative knowledge of language elements and rules of use, were scored both objectively and subjectively by the researcher. This was done according to the appointed marks for each question and each part as appeared on the exam papers.

In part 1 there were 12 multiple-choice questions for 12 marks. In part 2 students were asked to connect the sentences using sentence connectors given. Part 3 asked students to paraphrase sentences and part 4 required them to complete sentences with their own words. The focus of attention in all of these questions was connecting ideas through logical relationships between

sentences using their knowledge of grammar in. Each part was given 8 marks (2 marks for each test item). In part 5 of the test students read a paragraph with 4 missing words. They had to choose the correct answer from among four options given. They could obtain 4 marks for this part. The total possible score that they could gain from these 5 parts - declarative part- was 40 (See Appendix G). Table 5.2 shows the scores of both groups in pre-test and post-test for each of the five parts.

Table 5.2: Summary of the descriptive results of the first five parts of pre- and post-test in the Non-DDL and DDL groups

Group	Condition	Part 1 12		Part 2 8		Part 3 8		Part 4 8		Part 5 4		Total 40	
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Non-DDL (N = 24)	Pre-test	7.21	2.21	3.48	2.04	2.19	1.61	3.00	2.01	2.33	0.96	18.20	6.95
	Post-test	7.63	2.30	3.58	1.76	2.97	1.64	3.22	1.80	2.54	0.88	19.93	6.51
DDL (N = 26)	Pre-test	9.27	1.46	5.17	1.88	4.60	2.19	5.10	1.46	2.92	0.84	27.06	5.63
	Post-test	10.00	1.33	5.53	1.50	4.98	1.69	5.38	1.24	3.00	0.69	28.88	3.48

M = Mean SD= Standard deviation

5.2.2 Analytic Scoring

As observed in chapter 2, the most objective scoring scale in which six major elements of writing are scored is called *analytic scoring*. One of the best known and most widely used analytic scales in ESL was created by Jacobs et al. (1981). In this scale scripts are rated on five aspects of writing: content, organisation, vocabulary, language use, and mechanics. The five aspects are differentially weighted to emphasize, first, content (30 points) and next language use (25 points). Organisation and vocabulary weighted equally (20 points) and mechanics received very little emphasis (5 points). Since this scale was developed for longer essays than 150 to 250- word length paragraphs, in the present research in which students were not expected to produce paragraphs longer than 200 words, and therefore not a wide range of linguistic elements might appear in every single short paragraph, I decided to revise the scale in a way that scores given to

each component was reduced to 50% so that total score would be 50 rather than 100 as its original version indicates. Also, the last component i.e. MECHANICS was deleted and its allocated points was given to LANGUAGE USE. Therefore, different aspects of writing were rated with different weighting:

- CONTENT 15 points
- ORGANIZATION 10 points
- VOCABULARY 10 points, and
- LANGUAGE USE 15 points

See appendix H for the revised version of Jacobs *et al.*'s analytic scoring profile. Table 5.3 illustrates the summary of numerical values for each component of this analytic scoring procedure in the Non-DDL and DDL groups.

Table 5.3: Summary of the descriptive results of analytic scoring in the Non-DDL and DDL groups

Group	Condition	Content 15		Organization 10		Vocabulary 10		Language use 15		Total 50	
		M	SD	M	SD	M	SD	M	SD	M	SD
Non-DDL (N = 24)	Pre-test	7.67	1.76	5.29	1.40	5.63	1.41	8.00	2.32	26.58	5.87
	Post-test	8.75	2.23	6.33	1.40	5.88	1.15	8.63	1.79	29.58	5.87
DDL (N = 26)	Pre-test	9.73	2.13	7.12	2.01	6.69	1.49	10.31	2.35	33.85	6.96
	Post-test	11.12	2.76	7.04	1.37	6.92	1.62	11.27	2.47	36.35	7.86

M = Mean SD= Standard deviation

5.2.3 Analysis of Complexity, Accuracy and Fluency (CAF)

The third and perhaps the most detailed analysis of the participants' products, the written paragraphs in the pre- and post-test sessions, was done according to Wolfe-Quintero et al. (1998) to measure foreign language writing development. According to this approach (discussed in 2.5.1) the following features should be accounted for: a) **three measures of fluency**, i.e. mean length of T-unit (MLT), mean length of clause (MLC), and mean length of error-free T-unit b)

two measures of accuracy, i.e. error-free T-units per T-unit, and errors per T-unit c) **two measures of grammatical complexity**, i.e. clauses per T-unit (C/T), and dependent clauses per clause (DC/C), and d) **two measures of lexical complexity**, i.e. total number of word types divided by the square root of two times of total number of word tokens, and total number of sophisticated word types divided by total number of word types.

All of the files (100 written scripts) were first tagged for T-units (T), independent clauses (IC) and dependent clauses (DC), and then attempts were made to measure the components of CAF. A T-unit is defined by Hunt (1966: 735) as “one main clause plus whatever subordinate clauses happen to be attached to or embedded within it”. For this reason participant C24 from the Non-DDL group was taken out of the CAF data list because both paragraphs of hers were grammatically too weak to be analysed regarding T-units identification. Therefore the number of participants for the CAF statistical analyses was reduced to 23.

For the first two measures of fluency, MLT and MLC, the number of words were divided by the number of T-units and clauses respectively. Word measurements, as far as word types and tokens are concerned were calculated through the use of AntConc software. When I talk of ‘word’ in the analysis, it is defined in the same way it is treated in this software.

As for ‘Accuracy’ measures, and the ‘mean length of error-free T-unit’, which is the third attribute of the Fluency measures, there was a need to do a thorough error analysis of all the scripts. The error analysis framework proposed by Storch (2007) - a revised version of the error analysis model of Bardovi-Harlig and Bofman (1989) - was used for this purpose. In order to do

the error analysis, all of the written scripts were imported into a spreadsheet file; each T-unit was placed in a cell and for any occurrence of an error in each T-unit one score was recorded in the next cell. For example if there were an error observed in a T-unit, number 1 was recorded in the next cell, for a T-unit with no error zero was recorded, and so on. In this way the column of the cells next to the column of the T-units represented the number of errors in each T-unit. The total number of errors in a script could be obtained by summing up the column of number of errors. However, it should be pointed out that the exact types of errors were not considered the main focus of the analyses because the number of ‘errors per T-units’ and ‘error-free T-units’ were the two attributes being sought for. Therefore, the occurrence of an error of any type was considered as an error disregarding its type or classification.

As far as syntactic complexity is concerned, the data was analysed in terms of clauses per T-unit (C/T), and dependent clauses per clause (DC/C). For the purposes of this study, measures of lexical complexity were removed from the analyses. The reason for this was that the classes were not aimed at teaching vocabulary and improving students’ lexical knowledge. In fact, no section of the lessons either in the textbook or the DDL units was allocated to teaching vocabulary and very few vocabulary activities were done in class sessions. Therefore, evaluation of students’ vocabulary improvement was irrelevant to the aim of this research project. Hence, by complexity I mean ‘syntactic complexity’. Table 5.4 below shows the summary of the CAF measures in both groups of Non-DDL and DDL.

Table 5.4: Summary of CAF measures in the Non-DDL and DDL groups

Feature Group		Complexity				Accuracy				Fluency					
		C/T		DC/C		EFT / T		E/T		MLT		MLC		MLEFT	
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Non-DDL (N = 23)	Pre-test	1.43	0.42	0.26	0.18	0.38	0.22	1.09	0.53	11.45	3.34	8.22	2.25	7.94	3.98
	Post-test	1.40	0.25	0.27	0.13	0.35	0.16	1.18	0.52	11.21	2.74	8.02	1.34	8.59	3.20
DDL (N = 26)	Pre-test	1.49	0.33	0.30	0.12	0.43	0.28	0.89	0.54	13.86	3.92	9.41	2.28	10.55	5.32
	Post-test	1.48	0.26	0.30	0.13	0.53	0.22	0.69	0.44	13.20	3.26	8.96	1.51	12.06	4.37

C/T= clause per T-unit
E/T= error per T-unit
M= Mean

DC/C= dependent clause per clause
MLT= mean length of T-unit
SD= standard deviation

EFT/T= error free T-unit per T-unit
MLC= mean length of clause
MLEFT= mean length of error free T-unit

5.3 Statistical procedures

In order to evaluate the students' performances on each part of the pre- and post-tests certain statistical procedures were applied using the SPSS statistical package. Since the two groups of participants were from two different universities, it was necessary to compare them on the ground of language proficiency at the beginning of the study (before any kind of intervention). Two independent samples t-tests were conducted: one on the total scores of the declarative part of the pre-test and one on the total score of the analytic scoring on the procedural part of the pre-test, i.e. the written paragraphs. A significant difference between groups on both aspects of this comparison showed that the groups were different at the beginning of the study as far as language proficiency is concerned. Regarding the results of the t-test between the mean scores of declarative part of the pre-test, as shown in table 5.5, there is a significant difference in declarative scores between Non-DDL (M = 18.20, SD = 6.95) and DDL (M = 27.06, SD = 5.63; $t(48) = 4.96, p \leq 0.005$, two tailed). In regard to the participants' writing ability before any kind of treatment, an independent samples t-test between the mean of analytic total scores of Non-

DDL ($M = 26.58$, $SD = 5.87$) and DDL ($M = 33.85$, $SD = 6.95$; $t(48) = -3.97$, $p \leq 0.005$, two tailed) showed that the difference between groups was significant.

Table 5.5 Independent samples t-test for Declarative and Analytic scoring between Non-DDL and DDL groups in pre-test condition

		Mean	SD	Paired t-test (2-tailed) $df = 48$; $P < 0.05$
Total declarative pre-test scores (40 points)	Non-DDL (N= 24)	18.21	6.95	$t = -4.96$ $p = 0.000$
	DDL (N= 26)	27.06	5.63	
Total analytic pre-test score (50 points)	Non-DDE (N= 24)	26.58	5.87	$t = -3.97$ $p = .000$
	DDL (N= 26)	33.85	6.95	

The statistical procedure of ANCOVA was chosen to compare the participants' performances in the pre-test condition with that of the post-test condition. In this way, it would be possible to correct for the initial differences observed between the groups at the pre-test stage. The reason for using ANCOVA was that it will let us control for the students' pretest ability in analyzing the final test scores. Pallant (2010) mentions that ANCOVA "is also handy when [we] have been unable to randomly assign [our] participants to the different groups, but instead have had to use existing groups (e.g. classes of students)" (p: 298). This is the situation in the present study. According to Hatch and Lazaraton (1991) using ANCOVA in such a situation increases the internal and external validity of the study. That is, we can feel more confident that any claims we make about differences in the two groups after the treatment are not due to preexisting differences in the groups. The following three sections present the details of these analyses.

5.3.1 Statistical procedures for Declarative parts of pre- and post-test:

MCQ and Short answer items

In order to answer the first question raised in the study, "Do Iranian EFL learners achieve higher improvements in their declarative knowledge scores after being taught through the DDL approach than those who were taught through Non-DDL approach?" a one-way between-groups analysis of covariance (one-way ANCOVA) was conducted to compare the effectiveness of two different forms of instruction designed to improve the participants' declarative knowledge of English. The independent variable was the type of class presentation (Non-DDL, DDL), and the dependent variable consisted of scores on the post-test condition administered after the intervention was completed. Participants' scores on the pre-test administration were used as the covariate in this analysis.

The independent samples t-test showed that the mean scores of the groups after treatment were significantly different on the post-test ($p \leq .005$). However, the significant difference between the mean scores at the pre-test time ($p \leq .005$) called for the ANCOVA analysis. The comparison of the adjusted scores conducted through the ANCOVA analyses showed that the difference was still significant at the post-test time ($p = .005$). Table 5.6 illustrates the results in detail. Therefore, we can conclude that the DDL group could have improved their declarative knowledge more than the non-DDL group could have done. It would mean that the precise answer to the first question is a positive response.

Table 5.6 Independent samples t-test and ANCOVA analyses for Declarative scores between Non-DDL and DDL groups

	Non-DDL (N= 24)		DDL (N = 26)		P1	P2
	Mean	SD	Mean	SD		
Declarative pre	18.21	6.95	27.06	5.63	.000	-
Declarative post	19.94	6.51	28.88	3.48	.000	.005

P1 = Independent samples t-test P2 = ANCOVA

5.3.2 Statistical procedures for Analytic Scoring

The second question posed in this study concerns the Iranian EFL learners' paragraph development within the analytic framework as introduced in chapter 2. The question is: "Do Iranian EFL learners achieve higher improvements in their analytic writing scores after being taught through the DDL approach than those who were taught through Non-DDL approach?"

This question could be answered at two levels. At the macro-level the overall gains of the groups on total Analytic scoring should have been compared and at the micro-level the comparison should have been broken down into comparison of the four different features of the Analytic scoring: 'Content', 'Organization', 'Vocabulary', and 'Language use'. For the macro-level comparison an independent samples t-test was carried out on total Analytic scores on the post-test. The results showed a significant difference between mean scores ($P = .001$). The results of the ANCOVA ($p = .364$), however, after adjusting pre-test scores, show no significant differences between groups. It means that the observed improvements in the total Analytic scores in both groups might not be attributed to any particular method of teaching, whether Non-DDL or DDL. Table 5.7 shows the results.

Table 5.7 Independent samples t-test and ANCOVA analyses for total Analytic scores between Non-DDL and DDL groups

	Non-DDL (N= 24)		DDL (N = 26)		P1	P2
	Mean	SD	Mean	SD		
Total Analytic pre	26.58	5.87	33.85	6.95	.000	-
Total Analytic post	29.58	5.87	36.35	7.86	.001	.364

P1 = Independent samples t-test P2 = ANCOVA

As far as micro-level comparison is concerned, the two groups were compared in terms of their scores obtained on different features of the Analytic scoring. To do so, some independent samples t-tests were used. The level of significance was determined to be .0125. This level of significance was determined as a Bonferroni adjusted alpha since 4 t-tests were required in the statistical analyses in this section ($.05/4 = .0125$).

The results showed that the mean scores of 'Content' on the post-test were significantly different between Non-DDL (M=8.75, SD = 2.23) and DDL (M= 11.12, SD= 2.76; $t(48) = 3.72$, $p = .002$). However, the comparison of the adjusted scores conducted through the ANCOVA as illustrated in table 5.8, showed that the difference is not significant at the post-test time ($p = .12$). Therefore, we can conclude that although both groups have improved the 'Content' feature of their writings after a term-long period either under the Non-DDL instructional context or the DDL context, after controlling the pre-existing differences via ANCOVA; it was revealed that there is no preference of one method over the other.

As for the 'Organisation' feature, as we can see in table 5.8, both independent samples t-test on post-test means (Non-DDL Mean = 6.33, SD = 1.40 and DDL Mean = 7.04, SD = 1.37; $t(48) =$

1.80, $p = .079$) and ANCOVA ($p = .78$) indicated that no significant differences have been observed in the groups' achievement in the feature in question.

Table 5.8 Independent samples t-test and ANCOVA analyses for the four features of 'Analytic' scores between Non-DDL and DDL groups

Variable	Groups	Non-DDL (N= 24)		DDL (N= 26)		P1	P2
		Mean	SD	Mean	SD		
Content	Pre-test	7.67	1.76	9.73	2.13	.001	-
	Post-test	8.75	2.23	11.12	2.76	.002	.12
Organisation	Pre-test	5.29	1.40	7.12	2.01	.001	-
	Post-test	6.33	1.40	7.04	1.37	.079	.783
Vocabulary	Pre-test	5.63	1.41	6.69	1.49	.012	-
	Post-test	5.88	1.15	6.92	1.62	.012	.328
Language use	Pre-test	8.00	2.32	10.31	2.35	.001	-
	Post-test	8.63	1.79	11.27	2.47	.000	.015

P1 = Independent samples t-test ($p \leq 0.0125$)
P2 = ANCOVA

The third analytic scoring feature under investigation was '**Vocabulary**'. The statistical analyses in this case showed similar results with those of the 'Content'. Although independent samples t-test at time one (pre-test) and time two (post-test) show significant differences ($p = .012$) between Non-DDL and DDL groups, the ANCOVA results, after adjusting pre-test scores, show no significant differences between groups ($p = .328$). It means that slight observed improvements in the 'Vocabulary' feature in both groups might not be attributed to any particular method of teaching, whether Non-DDL or DDL.

The final feature of analytic scoring which went under scrutiny was 'Language use'. The independent samples t-test conducted on the mean scores of 'Language use' on the post-test showed that there is a significant difference between Non-DDL (M=8.63, SD = 1.79) and DDL (M= 11.27, SD= 2.47; $t(48) = 4.30, p \leq .005$). This significant difference was verified by the results of the ANCOVA ($p = .015$). Table 5.8 illustrates the results in detail. Therefore, we can conclude that the DDL participants have improved their 'Language use' knowledge more than the non-DDL group could have done.

5.3.3. Statistical procedures for the CAF Study

5.3.3.1 Introduction

The third question of the thesis which concerns the impact of the DDL approach on the improvement of complexity, accuracy and fluency (CAF) features of the paragraphs written by the Iranian EFL learners, consists of three different but related components. In order to give the most comprehensive answer to the question the three following sub-questions were formed:

- 1- Do Iranian EFL learners achieve a greater improvement in their Complexity scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
- 2- Do Iranian EFL learners achieve a greater improvement in their Accuracy scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?
- 3- Do Iranian EFL learners achieve a greater improvement in their Fluency scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?

While conducting the relevant statistical operations, these CAF components have been represented by their constituents. Complexity is represented by C/T and DC/C, accuracy is

shown as EFT/T and E/T, and fluency by MLT, MLC, and MLEFT. For comparison of the components of CAF measurements, ANCOVA was considered the appropriate statistical operation for all of the components of CAF. The reason for such a choice is the significant differences observed between groups at the pre-test time as shown in table 5.5 above. The following three sections (5.3.3.3-5) explain the relevant statistical analyses conducted for each component of the CAF.

5.3.3.2 Complexity

Sub-question 1 in the CAF study is: Do Iranian EFL learners achieve a greater improvement in their 'Complexity' scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?

The independent samples t-test conducted on the mean scores of both measures of complexity - C/T and DC/C - on the post-test showed that there is not a significant difference between Non-DDL (M= 1.40, SD = .25) and DDL (M= 1.47, SD= .26; $t(47) = 1.09$, $p = .28$) in C/T, the first measure of complexity and Non-DDL (M= .27, SD = .13) and DDL (M = .30, SD = .12; $t(47) = .851$, $p = .399$) in DC/C on the post-test. The results of ANCOVA conducted on the post-test revealed no significant difference between groups after adjusting the scores ($p = .44$). Table 5.9 shows the results from these analyses.

Table 5.9 Independent samples t-test and ANCOVA analyses for the 'Complexity' measures between Non-DDL and DDL groups

	Non-DDL (N = 23)		DDL (N = 26)		P1	P2
	Mean	SD	Mean	SD		
C/T pre	1.43	.42	1.48	.33	.62	-
C/T post	1.40	.25	1.47	.26	.28	.316
	Mean	SD	Mean	SD	P1	P2
DC/C pre	.26	.16	.30	.12	.283	-
DC/C post	.27	.13	.30	.12	.399	.443

P1 = Independent samples t-test ($p \leq 0.025$)

P2 = ANCOVA

Slight changes in the mean scores of both groups indicate that 'Complexity' features of their writings have not improved considerably.

5.3.3.3 Accuracy

Sub-question 2 in the CAF study is: Do Iranian EFL learners achieve a greater improvement in their Accuracy scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?

In order to answer this question the two measures of accuracy, the ratio of error-free T-unit per T-unit (EFT/T) and error per T-unit (E/T), in both groups were compared. No significant pre-existing differences between groups at time 1 (pre-test) have been observed in both measures. The results of the independent samples t-test between these two 'Accuracy' features show that the difference between mean scores of EFT/T pre-test in the Non-DDL group ($M = .38$, $SD = .22$) and DDL group ($M = .43$, $SD = .28$; $t(47) = .71$, $p = .483$) is not statistically significant. The

case is similar for E/T pre-test: Non-DDL (M = 1.09, SD = .53) and DDL (M = .89, SD = .54; t (47) = 1.33, p = .191).

An independent-samples t-test was conducted on EFT/T and E/T to compare the mean scores of the groups on post-test. There were significant differences between the mean scores of Non-DDL (M = .35, SD= .16) and DDL (M = .53, SD= .22), t (47) = 3.08, p = .003 in the case of EFT/T and between Non-DDL (M = 1.18, SD = .52) and DDL (M = .69, SD = .44), t (47) = 3.53, p = .001 in the case of E/T. The level of significance of .025 was determined as a Bonferroni adjusted alpha since 2 variables were involved in this question (.05/2 = .025). The p value for ANCOVA (p = .003) verifies the difference between groups (see table 5.10).

Table 5.10 Independent samples t-test and ANCOVA analyses for the 'Accuracy' measures between Non-DDL and DDL groups

	Non-DDL (N = 23)		DDL (N = 26)		P1	P2
	Mean	SD	Mean	SD		
EFT/T pre	.38	.22	.43	.28	.483	-
EFT/T post	.35	.16	.53	.22	.003	.004
E/T pre	1.09	.53	.89	.54	.191	-
E/T post	1.18	.52	.69	.44	.001	.003

P1 = Independent samples t-test (p ≤ 0.025)

P2 = ANCOVA

According to these statistics we can conclude that the DDL group has performed better than the Non-DDL group with regard to the accuracy feature of their paragraph development. It might be an indication of the learners' improvement at the level of writing micro skills. This will be discussed further in chapter 7.

5.3.3.4 Fluency

Sub-question 3 in the CAF study was Do Iranian EFL learners achieve a greater improvement in their Fluency scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?

The same statistical procedures were conducted on the three measures of fluency, mean length of T-unit (MLT), mean length of clause (MLC), and mean length of error free T-unit (MLEFT). The adjustment level for this investigation (three variables), however, was calculated as .0167. Since the independent-samples t-test conducted on the pre-test scores of the three variables showed no significant differences between the Non-DDL and DDL groups before the treatment, no ANCOVA analysis was necessary to compare the post-test performances of the groups. The independent samples t-test conducted on the mean scores of MLT and MLC on the post-test showed that there is not a significant difference between Non-DDL ($M = 11.21$, $SD = 2.74$) and DDL ($M = 13.20$, $SD = 3.26$; $t(47) = 2.29$, $p = .026$) in MLT, the first measure of fluency and Non-DDL ($M = 8.02$, $SD = 1.34$) and DDL ($M = 8.96$, $SD = 1.51$; $t(47) = 2.29$, $p = .027$) in MLC on the post-test. In regard to MLEFT, however, there is a significant difference between Non-DDL ($M = 8.59$, $SD = 3.20$) and DDL ($M = 12.06$, $SD = 4.37$; $t(47) = 3.13$, $p = .003$)

In sum, both groups tend to write shorter clauses at the post-test but longer error free T-units (see table 5.11).

Table 5.11 Independent samples t-test and ANCOVA analyses for the 'Fluency' measures between Non-DDL and DDL groups

	Non-DDL (N = 23)		DDL (N = 26)		P
	Mean	SD	Mean	SD	
MLT pre	11.45	3.34	13.86	3.92	.026
MLT post	11.21	2.74	13.20	3.26	.026
MLC pre	8.22	2.25	9.40	2.28	.075
MLC post	8.02	1.34	8.96	1.51	.027
MLEFT pre	7.94	3.98	10.50	5.32	.066
MLEFT post	8.59	3.20	12.06	4.37	.003

P = Independent samples t-test ($p \leq .0167$)

5.4 Summary of the main results

Three research questions were addressed in this chapter. In all these questions comparisons between the performances of the two groups were required. Significant differences between groups' mean scores on declarative and total analytic scoring before the treatment (pre-test) called for the ANCOVA in comparing certain features of the participants' written performances.

The first question of the study asked, "Do Iranian EFL learners achieve higher improvements in their declarative writing scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?" The results presented in 5.3.1 show that the DDL group could have improved their declarative knowledge more than the non-DDL group could have done. It means a positive answer to the first question.

In regard to the second question, the two levels of macro- and micro were taken into account. At the macro-level the overall gains of the groups on total analytic scoring were compared.

Although the independent-samples t-test showed a significant difference between mean scores of total analytic scoring, the results of the ANCOVA revealed that the observed improvements in both groups might not be attributed to any particular method of teaching, whether Non-DDL or DDL.

At the micro-level comparison the participants' improvements on the ground of the four features of analytic scoring ('Content', 'Organisation', 'Vocabulary', and 'Language use') were compared. The results showed that although both groups have improved the 'Content' and 'Vocabulary' features of their writings after a term-long period, there is no preference for one method over the other. As for the 'Organisation' feature, statistical analysis indicated that no significant differences have been observed in the groups' achievement in the feature in question. However, it should be borne in mind that the Non-DDL group outperformed in this feature, whereas a close look at the numerical results shows a regression in the DDL group. As far as the final feature, the 'Language use', is concerned, a significant difference between Non-DDL and DDL groups was verified by the results of the ANCOVA ($p = .015$). Therefore, we can conclude that the DDL participants could have improved their 'Language use' knowledge more than the Non-DDL group could have done. To put it in a nutshell, the DDL method has helped the participants improve one feature out of four in analytic scoring - Language use - significantly more than the Non-DDL method. No considerable improvements in 'Organisation' and 'Vocabulary' have taken place but 'Content' has enjoyed an improvement though still not significant.

The third question raised in this study was in regard to 'Complexity', 'Accuracy' and 'Fluency' (CAF) measures of writing: Do Iranian EFL learners achieve a greater improvement in their CAF

scores after being taught through the DDL approach than those who were taught through a Non-DDL approach? In order to answer the question as precisely as possible three sub-questions were formed, each concerning one of the components of CAF.

Results as reported in 5.3.3 indicate that 'Complexity' features of both groups have not improved considerably while the DDL group has performed better than the Non-DDL group with regard to the 'Accuracy' features of their paragraphs. If we take a quick look at the components of the accuracy features, we realize that this improvement entails fewer grammatical errors and more structurally accurate sentences. It can be interpreted that learners have improved at the level of writing micro skills.

Regarding the 'Fluency' component, it was found that there is not a significant difference between Non-DDL and DDL in MLT and MLC on the post-test, though the DDL group tends to produce shorter T-units and shorter clauses compared to the Non-DDL group. In regard to MLEFT, however, there is a significant difference between groups in a way that the DDL group could have improved more than the Non-DDL group in producing longer error free t-units. This will be discussed further in Chapter 7.

Having presented the numerical data and statistical operations associated with the three questions in this chapter, we now move to the next chapter, chapter 6, in which we examine qualitative data. The aim will be to find out our participants' attitudes towards the DDL approach in general and the DDL-based classes and instructional materials in particular.

Chapter Six

Qualitative Data Analysis:

Learners' attitude towards the DDL method

6.1 Introduction

The fourth question raised in the first chapter explores the participants' attitudes and feelings towards the DDL approach as an instructional method of second language learning/teaching via concordance-based units / (DDL-based units). The question posed was “What are the Iranian EFL learners' attitudes towards using the DDL approach in a ‘Paragraph Development’ course?”

Two sets of data were gathered during the data collection stage of this research: a questionnaire (an adapted version of Sripicharn 2002), and 9 one-to-one interviews. The aim of filling out this questionnaire was to elicit learners' attitudes towards the DDL-based materials in terms of usefulness, relevance and difficulty level of the units prepared and the instructions provided. A mixed method of data collection was used to provide the required data for this part of the research. In this mixed method which involves the collection and analysis of both quantitative (via questionnaire two) and qualitative data (through the interviews) attempts have been made to integrate the two approaches. One purpose of such a method, according to Sandelowski (2003, cited in Dornyei, 2007) is to verify one set of findings against the other. Here, the purpose is the traditional goal of triangulation, namely to validate the conclusions by presenting converging results obtained through different methods. Therefore, as we will see the findings of

questionnaire two triangulated against the results of the interviews so that a more comprehensive understanding of the phenomenon in question can be reached.

One-to-one interviews with students were conducted to supplement the questionnaire in order to elicit relevant information for the questions raised as well as their ideas regarding possible prospective DDL-based textbook, their fellow students' views and ideas about the method at the end of the term. Data collection through the interviews also ensured that participants had an opportunity to express their ideas, feelings and attitudes towards the issues that might have been overlooked in the questionnaire. This chapter gives an account of the procedures applied to collect the data and also reports the qualitative analyses done in order to answer the corresponding question.

6.2 Questionnaires

Questionnaire one (Appendix B) was administered to all participants of the study at the beginning of the term. The aim was to obtain data about the participants' personal information, their English learning background, their learning strategies preferences, their familiarity with different language learning techniques and skills. The next section (6.2.1.) gives a detailed analysis of the first questionnaire for both groups. The second questionnaire (Appendix C) was administered to the DDL group (experimental group) in the final session of the term. Participants were asked to give their ideas, comments and attitudes towards the DDL-based units, activities, and the new method in general in 4 different but related types of questions. The full analysis of this second questionnaire appears in 6.2.2.

6.2.1 Questionnaire one

This questionnaire includes 11 sections with a number of questions in different formats. These questions can be categorised into 5 main types (topics). In type one, general information such as the name of the participants (optional), their gender, year of study in the department, and the total GPA was elicited. In type two the length of time learning English, the number of courses taken in this term, and previous terms, their reasons for learning the language, and their possible trip(s) to English speaking countries have been asked about. The third type is aimed at examining the participants' strategies, and the kind of activities they do by themselves for learning purposes. Type four seeks information about pedagogical training and the kind of activities they have done - in relation to language learning - during previous terms. The fifth type of the questions which are in the form of an agreement scale asks the participants to announce their level of agreement with a number of statements regarding the role of the teacher and of the learner in the classroom, the error correction procedures, and so on. The results of the questionnaire (24 respondents in DDL group, and 21 in Non-DDL group) have already been presented in chapter four (section 4.2.1) and more detailed analyses can be seen in Appendix E.

6.2.2 Questionnaire two

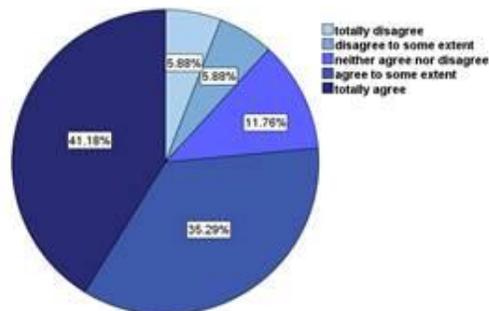
The main purpose for preparing the second questionnaire was to evaluate the participants' attitudes in the DDL group towards the materials in terms of the following four aspects: (1) concordance-based units in general; (2) concordance lines in general; (3) usefulness; and (4) relevance to the learners' main syllabus. The results of the questionnaire by topic are presented below through pie charts and the relevant frequency tables appear in Appendix I. In this section, the results of questionnaire 2 (17 respondents) are presented and discussed. There are 5 main

topics analysed with the corresponding questions from the questionnaire. All of the pie charts in this section are labelled according to the number of statements in the questionnaire.

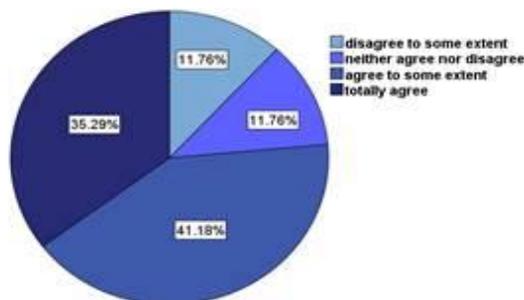
6.2.2.1 Concordance-based units in general

According to the participants' responses to the agreement scores for each statement, it appears that most of them (76.5%) perceived the DDL units as interesting (Statement 5.1) with good format and presentation (Statement 5.2). A slight majority (56%) believe that the units are not too long and can be done in 10-15 minutes (Statement 5.5) and around two thirds agree with the idea that the units are not too difficult to complete (Statement 5.6), and finally more than 70% admit that the instructions are easy to follow (Statement 5.17). Generally speaking, from the analysis of these 5 statements we see an acceptable level of participants' positive attitudes towards the Concordance-based units; the way they are being presented, the time they need to be worked out, their difficulty level, and the easiness of their instructions to follow.

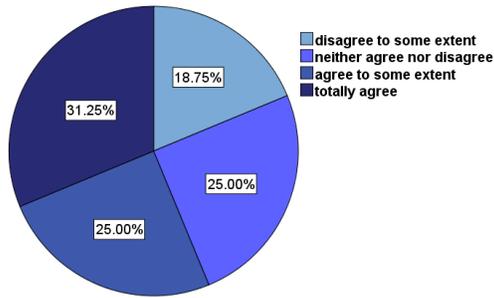
Statement 5.1: The units are interesting.



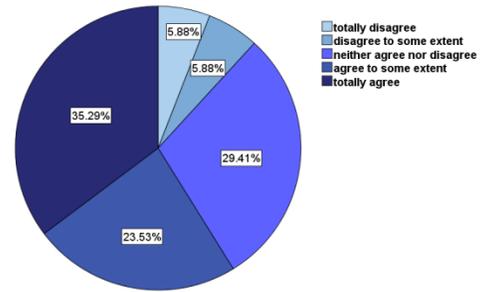
Statement 5.2: The format or presentation of the units is good.



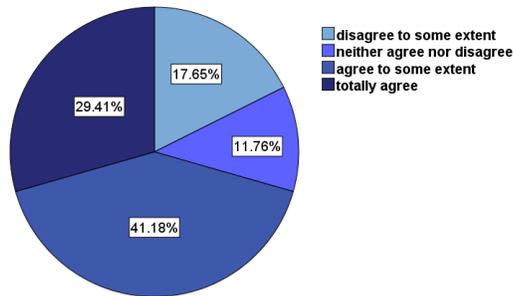
Statement 5.5: The units are not too long and can be done in 10-15 minutes.



Statement 5.6: The units are not difficult to complete.



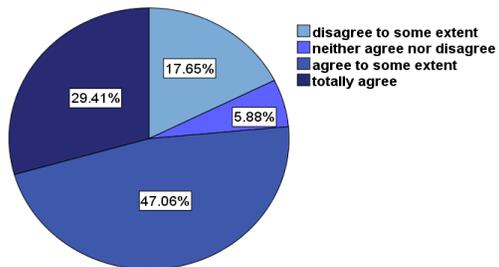
Statement 5.17: The instructions are easy to follow



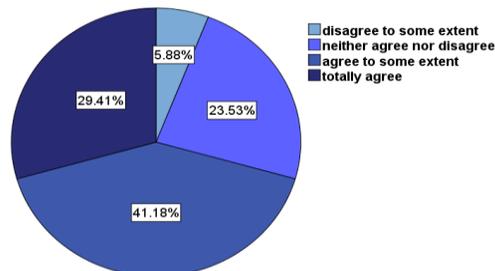
6.2.2.2 Concordance lines in general

In the three statements (5.19, 5.20, and 5.21) the participants' ideas in regard to the concordance lines were explored. Most of them (76.5%) agree that concordance lines were not difficult to read. Seventy per cent believe that concordance lines have been well chosen and they have had no difficulty with vocabulary. Also, a large number of them (88.2%) say that ‘observing concordance lines’ is an interesting way to learn English.

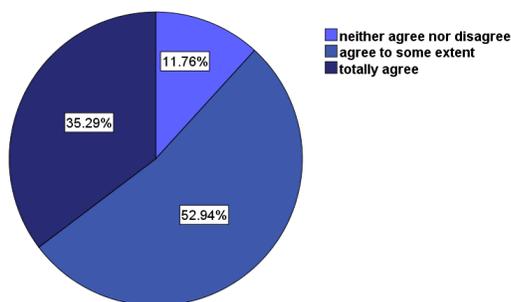
Statement 5.19: The concordance lines are not difficult to read



Statement 5.20: The concordance lines are well chosen (e.g. vocabulary not too difficult)



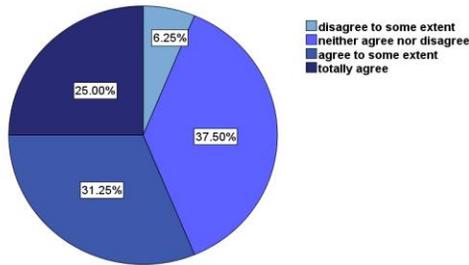
Statement 5.21: Observing concordance lines is an interesting way of learning English



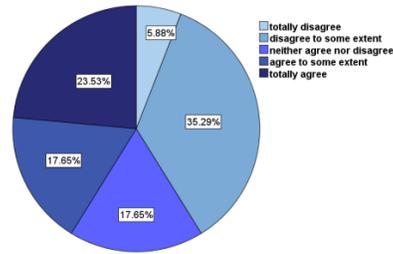
6.2.2.3 Usefulness (useful language features and useful skill practices)

In regard to 'usefulness', the participants were asked to show their ideas about the degrees to which DDL units have been useful in improving certain skills. More than 70% of the respondents agree that the language points selected in the DDL units were useful. A large number of them (88.2%) believe that the units help them learn grammar and structural points, and the same percentage regard the units as helpful in discovering new patterns.

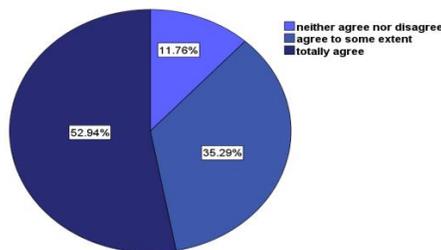
Statement 5.4: The units help you improve your reading skills



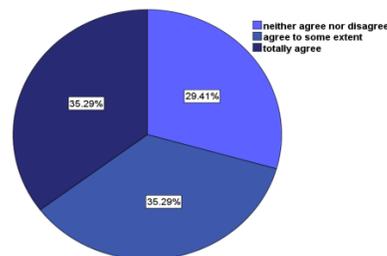
Statement 5.10: The units help you learn new vocabulary, idioms, and expressions



Statement 5.11: The units help you learn grammar or structure.



Statement 5.18: The language points selected are useful.

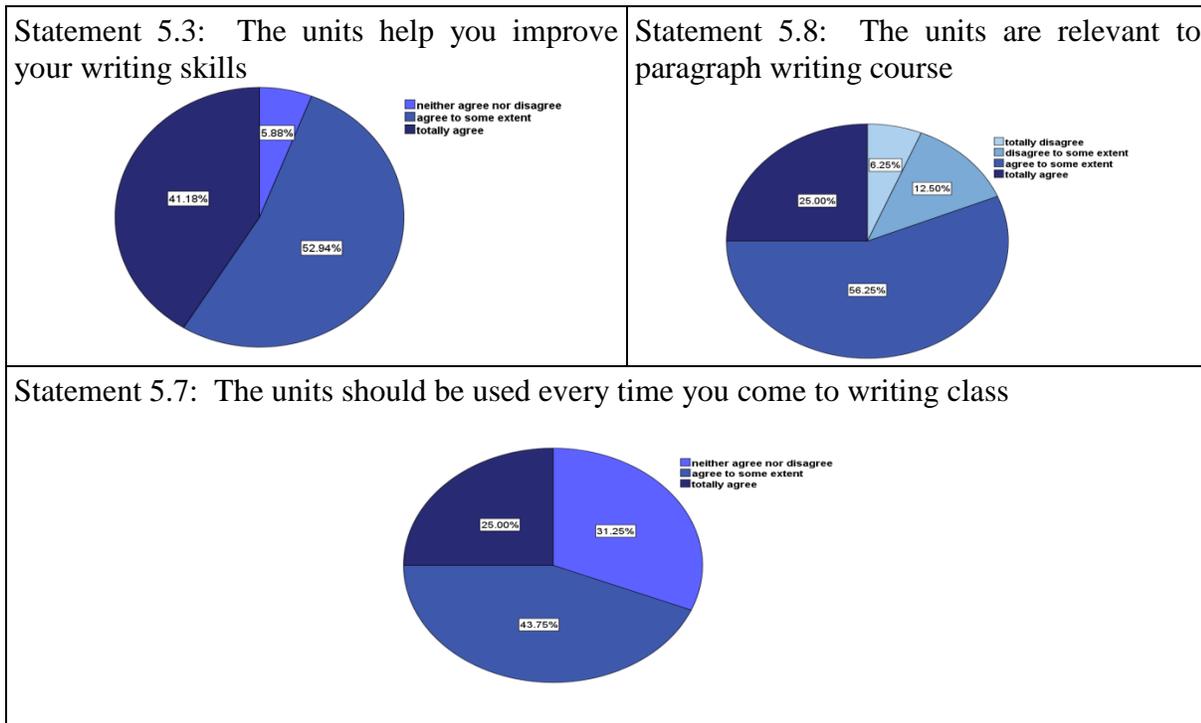


Questions that ask the usefulness of the units in areas such as learning new vocabulary, idioms, and expression received just 41% of the respondents' agreement. This minor agreement level is completely reasonable as the units have not been designed for vocabulary development. The first DDL-based unit, taken from Sripicharn (2002), was the only unit focusing on vocabulary. This first unit was chosen to familiarize the students with the concordance lines and KWIC format in a more concrete way than presenting them through grammatical patterns which are presumably more abstract.

It is worth noting that 47% of the respondents did not agree that the DDL units were useful for improving their reading skills. This might be explained by the idea that some students consider reading practices as the reading of complete texts such as paragraphs and do not associate

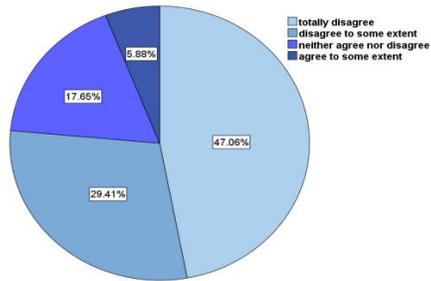
reading KWIC format concordances with reading activities. This is in accordance with what Sripicharn (2002, p 307) found.

6.2.2.4 Relevance to the learners' main syllabus

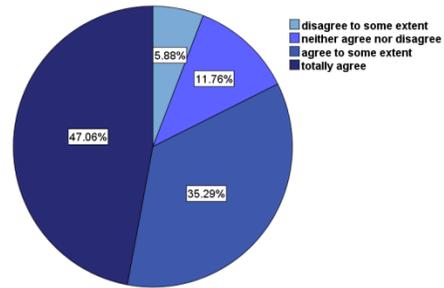


The final set of questions asked the students to evaluate the relevance of the units with the writing courses in general and this specific 'Paragraph Development' course in particular. The results showed that the majority of DDL students (94%) consider the units helpful for developing their writing skills (Statement 5.3). Most of them (81%) also perceived the DDL materials as relevant to the Paragraph writing course (Statement 5.8) and about two third of them would like their teacher to bring the units to the writing class every time they come to class (Statement 5.7).

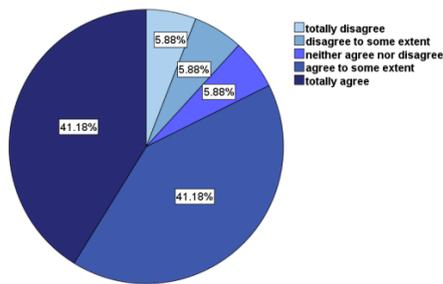
Statement 5.12: The units help you learn how to define something in your paragraph



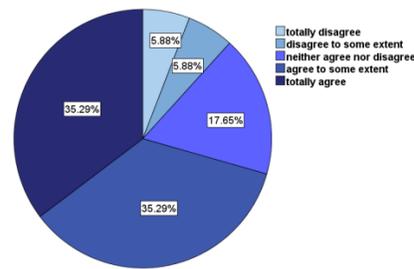
Statement 5.13: The units help you learn how to connect cause-effect clauses



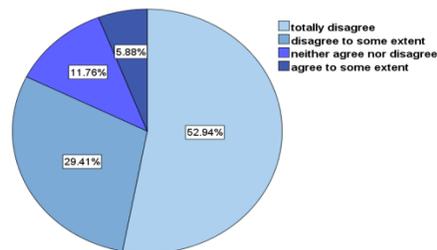
Statement 5.14: The units help you learn how to connect clauses of comparison and contrast



Statement 5.15: The units help you learn how to make a list in your writing (enumeration)



Statement 5.16: The units help you learn how to narrate an event that has happened to you



Statements 5-12 to 5-16 were allocated to the relevance of the units to particular topics of the syllabus. More than 80% of the students believe that the units help them learn how to connect the clauses with cause-effect relationships as well as compare and contrast relationships (Statements 5-13 and 5-14). A considerable proportion of the respondents (71%) also agree that they could make use of the contents of the units in writing enumerative paragraphs. However, fewer participants see an acceptable relevance of the units with their learning how to define something

in their writings (Statement 5-12) and to narrate an event that has happened to them (Statement 5-16).

It should be mentioned that none of the DDL units were aimed at practising/teaching these two final skills but the students were asked these questions so that the researcher could make sure that the respondents' answers to the questionnaire reflected their true thoughts.

6.3 Interviews

6.3.1 Introduction

As mentioned in chapter 4 (4.3.3), the aim of conducting an interview session with a sample of the DDL participants was to supplement questionnaire two in order to elicit relevant information for the questions raised in the questionnaire in a one-to-one communication so that the researcher could make sure an opportunity has been given to the participants to express their ideas, feelings and attitudes towards the issues that might have been overlooked in the questionnaire.

Since the interview session was semi-structured in the terms of Nunan (1992) and Dornyei (2007), the interactions between the interviewer and the interviewees were in an informal Q&A format, and no fixed prepared questions were listed. The researcher, however, had a set of general ideas and guiding questions in mind to ask the participants. The topics covered included how the interviewees might have felt working with DDL-based materials, the kind of activities they performed, the relevance of the lessons to the syllabus of the course they had been taking, their expectations of the whole course and their ideas about having textbooks containing DDL-

based materials and KWIC activities. A complete list of the 16 questions which were asked during these interviews appears in Appendix D.

6.3.2 The interviews

A sample of stratified randomly selected participants in the DDL group (experimental group) was asked to participate in an informal interview with the researcher right after the post-test session. Nine students (7 female and 2 male) out of 26 (20 female and 6 male) participated in the interview session and answered the questions raised by the researcher. All of the interviews were conducted in the participants' native language, Persian. The audio recorded materials were transcribed and then translated into English for analysis. Before the interview session the interviewees were all individually informed that they would be voice recorded during the session. An English language expert, a university colleague, was asked to check the reliability of the translation of the transcriptions. All cases of concerns raised by him were resolved after making necessary revisions.

The following section gives a summary report of the findings drawn out of the analyses done on the data, and a complete account of the interviews including the interviewees' characteristics such as their age, gender, English learning background, motivations, and their preferred language learning strategies (extracted from their responses to the first questionnaire, discussed in 4.3.2.1) along with individual transcripts of the interactions between the interviewees and the interviewer appear in Appendix D. Each interviewee has been given a pseudonym in order to protect their identity. The female interviewees are named Mahnaz, Azar, Parisa, Sanaz, Ayda, Pouran, and Mina, and the two male ones are Saman, and Nima.

6.3.3 Summary and analyses of interviews

The following table (6.1) summarises the 9 interviews. Column 1 shows the pseudonym for each interviewee. In columns 2 and 3 we see their learning motivations, and preferred learning strategies as announced in the beginning of the term via questionnaire one. This way, a comparison between their thinking before treatment and their actual understanding after being trained by this new method (at least new for them) will show any possible effect of the method. Section 6.3.3.1 (below) presents this comparison.

In columns 4, 5, 6, and 7 a summary of their general ideas towards the DDL- based class sessions, activities, and hand-outs as well as DDL-based textbook and their fellow students' ideas towards the method are given. In the last column, 8, some notable remarks of the interviewees that I think are worthwhile mentioning are presented. Blank boxes show that either the interviewee was not asked the question or they have not answered it.

Table 6.1 Summary of the analyses of the interviews

1	2	3	4	5	6	7	8
	Learning motivation	Learning strategies	General idea about DDL	Unit relevance	DDL-based Text book	Fellow students' Ideas	Notable remarks
Mahnaz	Intrinsic motivation	Inductively oriented	A completely new method	Helpful hand-outs	It can involve the students with learning activities	No dissatisfaction	
Azar	Extrinsic motivation	Uncertain about the preferred learning strategies	A very good method, the students have to discover a grammar pattern, a rule or some kind of word collocation.	Useful for learning vocabulary and writing.	It would be a good idea to have books with some particular parts for concordance lines.		Prefers a mixed method with a variety of materials, activities, and presentations.
Parisa	Intrinsic and extrinsic motivations	Start with deductive activities and then inductive learning	Self-learning and discovery learning can be considered as convincing methods in language learning. <i>(A change of views through the term)</i> An easy method for the learners.		DDL textbooks or hand-outs should fully inform the students of their tasks.	No dissatisfaction The DDL units are worthy enough to work with.	Some students prefer to read or to be told new ideas, relationships, and patterns rather than spend time and figure them out.
Sanaz	Intrinsic motivation	does not believe in inductive learning.	She likes the method because learned materials remain in the mind.	Remembers a particular pattern from the hand-outs.	DDL textbooks can be provided for most of the subjects in a syllabus.		—————
Ayda	Intrinsic and extrinsic motivation	does not believe in inductive.	DDL class sessions were real situations in which group work could be experienced.		DDL textbooks can present the necessary materials without lengthy unnecessary explanations and boring explanations.	The method is innovative. They got involved in class activities, sharing ideas, and working together.	
Pouran	Extrinsic motivation	Does not believe in inductive learning.	The method is useful because of discovery learning techniques through which learned patterns remain in mind. <i>(A change of views through the term)</i>	The unit on 'cause and effect' was particularly useful.	DDL-based books could be helpful if clear instructions and were given to the students.	All friends liked the method and enjoyed its newness.	The method is creative, innovative, and worthwhile spending time.
Mina	Intrinsic motivation	believes in inductive learning	The units are effective because the students could learn a pattern through different sentences. <i>(Confirming the preferred learning strategies)</i>	Ideas & topics relevant to the 'Paragraph Development' course were learned.	A textbook with a variety of activities, explanations, and exemplifications could form an appropriate textbook.		Books with just one kind of activities are boring. The method is Worthy enough to spend time and energy
Saman	Intrinsic and extrinsic motivation	believes in inductive learning	It is a very good method because learners could gain a lot	Learned how to use enumerators.		All are happy with the method.	Most students are not accustomed to inductively

			in a short period of time. Now we have a better view towards learning the structures and patterns necessary for writing.	The method is appropriate for 'Writing' classes.			oriented activities and also not ready for group work. So they get distracted. It is an educational training issue that needs to be amended.
Nima	Intrinsic motivation	believes in both inductive and deductive learning	The method is more useful than the textbook. Students had to discover the patterns, through concentration and thinking. <i>(He confirms his earlier ideas by the end of the term)</i>	The units were useful for improving writing skills.	DDL textbooks would be quite useful but more activities might be needed for each topic.		The unit on 'such' and the patterns in which it is used was the most relevant one.

6.3.3.1 Learners' motivation and learning strategies

As we see in table 6.1, the interviewees have had both intrinsic and extrinsic motivations in studying English at the university. Some of them (Mahnaz, Mina, Nima, and Sanaz) expressed a number of reasons that indicate their intrinsic motivation, some others believe in another set of reasons that we may conclude that they (Azar and Pouran) have had just extrinsic motivation. Parisa, Ayda, and Saman show a variety of reasons for their choice in studying English at university level. Their reasons indicate that they are both intrinsically and extrinsically motivated. If I can take these 9 interviewees as a true sample of the experimental group (DDL group) in this research, I can claim that roughly the same proportions of participants are in the same position in terms of language learning motivation, that is, a group of Iranian English learners with both intrinsic and extrinsic motivations.

As far as learning strategies are concerned, we are dealing with a group of EFL learners who are either inductively or deductively oriented in language learning. I can name Mahnaz, Mina, and Saman as the inductively oriented students and Ayda as a deductively oriented one. Nima has shown his major interests in inductive learning strategies and minor preferences to the deductive

ones; whereas, Parisa is eager to start learning the language with deduction and move to induction. Azar has shown no clear tendency to any particular learning strategy.

The three interviewees who have shown their inductively oriented language learning strategies, Mahnaz, Mina, and Saman, believe that the method is completely new and worth spending time and energy on in a language learning class such as the one they have been attending. Mina and Saman assert that the DDL units are effective and helpful because when the learners find out a pattern through a number of KWIC concordances they will not forget the learned material. In other words, in this way they have discovered the pattern themselves. I believe that this can be interpreted as an indication of confirming pre-course ideas of inductive learning. In a nutshell, they have realized the phenomenon in which they believe.

Ayda, as a deductively oriented EFL learner, who had expressed her disagreement with discovery learning activities in the classroom and believed that the learners should be given rules first and then do some practice at the beginning of the term, shows some kind of changes in her preferred learning strategies when she says, 'DDL class sessions were real situations for group work and autonomous learning'. If, at the end of the term and after attending DDL classes, she is thinking of 'group work and autonomous learning', it suggests a move toward inductive learning/discovery learning. I would like to conclude that Ayda's change of attitudes is a positive effect of the DDL method.

The other attitudinal change overtime in Ayda's remarks can be found where she believes that DDL-based textbooks can present the necessary materials without lengthy unnecessary

explanations and boring descriptions. It means that although at the beginning of the term when she was not familiar with a practical inductively-based method such as the DDL method, she preferred the strategies with which she had been taught. Now, after being trained with DDL method, she agrees that learning English can happen autonomously while working in a group of learners when the learner gets involved with the very act of learning. I believe that this is also a change from deductive to inductive learning preferences.

Very similar kind of attitudinal changes can be observed in the three interviewees who showed no interest in inductive learning strategies. Pouran, Sanaz, and Azar did not show any interest in inductively oriented strategies in the beginning of the term, but after attending DDL class sessions consider the method and the accompanying hand-outs useful for discovery learning techniques, innovative and worthwhile to spend time on. And the final two interviewees who, from the beginning, believed in some kind of learning strategies shift during the learning process, that is, Nima, and Parisa, have come up with the idea that self-learning and discovery learning are convincing methods of language learning that can be achieved through the DDL method. This is a change of attitudes for Parisa while a confirmation of previous beliefs for Nima.

6.3.3.2 Units usefulness and relevance

Regarding usefulness, there have been interviewees who believe that the method is appropriate for 'Writing' classes in general and for the 'Paragraph Development' course in particular. Some interviewees remember that specific units (hand-outs) on 'cause and effect', and 'compare and

contrast' were particularly useful and relevant to the syllabus of the course. Three interviewees believe that the unit on '*such*' and the patterns in which it is used was the most relevant one.

6.3.3.3 Views about DDL-based textbooks

The general view of the interviewees in this research in regard to compiling DDL-based textbook and class activities is positive and promising. They generally believe that textbooks with DDL-based activities in which language patterns and lexical collocations are presented in concordance lines and other DDL-based formats can be useful for a 'Paragraph Development' course. These kinds of books can present necessary materials and topics without over lengthy unnecessary explanations and descriptions. However, it should be borne in mind that this aim can be achieved if clear instructions and precise guidelines are given before the activities and exercises. This is what Mina calls our attention to and Nima emphasises that more exercises might be needed for each topic if DDL textbook compilers are apt to give as few explanations as possible. In other words, students must be fully informed of the tasks they are required to do and also led to the target language point in a step by step fashion.

6.3.3.4 Fellow students' ideas

The final concluding point that deserves attention is the interviewees' fellow students' opinions regarding the method, class activities and hand-outs. Since it was not possible to interview all of the participants in the DDL group about their understanding of and attitudes towards the DDL method as presented during the term, it was decided to ask them: 'Did any of your fellow students have negative attitudes toward the class activities we had, the DDL units, or thought that

the method is difficult, time consuming and boring?’ None of the interviewees reported serious complaints about the method or severe concern about attending the DDL class sessions. They reported a general satisfaction of their friends from the method. It was revealed that the DDL group participants typically consider the method an innovative and efficient way of learning the language.

However, the main concern of some of them is familiarizing the students with the techniques of detecting the patterns from the DDL materials. Saman and Parisa for example, remind us that many students are not accustomed to inductively oriented activities in which they should work out answers with the concordance lines independently. They believe that not all students are ready for this kind of learning and prefer to read or be told the new ideas, relationships between language chunks, and patterns rather than spend time figuring them out. This is perhaps because of their educational training that has promoted teacher-centred classes. Typically, Iranian EFL students have been taught through teacher-centred classes where they function as just the receivers of information.

6.4 Triangulation of the findings

As mentioned in 6.1, interpreting the results obtained from both quantitative and qualitative data calls for an integrative method in which the results should be triangulated to validate the conclusions and to achieve an elaborate and comprehensive understanding of the 'complex matter', here, the students' attitudes towards the newly developed DDL units, DDL class activities, and possible DDL textbooks. Hence, in this section the results from the four questionnaire themes are matched with the results obtained from the interviews.

6.4.1 Concordance-based units in general

As we have seen in 6.2.2.1, an acceptable level of agreement can be observed in the participants' answers to the questions concerning their ideas on concordance-based units in general. The questions of this theme ask if "the units are interesting", "the format or presentation of the units are good", "the instructions are easy to follow", and "the units are short enough to be done in 10-15 minutes and easy enough to complete. The results of the interview analyses show that all of the interviewees responded positively to the question which asks their general idea about the DDL method. They believe that the method is 'new' to them (Mahnaz, Parisa, and Pouran), 'different' from other methods, and 'more useful than the textbook' (Mahnaz, Saman, Nima, and Pouran). Most of the interviewees acknowledge that the method helps them find grammatical patterns through studying KWIC exercises (Azar, Saman, Nima, Sanaz and Mina) and they could discover something new (Parisa, Saman, and Nima). The following two extracts illustrate some of the interviewees' responses to the question: *'What is your idea about the DDL method in general?'*

- **Extract 1 (Mahnaz)**

It was a very new method and different from all of the other methods we had experienced before. The hand-outs were useful and helped us learn the language practically. We could make use of what we had learnt. Moreover, the method of presentation and your corrections on our paragraphs were instructive. In many cases we didn't need to read the book because we had already taken the points while doing DDL activities on our own out of the class.

- **Extract 2 (Nima)**

Well! I think the method was more useful than the textbook. The book started with the rules and was trying to show us the right way of writing sentences. But, in the DDL method we had

to discover the patterns, and it made us concentrate, think and keep the patterns in our mind. When you discover something new, it will remain in your mind forever. Generally speaking, I think the method was better than the textbook.

6.4.2 Concordance lines in general

Regarding concordance lines as far as difficulty level, and appropriateness of vocabulary are concerned, most of the participants answering questions 19, 20, and 21 in the second questionnaire believe that concordance lines have been well chosen and not too difficult to answer. In the one-to-one interviews, some respondents believe that working with concordance lines and KWIC format of presenting new patterns can involve the students directly with the very act of learning (Mahnaz) and can be used instead of books which normally contain lengthy unnecessary explanations (Ayda), while some other respondents point out that concordance lines can be used in textbooks if some short but relevant explanations would be accompanied with these lines and the following tasks (Pouran). In extracts 3 and 4 we can see the responses given to the question, “*What is your idea about the possibility of having books with concordance lines and other DDL activities all thorough the book?*”

- **Extract 3 (Ayda)**

That will be a very good idea. A new kind of book! I think in DDL units with KWIC formats, and other activities we will learn all necessary materials for the units and we do not have to read long and sometimes unnecessary explanations or descriptions

- **Extract 4 (Pouran)**

I think this kind of new book could be of a great help but it seems necessary to include some instructions, explanations and guidelines, especially at the earlier stages of working with

DDL activities. I think a book of up to 70% to 80% of DDL activities would be all right. The teacher should be active for answering questions and guide them with their problems.

6.4.3 Usefulness (useful language features and useful skill practices)

More than two third of the participants responding to the questionnaire agreed that the language points selected in the DDL units were useful in helping them learn grammar and structural points, as well as discovering new patterns. The interviewees also gave some interesting comments on the usefulness issues of the concordance lines. Saman, for example, tells the interviewer: *'I think the method was appropriate for writing classes..... We could extract some patterns out of the DDL units and they were useful and practical in our writing performances'*. The following is an extract from another interviewee, Mina, who believes whenever she was studying the textbook she felt she had already learned the topics through the DDL unit.

- **Extract 5 (Mina)**

I think the [DDL] units were effective because we could learn a pattern with different sentences. One pattern could be viewed through a variety of sentences. It helped us keep the pattern in mind.

6.4.4 Relevance to the learners' main syllabus

The final set of questions in the questionnaire sought for the relevance of the units with the writing courses. The majority of the respondents consider the units helpful for developing their writing skills in general and Paragraph writing course in particular, and about two third of them would like their teacher to bring the units to the writing class every time they come to class.

In a more detailed analysis, it came out that quite a considerable number of respondents believe that the units help them learn how to connect the clauses with cause-effect as well as compare and contrast relationships.

In response to the question, "*Do you remember any particular unit that has helped you considerably?*" raised in the interview session, Sanaz and Pouran mentioned that the unit on the pattern 'CAUSE such (a) NP that EFFECT' had been effective, and Saman said that that the unit on 'listing signals' had been easy to understand and effective in writing an enumerative paragraph.

- **Extract 6 (Nima)**

...Yes, I remember the unit on using the word 'such'. I had always problems in using this word. The unit showed us the appropriate pattern in which we can use the word. But, critically speaking, there were not enough exercises at the end of the units. We usually got familiar with the pattern in a few lines and then discovered the way we can make use of that particular word or pattern. The lines were usually followed by a number of exercises in order to apply the newly learned pattern in writing activities. However, I think they were not enough'.

- **Extract 7 (Pouran)**

Well, they were all good, I think. Yes, I remember the lesson with the pattern, 'such a....' It was very helpful to me. It worked the cause and effect relationships.

6.5 Conclusion

The results of the data analysis in this chapter show that the feedback from the questionnaires and the interviews was positive overall. The questionnaires showed that the EFL learners participating in the present study were all new to the DDL-based materials. Although they were getting introduced to a new approach of inductive learning, they showed an acceptable level of satisfaction with the method, the time they need to spend for each topic, and the types of exercises they have done.

Analyses of the participants' responses to the questions regarding their views towards concordancing materials for presenting new language points revealed that most of them have found the DDL units interesting and in a good format, not too difficult to complete and having easy instructions to follow. Regarding concordance lines, more than two thirds of the respondents agree that concordance lines are not difficult to read and do not include too difficult words, but they have been chosen carefully enough to be interesting for novice DDL users.

This positive attitude could also be tracked down in analysing the interviews conducted with the 9 randomly selected interviewees in the DDL group. As was shown in the summary section of the interviews above (6.3.3), there was a generally positive attitude towards the DDL units for writing classes among the interviewees. The students seem to be content with participating in DDL-based class activities, satisfied with the amount of learned materials in a class session, and think that the method is new and innovative.

A few criticisms, however, were made by one or more of the interviewees mentioning that more exercises could accompany each lesson. They believe that since the DDL units present the topics mostly through a set of concordance lines and no explanations are supposed to be given either by the teacher or the written materials, more exercises with variations might be needed to help the learners in absorbing the topic in question.

Having finalized the qualitative analysis and concluded the results out of the two main sources of data for the chapter, i.e. questionnaires and interviews, we can now move on to the next chapter, chapter 7 (Summary and conclusion), in which I first give a summary of the whole study and then present and discuss the findings.

Chapter Seven

Summary and conclusion

7.1 Introduction

This final chapter begins with a summary of the study and then the findings presented in chapters 5 and 6 are discussed in relation to the four research questions. The first three questions are concerned with the comparisons of the learning effects of the DDL-based instructional materials (units) used in the DDL group and those of the conventional textbook lessons and class activities used in the Non-DDL group. The final question explores the learners' attitudes in dealing with the method. Accordingly, the findings on the effects of the DDL-based method on developing writing skills on the grounds of learners' declarative knowledge of language units, analytic scoring of their written paragraphs, complexity, accuracy, and fluency (CAF) of their written paragraphs are discussed respectively. After that, the discussions on the implications of the study, suggestions regarding the application of the method and recommendations for further study will be given.

7.2 Summary of the study

The present study aimed at investigating the effects of a DDL approach on Iranian EFL learners' writing skills development on the one hand and the learners' attitudes toward the approach on the other. Three questions were raised to evaluate any possible effects that DDL-based materials and the corresponding class activities might have on a group of Iranian EFL learners' writing skills development. A fourth question was formed to ascertain the learners' attitudes towards the new

method, its instructional materials and class activities. The first three questions were explored quantitatively and the last one qualitatively.

Two lines of conceptual frameworks underlie this study: first, Data-Driven Learning (DDL) approach as proposed by Tim Johns (1991) and the ideas on which it is based, and second, second language (EFL) writing skills development hypotheses. As far as DDL approach is concerned the study is an attempt to contribute to the research line that is following Johns's (1990) basic ideas regarding the potential uses of corpora in language learning as in Higgins and Johns (1984) and Johns (1988) flourished and later on in the mid-1990s and more recently in early 2000s took the form of classroom concordancing (Tribble and Jones 1990, Johns 2008, Boulton 2010).

The focus of attention in the present study is EFL learners' writing skills development with regard to micro skills, i.e. grammar in particular. The reason why micro was chosen as the teaching aspect of the course lies in the two preliminary studies done before the main study. The period I spent making decisions on the teaching items, (what aspects of written discourse should have been taught?) led me to two actions taken in this regard. First, a textbook analysis was conducted on one of the textbooks- Arnaudet and Barret (1990) - commonly used in Iranian universities and chosen for the course. The results of this analysis showed that although the textbook as a whole focuses on a number of macro level issues such as paragraph unity, coherence and cohesion, and skills of writing, such as writing topic sentences, developing the topic sentence through explanations, illustrations and narrations and so on each chapter contains a considerable amount of sections and sub-sections regarding micro linguistic items - words,

phrases, and grammatical patterns which are frequently used in certain types of paragraphs. In sum, 18 grammatical patterns from the three selected chapters - 'Enumeration', 'Cause and Effect', and 'Compare and Contrast' - were retrieved out of this analysis.

The second step taken at this stage was an error analysis conducted on a sample of 50 written paragraphs by Iranian EFL learners who were ideally at the same language proficiency level of the subjects of the study. All of the observed errors in the scripts were classified into two main groups of micro (90%) and macro level errors (10%). As we see, the majority of observed errors were found at the micro level. Three sub-groups of structural (46%), lexical (16%), and mechanical errors (28%) comprised micro errors. The structural errors included the following 7 categories: 1- False structure (14%), 2- False Word Form (7%), 3- Count/Non-count Nouns(7%), 4- Relative Clauses (1%), 5- Conjunctions(4%), 6- prepositional phrases (3%), and 7- Articles(10%). Finally, based on the above two steps, the instructional aim of each DDL-based unit was determined to be certain linguistic items, words and grammar patterns that are more frequently presented in the textbook.

Compiling the relevant corpora as the source of linguistic data from which concordance lines could be retrieved was the next preparatory stage. In order to collect a source corpus from which the required linguistic materials at EFL learners' knowledge of language could be extracted it was decided to compile a learner corpus written by Iranian EFL learners (IrCLE). This corpus would be the main source for retrieving the language items - words, patterns, and sentences. To this end, a corpus of 120,000 word-tokens from the writing courses offered to Iranian EFL learners from 4 universities was collected. The paragraphs collected were in the same text types

as outlined in the textbook. Yet, the size of the corpus concerned the researcher on the ground that not as many necessary concordance lines could be retrieved. Therefore, the International Corpus of Learner English (ICLE) was determined as a complementary corpus to support the researcher to retrieve the required concordancing lines.

The reason for using a learner corpus lies in the fact that general corpora contain texts written (or spoken) in a range of different genres, for a variety of purposes and often contain references to concepts and events that are opaque to language learners in another cultural context. Moreover, general corpora consist of a body of texts which linguists analyse to seek answers to particular questions about the vocabulary, grammar or discourse structure of the language (Kennedy 1998: 20) and therefore could not be used in this study. On the other hand, EFL learners at the intermediate stages of language proficiency might not be competent enough to read, understand and draw grammatical patterns out of a set of unrelated sentences as presented in concordance lines of native English language writers. Since the participants of this study would be novice concordancing (DDL-based) materials users and obviously would need to be instructed and supported to get familiar with the techniques of finding out word meanings and grammar patterns within the lines, attempts should have been made to reduce the difficulty level of the materials. Since it would be more likely for them to have difficulty with understanding the language of native English writers as far as vocabulary, idiomatic expressions, (prefabricated language chunks), cultural aspects within the sentences and necessary background knowledge are concerned, it was decided to use the most understandable corpus as for the source of concordancing materials for the DDL-based hand-outs. Therefore, I came up with the idea of using a learner corpus, preferably produced by Iranian EFL learners and secondary by other EFL

learners. I think using the IrCLE could fulfil my preferable option and the ICLE the secondary option.

Using the two corpora, IrCLE and ICLE, and the AntConc 3.2.4w software (Anthony 2012) and based on the 'Paragraph Development' course syllabus, the textbook analysis and error analysis as explained above, a collection of 6 DDL-based units were prepared. In addition to these, 3 units from Sripicharn (2002) were adopted to be used in the introductory sessions. See Appendix (N). These hand-outs were aimed to be applied for the DDL-activities at the beginning of each classroom session (20 to 30 minutes) in the experimental group. In the control group the only material used was the textbook, with more teacher explanations and more time spending on the exercises of the book.

A pretest posttest control group design was employed to collect the required data. The Control Group (Non-DDL) received instructions through conventional method of textbook usage, teacher explanations and classroom exercises. The Experimental Group (DDL) received a 20-30 minutes of DDL-based instructions at the beginning of each class session. The rest of the time in each session was allocated to work with the same textbook as used in the Non-DDL group. In addition to textbook usage, both groups were asked to do similar weekly assignments, and attended the same pretest and posttest examination sessions, on the second and final term sessions respectively.

As for data collection, a questionnaire and a pretest were administered to both groups at the beginning of the term. The same test with some minor changes was administered to both groups

at the last session of the term- the post-test. The participants' performances on the pre- and post-test were analyzed quantitatively in order to answer the first three raised questions:

- 1) Do Iranian EFL learners achieve higher improvements in their declarative writing scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?**
- 2) Do Iranian EFL learners achieve higher improvements in their analytic writing scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?**
- 3) Do Iranian EFL learners achieve a greater improvement in their CAF scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?**

A second questionnaire was also asked to fill out by the DDL group. In this questionnaire the participants were asked to give their ideas, comments and attitudes towards the new method they had been taught by during the term. The last type of the data was collected through conducting some 9 interviews with a sample of participants in the DDL group. The results of these interviews along with those of the second questionnaire were used to find an appropriate answer to the fourth question of the study which asked about the Iranian EFL learners' attitude towards using the DDL approach in a 'Paragraph Development' course.

7.3 Discussions on the findings

The main findings from the study can be summarized in two areas: learning effects and learners' attitudes. As for learning effects, the declarative and procedural knowledge of the research

participants on the ground of paragraph development skills using the DDL approach was compared with a conventional method of textbook usage.

7.3.1 Declarative knowledge

The participants' declarative knowledge of language rules of use, that is, familiarity with elements of language in general and frequently used patterns and structures and also organisational elements in a paragraph such as connectors had been operationalised into the first 5 parts of the tests (pre- and post-test). However, the total sum of these parts were considered as the declarative score and used for the statistical operations. The statistical analyses of this part of the test showed that both groups have enjoyed some kind of improvements over time which might be interpreted as instructional influences during the term.

The results as reported in 5.3.1 showed that the DDL group could have improved their declarative knowledge more than the non-DDL group. If we take a closer look at the results gained from different components of the declarative part of the tests (table 5.2), we will see some kind of improvement in every part. It means that class instructions, and activities in both groups have led the learners to answer the multiple choice questions, sentence connection, sentence paraphrasing, sentence completion, and guided paragraph writing test parts better in the post-test than what they had done in the pre-test. Significant difference between the total scores in this part of the test between the two groups, however, indicates that class attendance with the DDL-based materials has had more positive effects on the learners' improvement than a conventional one with typical textbook (Non-DDL group).

What I would like to conclude at this point is that even if the class teachers or EFL/ESL syllabus designers aim at familiarizing the learners with structural patterns and grammatical features relevant to certain language points, the DDL techniques and materials can be considered at least a viable alternative instructional method.

7.3.2 Procedural knowledge

As for the procedural aspect of the research participants' language development, their written performances, paragraphs written on the pre- and post-test were compared on two grounds of 'Analytic Scoring' and 'Complexity, Accuracy, and Fluency' (the CAF Study).

7.3.2.1 Analytic Scoring

Brown (2003: 243), in introducing different scoring methods for assessing the writing skills of ESL/EFL writers, states that Analytic Scoring is the most objective scoring scale. Analytic scoring scales provide detailed information about a test taker's performance in different aspects of writing. Depending on the purpose of the assessment, scripts might be rated on such features as content, organisation, cohesion, register, vocabulary, grammar, or mechanics (Weigle 2002). Hence, the analytic scoring procedure was selected as the assessment tool for evaluating the participants' written paragraphs. The scoring scale which was used in this study is a revised version of Jacobs et al.'s (1981) scoring profile. In short, different aspects of writing were rated with different weighting: CONTENT 15 points, ORGANIZATION 10 points, VOCABULARY 10 points, and LANGUAGE USE 15 points. Each script was analytically scored in terms of the above four mentioned features, each one liable to get a 50.

In order to find a reasonable answer to the second question: "Do Iranian EFL learners achieve higher improvements in their analytic writing scores after being taught through the DDL approach than those who were taught through Non-DDL approach?" appropriate statistical analyses were conducted. The results show that both groups have improved an overall extent of the features of this measuring scale. Since no significant difference between groups' improvements was observed in regard to the Analytic scoring as a whole (at the macro-level comparison), it can be concluded that the observed improvements in the total Analytic scores in both groups might not be attributed to any particular method of teaching, although instructional activities in both groups have been effective.

As far as micro-level comparison is concerned, both groups have been able to improve the 'Content' feature of their paragraphs. The Non-DDL group had a gain in the 'Organisation' feature, whereas the DDL group had a slight regression. One possible reason for such an unexpected loss could be explained in the focus of attention put on developing the grammatical features, micro level, of the written products in this group. In other words, DDL participants were trying to write paragraphs with fewer grammatical errors and this might have caused them overlook the organization features of their paragraphs. Both groups showed no significant improvements in the 'Vocabulary' feature which is quite understandable since no particular attention was paid to learning vocabulary during the term.

It was shown in the results chapter that the DDL group could have improved their 'Language use' features significantly more than the Non-DDL group. In other words, the DDL-based units can be seen to act as supportive instructional materials in developing the components of the

'language use' feature. If this is the case, I can argue that the DDL method, as used in this group, has given the learners an advantage in learning and applying the target grammar patterns whereas, the parallel group - Non-DDL - did not enjoy the situation.

7.3.2.2 The CAF Study

The third question raised in this study was in regard with 'Complexity', 'Accuracy' and 'Fluency' (CAF) measures of writing. The idea of doing a CAF Study on the data came up from the idea that progress in language use may be better captured by measures of the triad (Skehan, 1998; Ellis, 2003, 2008; Ellis and Barkhuizen, 2005). Norris and Ortega (2003) proposed that when done well, measurement provides the empirical link between researchable phenomena and the theoretical claims researchers want to make about such phenomena.

Since I intended to do this empirical research to evaluate the development of specific language learners' skills for paragraph writing in response to the particular set of DDL-based tasks, the third question was raised. "Do Iranian EFL learners achieve a greater improvement in their CAF scores after being taught through the DDL approach than those who were taught through a Non-DDL approach?"

This was, perhaps, the most detailed analysis of the participants' products, the written paragraphs in the pre- and post-test sessions. The analysis was based on Wolfe-Quintero et al. (1998) and the goal was to measure the learners' paragraph writing development. From among different measures of analyses for each of these writing features the followings were measured. For the measures of 'Complexity' the ratio of clauses to T-units (C/T) and the proportion of dependent clauses to clauses (DC/C) were used. In order to measure 'Fluency' the number of words per T-

unit (mean length of T-unit - MLT), the number of words per clauses (mean length of clause - MLC), and mean length of error-free T-unit (MLEFT) were taken into account. In terms of 'Accuracy', error-free T-units per T-unit (EFT/T) and errors per T-unit (E/T) were calculated.

7.3.2.2.1 Measures of Complexity

As mentioned in chapter 5 (5.2.3), in the present study, 'complexity' refers to 'syntactic complexity'. Syntactic complexity has been recognized as an important construct in L2 writing teaching and research, as the growth of a learner's syntactic repertoire is an integral part of his or her development in the target language (Ortega, 2003). Syntactic complexity is evident in second language (L2) writing in terms of syntactic variation and sophistication, or, more specifically, the range of syntactic structures that are produced and the degree of sophistication of such structures (Lu 2011). Wolfe-Quintero et al. (1998) identified over 30 syntactic complexity measures proposed in previous L2 writing development studies. Most measures consider clauses, sentences, or T-units as production units and analyse them in terms of length (e.g., mean length of T-unit) or in relation to either one another (e.g., clauses per T-unit) or particular syntactic structures (e.g., complex nominal per T-unit).

In this study, from a large variety of measures proposed for characterizing syntactic complexity in L2/EFL writing, the ratio of clauses to T-units (C/T) and the dependent clauses to clauses (DC/C), the two measures reflecting the amount of subordination (Lu 2011: 43), were used. As shown in chapter 5 very slight changes have been observed in these two features of syntactic complexity in both groups. In the case of the Non-DDL group a decrease of 0.03 has happened in the ratio of clause per T-unit which means that the participants tend to write fewer compound

structures at the end of the term. The same kind of decrease, though in a slighter rate, can be seen in the DDL group (0.01). Another complexity feature that was measured was the ratio of dependent clause per clause (DC/C). In both groups there were no considerable changes over time. It can be interpreted that the stable ratio is an indication of learners' intention towards using simpler structures or at least they have not shown an interest in using more complex structures.

As far as developmental nature of ESL/EFL learning is concerned, this finding is in line with the results gained from previous studies on subordination features of the complexity construct. Lu (2011) in a longitudinal study in which he evaluates syntactic complexity measures of college-level ESL writers' language development concludes that the subordination measures, DC/C and DC/T have shown significant negative changes from lower to higher levels of proficiency. This finding, I think, supports the developmental prediction (Cooper, 1976) which presents an argument for non-linear complexification as far as subordination is concerned, on the grounds that advanced proficiency groups should be expected to produce writing that capitalizes on complexification at the phrasal, rather than clausal level. Similar negative direction of C/T at advanced levels is also taken into account as a result of reduction from clauses to phrases. See Monroe (1975), Sharma (1980), and Wolfe-Quintero et al. (1998) for more details.

What I would like to conclude from this discussion is that the participants' tendency towards less use of subordinations can be understood as an indication of what Ortega (2003) mentions as the learners' capitalization on complexification at the phrasal level. This would be an appropriate ground for further research in this regard. On the whole, lack of significant differences between

groups (Non-DDL and DDL) reveals that methodological variation has not violated the developmental prediction.

7.3.2.2.2 Measures of Accuracy

Accuracy simply corresponds to correctness of language produced. It refers to 'how well the target language is produced in relation to the rule system of the target language' (Skehan 1996: 22). For the purpose of measuring language accuracy the ratio of the number of error free T-units to T-units and the number of errors per T-units were computed. As mentioned in chapter 5 (5.2.3), the occurrence of every instance of an error either syntactic, morphological or lexical-idiomatic, as classified by Bardovi-Harlig and Bofman (1989) was counted for 'an error' disregarding its type and category. Therefore, the number of 'errors per T-units' and 'error-free T-units' were the two attributes sought for.

The results of this error analysis showed that the accuracy feature of the Non-DDL group has decreased in the post-test as compared with the pre-test. The ratio of error free T-units to T-units in this group has decreased from 0.38 in the pre-test to 0.35 in the post-test. Moreover, the ratio of errors to T-units has increased by an amount of 0.09 (pre-test: 1.09, post-test 1.18). It means that the paragraphs written in the post-test contain more erroneous T-units!

As for the DDL group, the story of accuracy turned out to be totally different from that of the Non-DDL group. Learners in this group wrote more accurate paragraphs in the post-test. The ratio of error free T-unit to T-unit (EFT/T) increased from 0.43 in the pre-test to 0.53 in post-test. Although statistical analysis of paired samples t-test does not show a significant difference in this measure, the other accuracy feature, that is, the ratio of error to T-unit (E/T) enjoyed a

statistically significant difference (pre-test: 0.89, post-test: 0.69). It means that the DDL group has produced paragraphs with more grammatically correct T-units. In this case a claim can be made that instructional materials and class activities based on a DDL approach have helped the learners produce paragraphs with more grammatically accurate structures.

I believe that one of the goals of the course which seems to be the development of the learners' micro level skills in writing has been met. As I have mentioned in the methodology chapter under the 'Error Analysis' section, quite a large number of teachers' corrections are on the same micro features of the learners' products. Also, the textbook analysis revealed that considerable amount of the textbook presentations and activities deal with structural features relevant to wider topics of developing ideas in writing activities.

Comparison between groups' results in the 'organization' feature of analytic scoring and accuracy measures of the CAF study leads us to some interesting findings. As we saw in 7.3.2.1, above, the Non-DDL group has been able to improve the 'organization' feature which by definition and according to the scale components indicates language learners' improvement on the grounds of 'fluency of expression', 'logical sequencing of their ideas', and 'cohesion'. In a word, I can say that Non-DDL learners could have developed their 'macro skills' in a classroom in which more emphasis has been made on textbook explanations and activities. On the other hand, the DDL participants whose classroom activities comprised a combination of textbook use and DDL hand-outs outperformed micro skills. Weak performance of Non-DDL participants in accuracy features in the post-test could be interpreted (justified) as the over-emphasis that they have been made on organization features. It seems as if they had not have time to focus on grammatical

aspects of what they are writing and this is because of over-involvement with macro-level features.

Roughly, a similar but minor over-emphasis can be traced in the DDL group in which we witness a slight decrease in the 'organization' component of analytic scoring. This happens while a decrease is taking place in the ratio of E/T indicating a quite reasonable improvement in the 'accuracy' component of CAF. Although the accuracy improvement is considered as a desirable gain of the term, a minor regression in the 'organization' might be seen as a result of over-emphasis on micro skills presented in the DDL units.

Another explanation for these findings, however, might be the impact of task design, i.e. the tasks used in the DDL group might have not allowed the learners syntactic complexity to emerge. What I want to elaborate is that instructional activities in either group has led to some kind of change, methods used have been influential and differences in presenting instructional materials should at least be viewed determinant.

7.3.2.2.3 Measures of Fluency

Three measures of fluency were used to evaluate any possible change in the fluency aspect of the learners' products during the term. For the first two measures, mean length of T-units (MLT) and mean length of clauses (MLC), the numbers of words were divided by the number of T-units and clauses respectively. The third fluency measure was the mean length of error-free T-units (MLEFT).

Statistical analyses reported in 5.3.3.5 showed that both Non-DDL and DLL groups had slight decreases in their MLT and MLC (11.45 to 11.21 in the Non-DDL and 13.86 to 13.20 in the

DDL group in the case of MLT and 8.22 to 8.02 in the Non-DDL and 9.41 to 8.96 in the DDL group in the case of MLC). These statistics indicate that the learners tend to write shorter T-units and shorter clauses, though the differences are not statistically significant.

The mean length of error-free T-units was the only component that enjoyed more improvement in the DDL group as compared with the Non-DDL group. Results showed that the Non-DDL group has increased its MLEFT from 7.94 in the pre-test to 8.59 in the post-test which means an increase of 0.65. This change in the DDL group is even bigger, 10.50 in the pre-test has changed to 12.06 in the post-test. That is an increase of 1.56 (word). This significant change can lead us to the idea that conducting a paragraph development course using the DDL-based techniques and materials helps them increase the quality level of their writing. I do believe that lengthening the error free T-units shall be interpreted as an aspect of increasing the quality level of writing.

Having the first finding of this CAF study, that is, learners' tendency towards less complex paragraphs, in mind, I can now realize that shorter MLTs and shorter MLCs in the post-test can be viewed as two complementing processes that I would call the "**de-complexification moves**" at this stage of EFL writing. By the term de-complexification moves, I mean that upper-intermediate EFL learners attending paragraph writing courses are getting familiar with the way/s of how to write precise, cohesive, and well-developed paragraphs. In many cases, I have experienced paragraph writing contexts in which EFL teachers feel necessary to familiarize their learners with how to write more effectively with shorter sentences using simpler structures. EFL learners who are at earlier stages of writing need to be assured that they can start writing with their language ability they are enjoying at the time.

I think more complex sentences, longer T-units, and longer clauses observed in the earlier written paragraphs (pre-test) of EFL learners at this proficiency level can be viewed as their more reliance on their L1 literacy. Let's say, some kind of language transfer leads them to more complex and lengthier language outputs. Then, after attending a one-term long paragraph development course they are on a route to writing more effectively while using less complex structures and even a bit shorter sentences, T-units, and clauses.

7.3.2.3 Interpreting the results of the CAF Study with Trade-off Hypothesis

In his theorisation of second/foreign language learner performance on language learning tasks, Skehan develops the Trade-off Hypothesis (Skehan, 2009; earlier known as the Limited Attentional Capacity Model) in which he believes that in order to cope with some cognitive problems such as capacity limitations and working memory limitations (Baddeley 2007) language learners should divide their attentional resources between all the processes a task requires, such as input selection, effective information processing, and response actions. On the other hand, advantages of successful performance in task-based contexts has often been characterized as containing more advanced language, leading to *complexity*; a concern to avoid error, leading to higher *accuracy*; and the capacity to produce speech at normal rate and without interruption, resulting in greater *fluency*.

The assumption that each of these areas, complexity, accuracy, and fluency (CAF), requires attention and working memory involvement, would explain negative impact of applying an excess of attentional resources to any one of them, a competitive situation between the ongoing processes and related areas of performance (linguistic complexity, accuracy, and fluency).

Therefore, Skehan (2009), in the Trade-off Hypothesis, predicts that "committing attention to one area, other things being equal, might cause lower performance in others" (p 511).

According to this hypothesis only those aspects receiving enough attention will reach optimal performance while processes under limited attention become erroneous (Sample and Michel, 2014). An instance of conflict between CAF components is when L2 learners aim at being fluent. This is a situation in which less attention will be available for complex and accurate language. Skehan (2009) interprets this conflict as "a tension between form (complexity and accuracy), on the one hand, and fluency, on the other" (511).

Although the main focus of attention in the Trade-off Hypothesis is spoken language and oral performance tasks, similar trends of thought in researchers who are more interested in written language can be seen. As it was reviewed in chapter 2 (2.5.1.2), some researchers investigating second language writing development have concluded that although there exists a close relationship between the development of accuracy, an increase of fluency, and an increase in complexity, it is not necessarily a linear kind of relationship between them (Foster and Skehan, 1996; MacKay, 1982; Tedick, 1990).

The results of the CAF Study in the present study seem to me like an indication of a trade-off between accuracy and fluency. Since the majority of class activities have been planned to improve structural knowledge and grammatical development of the learners' performance in terms of micro-skills of writing, the accuracy features have improved, whereas the fluency

features have decreased. In fact, committing attention to accuracy might have caused lower performance in fluency.

Lack of considerable changes in complexity could be seen as a consequence of the length of instruction, i.e. term duration. If we take Wolfe-Quintero et al.'s (1998: 35) belief that "complexity and accuracy may progress together over long-term development", we will arrive at the conclusion that a 4-month period of instruction might have not been long enough for such a progress. I think developing complexity features could be expected as an advanced-level improvement which needs more time in terms of instructional activities as well as attentional resources.

7.3.3 Learners' attitudes

The last research question in this study surveyed the students' attitudes and feelings towards the DDL approach as an instructional method of second language learning/teaching. An overall positive feedback from the questionnaires was received from the results of the data analysis in chapter 6. The questionnaires showed that the EFL learners participating in the study were all new to the DDL-based materials. Although they were getting introduced to a new approach of inductive learning, they showed an acceptable level of satisfaction with the method, the time they need to spend for each topic, and the types of exercises they have done.

This positive attitude could also be tracked down in analysing the interviews conducted with the 9 randomly selected interviewees in the DDL group. As it was shown in the summary section of the interviews in chapter 6 above (6.3.3), there exists a general positive attitude towards the DDL

units for writing classes among the interviewees. The students seem to be content with participating in DDL-based class activities, satisfied with the amount of learned materials in a class session, and think that the method is new and innovative. None of the interviewees expressed their lack of interest in being in a DDL-based classroom and they did not know anyone of their classmates who might have complained about these classes. The possibility of having books with large proportions of KWIC format was welcomed by most of the respondents.

Quite a number of previously conducted research studies on DDL approach in general and on classroom concordancing in particular, have frequently shown the EFL/ESL learners' positive attitudes towards the method (Chan and Liou, 2005; Kaur and Hegelheimer, 2005; Yoon and Hirvela, 2004; Hadley, 2002 and 2001; Sirphicharn, 2002; Cobb and Horst, 2001; Cobb, 1999a and b; and Cobb, 1997a and b).

A few criticisms, however, were made by one or more of the interviewees mentioning that more exercises could accompany each lesson. They believe that since the DDL units present the topics mostly through a set of concordance lines and no explanations are supposed to be given either by the teacher or the written materials, more exercises with variations might be needed to help the learners in absorbing the topic in question.

One of the points of concern for some participants was the educational background of the students. Four out of the 9 interviewees told the researcher that 'the majority of we Iranian students are too dependent to teacher-centred classes and are always waiting for the teacher presentations, descriptions, and explanations'. These points of concern are what Bernardini (2001) has pointed out when she maintains that many learners are of the kind who prefers to be

told what to do, rather than to seek for finding relationships between ideas, words and other linguistic items. She believes that these learners ‘resent having to take any responsibility for their own learning. Learners’ cultural background can be an influential factor in this regard as well.’ Boulton (2009a) also concludes that ‘learners ...may live within culturally diverse pedagogic traditions not compatible with DDL but it would seem ethically dubious to deny learners the opportunity even to try a potentially useful set of tools and skills on the assumption that they will all adhere to the precepts of that culture’ (Boulton 2009a:7).

An outstanding finding in relation to this last question of the study is that EFL learners at this stage feel they need new kinds of materials and some innovative styles of presenting new materials. Both interviews and questionnaires reveal that DDL-based materials can have at least one advantage over conventional textbooks and usual methods of teacher presentations and that is to get the learners involved with learning patterns of language through autonomous independent learning. This finding is, I think, exactly in line with the concluding remark of Sripicharn (2002: 402) where he writes, ‘while almost all the DDL students perceived DDL materials as being helpful in raising awareness of words in context, fewer students in the non-DDL group thought that non-DDL materials were as useful in this respect.’ Although the learners in the present study were involved with finding out grammar patterns through the concordance lines, the same process of raising awareness, or in a more technical terminology, noticing, in regard with language patterning through the concordance lines is very well witnessed.

DDL units can be prepared to encourage learners for learning within a discovery learning framework. One of the basic responsibilities of the teachers using the DDL approach would be to

prepare appropriate materials and after familiarising the learners with the way(s) of patterning the language out of KWIC format and/or other formats of DDL-based materials, they need to be classroom facilitators. I think teachers who are using the DDL approach should function as learning consultants in the classroom.

7.4 Implications of the study

The implications of the study can be examined on the two areas of theoretical and practical. As far as theoretical implications are concerned, some underlying ideas of DDL have gone under further scrutiny and also the extent to which the study could have contributed to the conceptualisations involved are presented. The practical implications and more objective impacts of using the DDL approach in instructing a writing course - at a 'Paragraph Development' level - as well as in instructional materials preparation are presented in the next few paragraphs.

7.4.1 Authenticity of materials

One of the issues around using the DDL approach has been authenticity of linguistic input with which language learners are involved. This arises from the fact that DDL typically involves exposing learners to large quantities of authentic data so that learners can play an active role in exploring the language and detecting patterns in it. Gilquin and Granger (2010) assert that 'not only do corpora make it possible to expose learners to authentic language, but they can actually present them with a large number of authentic instances of a particular linguistic item' and this 'condensed exposure' (Gabrielatos 2005: 10) can 'contribute to vocabulary expansion or heightened awareness of language patterns' (2010: 359). As it was explained in the methodology chapter, the sources of concordance lines used for materials preparation purposes in this study were two learner corpora, the ICLE corpus, and IrCLE, a mini learner corpus comprising of the

Iranian EFL learners' writings. Both corpora are real authentic language products not for teaching purposes but for some kind of real communications between language learners and their teachers, yet in an academic context. Although I knew using a learner corpus for preparing teaching materials has its own disadvantages like scarcity of well-structured relevant lines for any given particular language item, vocabulary or pattern, I decided to choose these two corpora to take the advantages ascertained by previous researchers. It has been said that 'learner corpora can be extremely useful for form-focused instruction (see, e.g., Granger and Tribble 1998; Seidlhofer 2000) because they present students with typical interlanguage features, especially when the data were produced by learners from the same mother tongue background as the students' (Gilquin and Granger, 2010: 361).

7.4.2 Discovery Learning

On the ground of theoretical basis of DDL, it has been pointed out that an element of 'discovery learning' which arguably makes learning more motivating and more fun is an advantage for the approach (Gilquin et al. 2010). Some researchers have described learners as travellers (Bernardini 2001: 22), researchers or detectives (Johns 1997: 101). However, due to a number of factors such as the logistics, the teacher's point of view, the learners' level of language proficiency, and the content of DDL two types of DDL activities may be used in an instructional context; teacher-led activities and learner-led activities which stand at two extremes of a cline (Mukherjee 2006: 12; see also Gabriellatos 2005: 11). Gabriellatos makes a distinction between the two in this way:

"At the teacher-centred end, the teacher decides on the aims of the lesson, selects/designs the materials and manages the lesson. At the learner-centred end, the learner decides on all

three, with the teacher or computer programme acting as facilitator and guide. Of course, there can be intermediate combinations, particularly when decisions are taken collaboratively between teacher and learners" (Gabrielatos, 2005: 12).

In this research, the teacher-led end of the continuum was taken into account for the DDL-based materials preparation. Perhaps the main reason was the fact that the learners were not familiar with autonomous learning procedures and strategies as required in the learner-led kind of activities. Although Bernardini (2004: 22) believes that the kind of activities in which learners 'brows large and varied text collections in open-ended, exploratory ways' would be called 'discovery learning', I think preparing a learning situation in which learners think, guess, hypothesise and retrieve a rule out of the language they have been exposed to could also be called a kind of 'discovery learning'. This is because even though the teacher is already familiar with the language pattern, collocation of words, lexical expressions...this is the learners who should discover what his/her teacher had intended them to get to.

In the DDL-based units, prepared and used in the present study, principles of discovery learning were followed while putting the learners in a position to either find a new pattern, or remember the patterns that they had learned previously. They were not told what pattern(s) they might need to know or use in any certain unit. They were just given a number of concordance lines with the KWIC format or full-sentence citations, asked to answer a few simple questions about the words before or after the key word and then generalise their finding through relating the questions and answers into a pattern. In fact, they have been involving in a 'discovery learning' activity though in a controlled way. Why not calling this activity a '**controlled discovery learning**'?

Figure 7.1 shows an example from unit three (Compare and Contrast) prepared for the DDL group in which students are asked to answer questions 1, 2, and 3 and try to summarize their answers into a pattern in question 4.

Figure 7.1 A sample of a DDL-based unit

Look at the concordances below.

1. ard about computers. At that time, I wasn't into the software-business at all, and I wasn't tempted **either**. When it came to
2. rced into it. It is a fact that many men are not fit to be a soldier and they should not have to be **either**. They would proba
3. ose people who share this opinion. I'm certainly not one of them and I believe many others aren't **either**. The strongest ar
4. at if you are raped and nobody believes you? Life is not always fair and the justice system is not **either**. It consists of p
5. have never been in the situation of a victim in such a severe case and I have not been concerned **either**. Although I am ag
6.s are very extreme. Murderers shouldn't be rehabilitated and they shouldn't be treated like animals **either**. But what about m

1. What is the position of either in each line?
2. Underline the first '**and**' before either in each line and then the first '**not**'.
3. What kinds of statements are there before and after the underlined '**and**'?
4. How can you summarize the pattern observed in these sentences?
5. Write two sentences using this pattern.

Johns (1991 b), in his earliest works on DDL suggested that DDL attempts to cut out the middleman as far as possible and give the learner direct access to the data. Later researchers conducted their studies with a revised version of the idea and considered a more active role for the teacher. This active role did not manifest itself necessarily in the classroom. Teachers' role got its shape specifically at the materials preparation stage. Gabrielatos (2005), for example, drew our attention to a continuum with learner-end activities on one end, which perhaps Johns had in his mind, and the teacher-led activities on the other end. He suggests an intermediate combination in which decisions are taken collaboratively between teacher and learners. Sripicharn (2002: 383) asserts that the teacher in his study played a more important role than what one could expect from Johns's suggestion (expectation). The teacher in Sripicharn's study 'decided what language features should be brought to attention in the materials and selected concordance lines that can reveal such features to learners. The learners therefore did not have

direct access to concordances, but make generalisations based on data pre-selected by the teacher'. The DDL approach, therefore, enjoyed the new metaphor of 'learners as junior researchers' or 'learners as co-detectives', as the learners research on language points decided by the teacher based on pre-selected concordance data'. In the present study, the researcher who also played the role of the teacher in the classroom prepared the DDL-based units, based on a pre-selected course syllabus, Paragraph Development, and accordingly selected the appropriate concordance lines from the corpora. The teacher, however, in the classroom, seems to be not as much active as he is in reality. The classroom session is the time when the learners are more active. This is the time when they are busy with Johns's trilogy of identification, classification, generalisation (Johns 1991a: 4) or research, practice, and improvisation (Johns 1997a: 101).

In fact, the teacher's role must have been fulfilled to a large extent before the class session and if the DDL users are attempting to cut out the middleman, as Johns was longing for, should invest their time, energy, and expertise in preparing DDL-based teaching materials which is a difficult time-consuming stage in teaching the language in a DDL class.

7.4.3 Inductive Approach to Learning

As noted in 3.4, inductive learning strategy has been associated with DDL from the very early days of its development. We noticed that Johns (1991a) started using concordance lines and gave them directly to students as part of a process of inductive learning. He believed that learners should get involved directly in the process of learning. In DDL classes conducted by Johns, learners were asked to "discover", "solve problems", and "learn how to learn". It was discussed that "finding out language patterning and use" by learners, which is one of the two main

functions of learners attending in a DDL class, deals with issues of generalization, and inductive learning as well as Discovery Learning.

Qualitative analyses done on the interviews, discussed in detail in 6.3.3.1, showed that the interviewees have been either inductively oriented learners at the beginning of the study or have shown reasonable tendencies towards the inductive learning strategy throughout the study. This finding seems to me in accordance with the early conceptualisations of the DDL promoters like Johns who believed that applying concordancing in the classroom can help learners as researchers, although other studies such as Watson Todd (2001), Lee and Swales (2006), Tribble (2002), and Yoon (2008) reviewed by Yoon (2011) did not achieve the same result.

7.4.4 The Noticing Hypothesis

As discussed in chapter 3 (3.4.2.1), The Noticing Hypothesis has been applied in language learning in two areas: a) learners' identification of linguistic features, and b) learners' comparisons between their interlanguage and the model target language (Schmidt and Frota, 1986). As for the first area the learners' attention was drawn to linguistic features in the input.

In preparing the DDL units for the present study - explained in detail in chapter 4 - a variety of different types of tasks and activities were prepared in KWIC format in which the target linguistic features were to be identified. The immediate aims of DDL as a noticing activity (in each of the three main types of concordancing activities: Identification activities, Pattern noticing activities, and fill in the blanks activities) were to have learners' attention drawn to a given grammar pattern and language features and to enable the learners to use them correctly (as tested

in the declarative part of the test: sentence connection, sentence paraphrasing, and sentence completion).

The results of comparing the groups' progress in their declarative knowledge showed that the DDL units could help the learners better than the Non-DDL materials (textbook) in identifying the target linguistic features. In addition, as we saw in chapter 5, the DDL participants could improve more in the 'Language use' part of the Analytic Scoring and 'Accuracy' features of the CAF Study. I believe that improvement in these components is an indication of the effectiveness of DDL in increasing learners' awareness of aspects of language that are not sufficiently covered in conventional materials (especially in the case of language patterning).

I think that the obtained results are in line with Schmidt and Frota (1986) and Doughty (1991) providing more empirical evidence for the role of noticing in learners' production. Doughty (1991), of course, used the highlighting technique and capitalisation of texts on computer in the saliency of target forms, whereas the DDL units in this study presented the hidden target grammar patterns in the KWIC format, underlined words and phrases, and bold type words. The techniques used here were as successful as providing explicit rules in helping learners to acquire the intended grammar patterns (linguistic features).

7.4.5 Practical implications

The practical implications of this research can be presented in five sessions, the last four being more related: 1) L2 writing development, 2) using corpora, 3) applying concordancers, 4) training learners, and 5) preparing DDL-based materials.

7.4.5.1 L2 writing development

As discussed in 2.5, the present study is aimed at examining the students' progress in language use features of the writing skill and comparing two groups of students in this regard. Having reviewed different theories of writing and approaches to teaching L2 writing, for the purpose of this study, I adopted the "functional approach" to design and prepare the teaching materials for the DDL group accordingly. Based on the principles of preparing materials in this approach the materials developer, here the researcher, were to choose the appropriate patterns to teach, relate structures to meanings, consider paragraphs as syntactic units composing of a number of sentences expressing particular functional units, and teach students how to form the functions into structural patterns.

In order to evaluate the effectiveness of the DDL-based materials and class activities, the learners' performance was examined in terms of declarative knowledge on the one hand and their procedural knowledge on the other hand. Regarding declarative knowledge, the DDL-based materials could have helped the learners learn the structural patterns and grammatical features relevant to the target functional units.

As far as procedural knowledge is concerned, the 'Language use' features of the 'Analytic' Scoring and the 'Accuracy' component of the CAF Study improved more than other features ('Content', 'Organisation', and 'Vocabulary') and components ('Complexity' and 'Fluency').

In summary, I believe that one of the goals of the course which is the development of the learners' micro level skills in writing has been met. Lack of improvement in 'Organisation' and 'Vocabulary' could be understandable since they were not targeted in the tasks designed in the

DDL group. I think these results would mean that DDL can be viewed as a teaching technique that language teachers can apply along with appropriate tasks to teach the language so that students become active autonomous learners in the language classroom.

7.4.5.2 Using corpora

In order to adopt a DDL methodology one crucial choice is determining the corpus/corpora from which the concordance lines would be retrieved. Gilquin and Granger (2010: 360) point out that ‘any type of corpus may be used in DDL, and indeed, the literature on DDL mentions quite a large range of corpora: written, spoken or multimodal, monolingual or bilingual, general or specialised, native or non-native, tagged or untagged, etc.’ However, particular corpora are best suited for certain purposes and based on the learners' proficiency level, the goals of the teaching course and institutional capabilities like financial supports, technical capabilities etc. the most suitable corpus should be chosen as the corpus resource. In addition to learner corpora like the ones used in this research, for an instructional course such as a ‘Paragraph Development’ course with the goals of improving the learners' micro level skills other types of corpora such as a ‘pedagogic corpus’, compiled from textbooks, can be used.

7.4.5.3 Applying concordancers

Another necessary resource to use in a DDL-based class is a tool to exploit the corpus, i.e. concordancing software (ibid). Either the class is planned to be conducted according to the ‘*soft version*’ of DDL or the ‘*hard-version*’ in terms of Gabrielatos (2005) classification, the instructional institution in which we are working must be equipped with some sort of at least a concordancer. The *soft version* requires only the teacher to have access to, and the skills to use

the software. The teacher prints out examples from the corpus and devises the tasks. Learners work with these corpus-derived and corpus-based materials (Bernardini, 2004; Granger and Tribble, 1998; Osbourne, 2000; Tribble, 1997b; Tribble and Jones, 1990).

In universities and colleges which language departments subscribe to use a large corpus, the teachers can make use of a retrieving tool available with the corpus. For immediate uses, the teachers can use the Micro-concord software, which is more than capable of producing DDL materials with its facilities such as sorting words on the left and right contexts of the key words, or blanking the key words (Sripicharn, 2002).

In cases that language teachers create their own corpora or want to access a corpus that does not have a built-in concordancing programme, it is important to note that many effective concordancing programmes are available. Some concordancing programmes are very affordable, and others are free (Bennet 2010). AntConc (version: 3.2.4w) which is a free downloadable tool was used for this research. Another common corpus tool used for pedagogic purposes is the WordSmith tools.

7.4.5.4 Training learners

If all the requirements of doing a DDL-based class have been fulfilled without necessary trainings for the learners, no benefit of such a class would be expected. For the novice EFL learners who have had no experiences of reading a certain number of unrelated truncated lines, the first step, after materials preparation stage, will be training them how to read the lines. In this regard teachers are expected to provide their students with necessary training for reading concordance lines and make them aware that reading in DDL approach is not a left-to-right

linear movement of the eyes but it involves a top-to-bottom vertical one in which they should try to search for what happens around the key word in the middle of the lines, the node. Students would be taught to focus on a word span of 4 to 5 words before and after the key word.

In many class activities, prepared for the DDL group in this research, in which students were supposed to draw some grammatical patterns out of concordance lines, they were asked to answer the questions following a block of concordance lines. The students were informed that it was not necessary to read all the lines in order, and that they should have searched to find a word, a phrase, or even a punctuation mark. Finding answers to a series of consequential questions would lead them to the intended pattern.

Perhaps one crucial role of the teacher who is using this approach is training the learners in reading the concordance lines aiming at analysing text corpora and interpreting computer-derived data.

7.4.5.5 Preparing DDL-based materials

As discussed in chapter 3 (section 3.3), since the 'Paragraph Development' course is a 2-credit mandatory course for the EFL learners doing their undergraduate studies at Iranian universities and the syllabus is already prepared and offered by the Ministry of Science, Research and Technology on the one hand and in most cases English Departments present the course through a textbook or two on the other, I decided to prepare the DDL-based units according to one of the textbooks which is widely used in the universities, that is, 'Paragraph Development' by Arnaudet and Barret (1990). Having analysed the textbook, a list of 18 grammatical patterns was prepared as the main topics for the DDL-based units.

The format of presenting concordance lines is of great importance in materials preparation stage. KWIC citations are suitable for tasks with a focus on the relationship between the key word and its immediate contexts, or on the patterning of the key word [such as lessons on collocation and connotation]. Full-sentence citations are more helpful when learners are asked to look at language features at the clause or sentence levels (Sripicharn, 2002: 76).

In the present study that grammar patterns mostly at clause and sentence levels were the main points of instructions, full sentences were used in many cases, and wherever KWIC format was used, longer contexts (words before and after the key word) than usual 4 or 5 words were presented in the blocks of concordance lines. In the example given above in 6.4.2 the key word appears towards the end of the lines because a preceding full sentence with at least two clauses need to be analysed by the learners in order to find out the pattern in question. Therefore, it is advised to choose the kind of concordance lines presentation according to the language feature intended to work out with.

Although most commonly used classroom concordancing formats have been intended to present the lexical relations like collocations and connotations (at phrasal level) with immediate contexts in order to show language patterning, it is shown in this study that longer language structures at clause or even sentence levels can be also worked out if the appropriate formatting is chosen.

The DDL-based units prepared for this study were aimed at teaching a writing course and therefore the contents, formats, and classroom tasks were chosen, designed and prepared accordingly. Needless to say, it is a rather specific use of the method. Other language teachers can prepare their own DDL-based materials in general teaching contexts to draw learners' attention to different language points. I believe that appropriate materials can be prepared at

word and phrase levels and even at clause and discourse levels as I used in this study. Yet as Sripicharn (2002: 391) asserts 'it is not likely that DDL materials are to be used as the main task for the whole lesson because the teacher has to cover the content of each course and administers quizzes or exams based on the course's syllabus. So it is suggested that DDL materials be used as supplementary exercises to the main textbook used in each course, or can be used as a general grammar and vocabulary exercises as part of a lesson, or in a self-access language centre'.

Regarding DDL-based materials preparation the following considerations seem necessary to be taken into account:

1. Teaching points should be determined through a needs analysis study conducted by the teacher prior to materials preparation stage. This needs analysis can be conducted either on the students asking them to announce their needs, preferences, and interests while filling out a questionnaire or through analysing an already existing syllabus. The former procedure could be viewed as a learner-led oriented activity and the latter one a teacher-led activity in terms of Gabriellatos (2005). As for the present study, I collected the required information for determining the teaching points after conducting a textbook analysis, explained in chapter 4.
2. The amount of time allocated for each DDL session needs to be considered at the time of materials preparation. Since the learners are new concordance lines users and are at the beginning levels of this kind of inductive learning, lengthy DDL activities will be at the risk of being boring and uninteresting. Therefore, 20 to 30 minutes can be considered for each DDL unit to work out in a classroom session. I presented each DDL session no longer than 30 minutes.

Teacher-designed materials can be used with the whole class first, and individual or a small group of students can spend extra time with some difficult materials with the teacher in a one-to-one or small group consultations.

- c. It is advised to use the materials at the beginning of the class session. There are two main reasons for this. First, the rationale behind the DDL activities calls the learners' attention to identify the language forms, classify their observations and finally generalise them into some new patterns. Hence, doing the activities at the beginning of the session that they have not yet been exposed or presented any particular topic would let them to be in a right situation for what they are supposed to do. Second, if they would have started with their normal coursework activities, it is not reasonable to stop them in the middle of their activities and call their attention to some new supplementary materials that might seem not as important as their normal course work.

- d. As discussed in chapter 6 quite a reasonable number of EFL learners agree that textbooks with new methods of presenting the topics could increase the learners' motivations and interests. It is widely believed that repetitious nature of textbooks can be demotivating to a certain degree. Results from the interviews showed that textbooks with some sort of combining common conventional presentations and exercises with these new innovative concordancing formats and tasks within the DDL-based materials can lead language syllabus designers, textbook developers and teachers to newer series of textbooks, booklets and class hand-outs.

7.5 Conclusion

This thesis reports the findings and their implications of the study conducted on the impacts of teaching some DDL-based units to a group of Iranian EFL learners in a ‘Paragraph Development’ course. In addition to quantitative analyses of the experimental and control groups’ written performances in terms of writing development measures, the learners’ attitudes towards the DDL method (approach) used in the experimental group were scrutinized.

It was found that the students taking a DDL class are in a better position in developing their declarative knowledge than their peer participants in a Non-DDL class. It means that EFL learners using DDL-based materials can develop their knowledge of language elements and rules of use especially micro linguistic elements such as words, expressions and patterns frequently used in connecting ideas more than their counterpart learners using the conventional textbook and the teacher’s class presentations.

The second finding concerns the procedural knowledge of the learners on the grounds of developing writing skills in practice. The results show that the DDL participants have improved their ‘language use’ features more than the Non-DDL group. ‘Language use’ features by definition are linguistic constructions, word order, and linguistic accuracy. This finding has been supported by the results obtained from analysing the ‘Accuracy’ measures in the CAF study.

In the CAF study, the three measures of syntactic complexity, accuracy, and fluency was examined to see how the DDL method might affect the learners’ writing skills development. Results from analysing measures of complexity reveal that the EFL learners in both groups have

not shown an interest in using more complex structures in their paragraphs in the post-test as compared with their paragraphs produced in the pre-test. In fact, through writing less complicated sentences, they show their tendencies to be more straightforward in their writing. Of course, another interpretation of this finding is that the task design had an impact. That is, it is probable that the kind of tasks and activities as well as the way of presenting the materials used in the DDL group have not allowed for the learners syntactic complexity to emerge. This recent interpretation, I think, could be set out for further research.

It was discussed that lack of significant differences between groups (Non-DDL and DDL), as far as complexity is concerned, indicates that methodological variation has not violated the developmental prediction as proposed by Cooper (1976). In Cooper's proposal advanced proficiency groups should be expected to produce writing that capitalizes on complexification at the phrasal, rather than clausal level. By the same token, in this study, the participants' tendency towards fewer uses of subordinations can be understood as an indication of what Ortega (2003) mentions as the learners' capitalization on complexification at the phrasal level.

The findings of an error analysis conducted on the learners' written paragraphs in the two occasions of before and after treatment supported the results obtained from the 'language use' features comparison in the second question of the thesis concerning analytic scoring. According to this error analysis learners in the DDL group wrote more accurate paragraphs in the post-test showing some positive impact of the methodology used in the group.

I believe that one of the goals of the course which seems to be the development of the learners' micro level skills in writing has been met. As mentioned in the methodology chapter under the 'Error Analysis' section, quite a large number of teachers' corrections are on the same micro features of the learners' products. Also, the textbook analysis revealed that considerable amount of the textbook presentations and activities deal with structural features relevant to wider topics of developing ideas in writing activities.

Analyses on the fluency measures, discussed in 7.3.2.2.3 above, revealed that both groups of DDL and Non-DDL tend to write shorter T-units and shorter clauses while trying to expand the length of their error free T-units. This tendency was taken as an indication of developing the quality of writing although no improvement in the length of paragraphs, quantity of writing was observed.

An overall view on the results of complexity and fluency features of the CAF study lead me to the idea that EFL learners who start writing paragraphs go through a “de-complexification moves” stage in which they tend to simplify their grammatical structures, and shorten their T-units and clauses. As I said before, I have experienced paragraph writing contexts in which EFL teachers, at least in an Iranian context, feel necessary to familiarize their learners with how to write more effectively with shorter sentences using simpler structures. EFL learners who are at earlier stages of writing need to be assured that they can start writing with their language ability they have at their hands.

More complex sentences, longer T-units, and longer clauses observed in the earlier written paragraphs (pre-test) of the learners at this proficiency level was attributed to their reliance on

their L1 literacy. I suppose there should be some kind of language transfer that leads them to more complex and lengthier language outputs in the beginning of their writings. Then, after attending a one-term long paragraph development course they are on a route to writing more effectively while using less complex structures and even a bit shorter sentences, T-units, and clauses.

The last research question was to elicit the students' attitudes towards the DDL approach in general and the DDL materials prepared for this study in particular. As it was shown in 6.3.3, there exists a general positive attitude towards the DDL units for writing classes among the interviewees. The students seem to be content with participating in DDL-based class activities, satisfied with the amount of learned materials in a class session, and think that the method is new and innovative. None of the interviewees expressed their lack of interest in being in a DDL-based classroom and they did not know anyone of their classmates who might have complained about these classes. The possibility of having books with large proportions of KWIC format was welcomed by most of the respondents.

A few criticisms, however, were made by one or more of the interviewees mentioning that more exercises could accompany each lesson. They believe that since the DDL units present the topics mostly through a set of concordance lines and no explanations are supposed to be given either by the teacher or the written materials, more exercises with variations might be needed to help the learners in absorbing the topic in question. One of the points of concern for some participants was the educational background of the students. The point that they were trying to make was the cultural tendency of the learners who are accustomed to be told rather than to be independent learners trying to discover new ideas and relations.

An outstanding finding of the students' attitudes towards the method was that they feel they need new kinds of materials and some innovative styles of presenting new materials. Both interviews and questionnaires revealed that DDL-based materials can have at least one advantage over conventional textbooks and usual methods of teacher presentations and that is to get the learners involved with learning patterns of language through autonomous independent learning. Hence, I would like to say that one of the basic responsibilities of the teachers using the DDL approach would be to prepare appropriate instructional materials and after familiarising the learners with the way(s) of patterning the language out of KWIC format and/or other formats of DDL-based materials, they need to be classroom facilitators. I think teachers who are using the DDL approach should function as learning consultants in the classroom.

7.6 Limitations of the study

There is no doubt that every research has its own limitations and this one is not an exception. One major limitation that I was dealing with at the designing period of the study was sampling of the participants. Since it was impossible to have two groups of students at one individual university at the same term, I had to take the groups from two different universities with two different entrance examinations. However, attempts were made to have two groups of students with as much identical English learning background as possible. Both groups were taking a 'Paragraph Development' course which is offered at the third term of the students doing BA in English. According to the national curriculum offered at all Iranian universities the students should have passed the same English courses before the 'Paragraph Development' course. Therefore, the groups' similar backgrounds convinced me of their comparability. However, the groups' proficiency differences, known to me at later stages of the study, assured me that it

would be more worthy to take participants from the same educational institute to ensure a better homogeneity of participants.

This research was conducted in a teaching/learning context in which the researchers' primary function in the class was teaching the course and collecting data for his own research was the secondary function. On the other hand, students were attending a 2-credit mandatory course for which they had to sit on a final exam at the end of the term. Obviously, the course syllabus had to be covered in both groups, and therefore it was impossible to compare the whole DDL units with the whole Non-DDL ones. Instead, a time span of 15 to 20 minutes (on few occasions 30 minutes) at the beginning of each session was allocated for the DDL activities. Perhaps, if more time had given to the DDL units, some considerable changes in results would have been obtained. I think if the present study would be intended to be replicated in the future, one consideration should be to compare a DDL class with a Non-DLL class taught in complete sessions.

7.7 Suggestions for future study

In this study the soft version of DDL (classroom-concordances hand outs) was used to examine the approach in an Iranian EFL writing context. In the future, the spread of computers in educational contexts in the country will make it possible to introduce the hard version of the DDL approach that is, the direct use of corpora and computer concordancers within the classroom. In this way, language learners can directly consult with corpora about their self-raised questions. Hence, it is suggested to other researchers in the future to design research projects to evaluate the hard version of DDL in an Iranian EFL context.

This study has focused on the effects of DDL on developing writing skills of Iranian EFL learners focusing on paragraphs, and further research could be done on longer academic written texts. Courses such as "Essay Writing" can provide the researchers with required data.

Despite all of the aforementioned (chapter 3) advantages of using learner corpora in language learning classes, there have been certain points of concern in using the language produced by learners for other learners. Exposing the language learners to erroneous language structures, non-standard collocations, and mis-spellings are of these points. These are some of the inevitable pitfalls of using any learner corpus. However, researchers interested in using learner corpora are strongly advised to pay their utmost attention in collecting the language produced by advanced learners to decrease the amount of erroneous instances of language.

All the of the findings and conclusions drawn in this study have been bound to the kind of tasks and activities designed in the DDL units with a focus on certain number of grammar patterns and linguistic items as listed in Appendix K. Other researchers could conduct similar studies with alternative task designs and class activities. This way the impact of task design on findings and associated interpretations could be examined more precisely

There are about 100 million speakers of Persian around the world, mainly in Iran, Afghanistan, and Tajikistan. There is a need for a learner corpus of the Persian native speakers learning English as a contribution for other EFL researchers and applied linguists who are interested in conducting corpus based studies suitable for the Persian speaking regions. This corpus compilation can be and should be done under the consultations of *The International Corpus of Learner English (ICLE)* experts based at the University of Louvain.

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Appendix A Scoring Scales

1. TOEFL Writing Scoring Guide (Weigle 2002: 113)

- 6 An essay at this level
- effectively addresses the writing task
 - Is well organized and well developed
 - Uses clearly appropriate details to support a thesis or illustrate ideas
 - Displays consistent facility in use of language
 - Demonstrate syntactic variety and appropriate word choice though it may have occasional errors
- 5 An essay at this level:
- may address some parts of the task more effectively than others
 - is generally well organized and developed
 - uses details to support a thesis or illustrate an idea
 - displays ability in the use of the language
 - shows some variety in sentence structure and range of vocabulary
- 4 An essay at this level:
- addresses the writing topic adequately but does not meet all of the goals of the task
 - is adequately organized and developed
 - uses some details to support a thesis or illustrate an idea
 - demonstrates adequate but possibly inconsistent facility with syntax and usage
 - may contain some usage errors that occasionally obscure meaning
- 3 An essay at this level may reveal one or more of the following weaknesses:
- inadequate organization or development
 - Inadequate or insufficient details to support or illustrate generalizations
 - a noticeably inappropriate choice of words or word forms
 - an accumulation of errors in sentence structure and/or usage
- 2 An essay at this level is seriously flawed by one or more of the following weaknesses:
- serious disorganization or underdevelopment
 - little or no detail, or irrelevant specifics
 - serious and frequent errors in sentence structure or usage
 - serious problems with focus
- 1 An essay at this level:
- may be incoherent
 - may be undeveloped
 - may contain severe and persistent writing errors
- 0 A paper is rated 0 if it contains no response, merely copies the topic, is off-topic, is written in a foreign language, or consists of only keystroke characters.

2. Holistic scoring scale developed by Polio (1997)

10–12

mastery of word forms
virtually no errors in lexical choice
virtually no global errors
may be a few minor grammatical errors per page
demonstrates mastery of punctuation conventions

7–11

occasional errors of word form
occasional errors in lexical choice but meaning not obscured
mastery of simple constructions
rare problems in complex constructions
several local errors per page but meaning is seldom obscured
may be a few global errors per page
a few punctuation errors

4–6

frequent errors of word form and choice
meaning may be confused or obscured
some problems complex constructions
frequent global and local errors
meaning is obscured but not unintelligible
some errors in punctuation

1–3

little knowledge of English vocabulary and word forms
virtually no mastery of sentence construction rules
dominated by errors
does not communicate
frequent errors in punctuation

comments: Do not count spelling or capitalization errors. Be conservative about comma errors.

3. Holistic assessment grid (scoring rubric) (adapted from Kreth et al, 2010)

4=**An excellent essay.** (Passable)

- It offers an effective response to the prompt.
- Its overall pattern of organization is appropriate; the internal organization of ideas is effective, and transitions are smooth.
- The argument is well developed, uses appropriate and effective rhetorical strategies, and avoids logical fallacies.
- The writing follows the conventions of Standard English, and the writing style is clear, concise, and appropriate.
- The essay has very few, if any, errors in grammar, punctuation, and spelling.
- The essay is well written, interesting, and easy to read.

3=**A good essay.** (Passable)

- It offers a generally effective response to the prompt.
- Both the overall pattern of organization and the internal organization are good, although transitions might not be as smooth as in a “4” essay.
- The argument is developed adequately, though not as well as a “4” essay; it uses appropriate and effective rhetorical strategies and avoids logical fallacies.
- The writing follows the conventions of Standard English, and the writing style is generally clear, concise, and appropriate.
- It might have some minor mechanical errors or some awkward spots, but basically it is clear, well written, fairly interesting, and easy to read.

2=**A satisfactory essay.** (Passable)

- It offers a response to the prompt that is generally acceptable but that contains problems that mar its effectiveness.
- It uses an acceptable pattern of organization, but it might lack smooth transitions.
- The writing follows the conventions of Standard English, but there might be minor errors in style, tone, internal organization, or mechanics; logic might not be developed fully.
- OR the assignment may be a good (“3”) paper with a *major* flaw in one of the following: the argument, organization, tone, or writing style.

1=**An Unsatisfactory essay.** (Unpassable)

- It offers an unacceptable response to the prompt.
- OR it might be a satisfactory (“2”) assignment with a *major* flaw in one of the following: the argument, organization, tone, or writing style.
- OR it might show some evidence of attempting to respond to the prompt but has many errors in organization, development, word choice, style, tone, and/or grammar, punctuation, and spelling. None of these alone would necessarily cause the essay to fail; however, together they make the essay Unsatisfactory.

4. Jacobs's et al. (1981) Analytic Scoring Profile

ESL COMPOSITION PROFILE			
STUDENT	DATE	TOPIC	
SCORE	LEVEL	CRITERIA	COMMENTS
CONTENT	30-27	EXCELLENT TO VERY GOOD: knowledgeable • substantive • thorough development of thesis • relevant to assigned topic	
	26-22	GOOD TO AVERAGE: some knowledge of subject • adequate range • limited development of thesis • mostly relevant to topic, but lacks detail	
	21-17	FAIR TO POOR: limited knowledge of subject • little substance • inadequate development of topic	
	16-13	VERY POOR: does not show knowledge of subject • non-substantive • not pertinent • OR not enough to evaluate	
ORGANIZATION	20-18	EXCELLENT TO VERY GOOD: fluent expression • ideas clearly stated/ supported • succinct • well-organized • logical sequencing • cohesive	
	17-14	GOOD TO AVERAGE: somewhat choppy • loosely organized but main ideas stand out • limited support • logical but incomplete sequencing	
	13-10	FAIR TO POOR: non-fluent • ideas confused or disconnected • lacks logical sequencing and development	
	9-7	VERY POOR: does not communicate • no organization • OR not enough to evaluate	
VOCABULARY	20-18	EXCELLENT TO VERY GOOD: sophisticated range • effective word/ idiom choice and usage • word form mastery • appropriate register	
	17-14	GOOD TO AVERAGE: adequate range • occasional errors of word/idiom form, choice, usage <i>but meaning not obscured</i>	
	13-10	FAIR TO POOR: limited range • frequent errors of word/idiom form, choice, usage • <i>meaning confused or obscured</i>	
	9-7	VERY POOR: essentially translation • little knowledge of English vocabulary, idioms, word form • OR not enough to evaluate	
LANGUAGE USE	25-22	EXCELLENT TO VERY GOOD: effective complex constructions • few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions	
	21-18	GOOD TO AVERAGE: effective but simple constructions • minor problems in complex constructions • several errors of agreement, tense, number, word order/function, articles, pronouns, prepositions <i>but meaning seldom obscured</i>	
	17-11	FAIR TO POOR: major problems in simple/complex constructions • frequent errors of negation, agreement, tense, number, word order/function, articles, pronouns, prepositions and/or fragments, run-ons, deletions • <i>meaning confused or obscured</i>	
	10-5	VERY POOR: virtually no mastery of sentence construction rules • dominated by errors • does not communicate • OR not enough to evaluate	
MECHANICS	5	EXCELLENT TO VERY GOOD: demonstrates mastery of conventions • few errors of spelling, punctuation, capitalization, paragraphing	
	4	GOOD TO AVERAGE: occasional errors of spelling, punctuation, capitalization, paragraphing <i>but meaning not obscured</i>	
	3	FAIR TO POOR: frequent errors of spelling, punctuation, capitalization, paragraphing • poor handwriting • <i>meaning confused or obscured</i>	
	2	VERY POOR: no mastery of conventions • dominated by errors of spelling, punctuation, capitalization, paragraphing • handwriting illegible • OR not enough to evaluate	
TOTAL SCORE	READER	COMMENTS	

5. Weir's (1990) Scoring scale

A. *Relevance and adequacy of content*

1. The answer bears almost no relation to the task set. Totally inadequate answer.
2. Answer of limit relevance to the task set, Possibly major gaps in treatment of topic and/or pointless repetition.
3. For the most part answers the task set, though there may be some gaps or redundant information.
4. Relevant and adequate answer to the task set.

B. *Compositional organization*

1. No apparent organization of content.
2. Very little organization of content. Underlying structure not sufficiently controlled.
3. Some organizational skills in evidence, but not adequately controlled.
4. Overall shape and internal pattern clear. Organizational skills adequately controlled.

C. *Cohesion*

1. Cohesion almost totally absent. Writing so fragmentary that comprehension of the intended communication is virtually impossible.
2. Unsatisfactory cohesion may cause difficulty in comprehension of most of the intended communication.
3. For the most part satisfactory cohesion although occasional deficiencies may mean that certain parts of the communication are not always effective.
4. Satisfactory use of cohesion resulting in effective communication.

D. *Adequacy of vocabulary for purpose*

1. Vocabulary inadequate even for the most basic parts of the intended communication.
2. Frequent inadequacies in vocabulary for the task. Perhaps frequent lexical inappropriacies and/ or repetition.
3. Some inadequacies in vocabulary for the task. Perhaps some lexical inappropriacies and/or circumlocution.
4. Almost no inadequacies in vocabulary for the task. Only rare inappropriacies and/or circumlocution.

E. *Grammar*

1. Almost all grammatical patterns inaccurate.
2. Frequent grammatical inaccuracies.
3. Some grammatical inaccuracies.
4. Almost no grammatical inaccuracies.

F. *Mechanical accuracy I (punctuation)*

1. Ignorance of conventions of punctuation.
2. Low standard of accuracy in punctuation.
3. Some inaccuracies in punctuation.
4. Almost no inaccuracies in punctuation.

G. *Mechanical accuracy II (spelling)*

1. Almost all spelling inaccurate.
2. Low standard of accuracy on spelling.
3. Some inaccuracies in spelling.
4. Almost no inaccuracies in spelling.

6. Composition grading scale (Brown and Bailey, 1984)

Composition Grading Scale

	20-18 Excellent to Good	17-15 Good to Adequate	14-12 Adequate to Fair	11-6 Unacceptable—not college-level work	5-1
I. ORGANIZATION: Appropriate title, Introduction, Body, and Conclusion	Appropriate title, effective introductory paragraph, topic is stated, leads to body; transitional expressions used; arrangement of material shows plan (could be outlined by reader); supporting evidence given for generalizations; conclusion logical and complete	Adequate title, introduction, and conclusion; body of essay is acceptable but some evidence may be lacking, some ideas aren't fully developed; sequence is logical but transitional expressions may be absent or misused	Mediocre or scant introduction or conclusion; problems with the order of ideas in body; the generalizations may not be fully supported by the evidence given; problems of organization interfere	Shaky or minimally recognizable introduction; organization can barely be seen; severe problems with ordering of ideas; lack of supporting evidence; conclusion weak or illogical; inadequate effort at organization	Absence of introduction or conclusion; no apparent organization of body; severe lack of supporting evidence; writer has not made any effort to organize the composition (could not be outlined by reader)
	20-18 Excellent to Good	17-15 Good to Adequate	14-12 Adequate to Fair	11-6 Unacceptable—not college-level work	5-1
II. LOGICAL DEVELOPMENT OF IDEAS: Content	Essay addresses the assigned topic; the ideas are concrete and thoroughly developed; no extraneous material; essay reflects thought	Essay addresses the issues but misses some points; ideas could be more fully developed; some extraneous material is present	Development of ideas not complete or essay is somewhat off the topic; paragraphs aren't divided exactly right	Ideas incomplete; essay does not reflect careful thinking or was hurriedly written; inadequate effort in area of content	Essay is completely inadequate and does not reflect college-level work; no apparent effort to consider the topic carefully
III. GRAMMAR	Native-like fluency in English grammar; correct use of relative clauses, prepositions, modals, articles, verb forms, and tense sequencing; no fragments or run-on sentences	Advanced proficiency in English grammar; some grammar problems don't influence communication, although the reader is aware of them; no fragments or run-on sentences	Ideas are getting through to the reader but grammar problems are apparent and have a negative effect on communication; run-on sentences or fragments present	Numerous serious grammar problems interfere with communication of the writer's ideas; grammar review of some areas clearly needed; difficult to read sentences	Severe grammar problems interfere greatly with the message; reader can't understand what the writer was trying to say; unintelligible sentence structure

Composition grading scale (Brown and Bailey, 1984) (Contd.)

	20-18 Excellent to Good	17-15 Good to Adequate	14-12 Adequate to Fair	11-6 Unacceptable—not college-level work	5-1
IV. PUNCTUATION, SPELLING, AND MECHANICS	Correct use of English writing conventions: left and right margins, all needed capitals, paragraphs indented, punctuation and spelling; very neat	Some problems with writing conventions or punctuation; occasional spelling errors; left margin correct; paper is neat and legible	Uses general writing conventions but has errors; spelling problems distract reader; punctuation errors interfere with ideas	Serious problems with format of paper; parts of essay not legible; errors in sentence-final punctuation; unacceptable to educated readers	Complete disregard for English writing conventions; paper illegible; obvious capitals missing, no margins, severe spelling problems
V. STYLE AND QUALITY OF EXPRESSION	Precise vocabulary usage; use of parallel structures; concise; register good	Attempts variety; good vocabulary; not wordy; register OK; style fairly concise	Some vocabulary misused; lacks awareness of register; may be too wordy	Poor expression of ideas; problems in vocabulary; lacks variety of structure	Inappropriate use of vocabulary; no concept of register or sentence variety

Brown and Bailey

Appendix B
Questionnaire 1
(administered at the beginning of the course)

1. General information

First name _____ Last name _____ Gender (m / f)

Age under 19 19-22 over 22

Year _____ Faculty _____ Major _____

GPA less than 12 12 – 13.9 14 -15.9 16-18 more than 18

2. How long have you been learning English?

1-3 4-6 7-9 10-12 more than 12 years

3. Why do you learn English? (You may tick more than one)

- Because it helps me to get a good and well-paid job
- Because it helps me to prepare myself for studying abroad
- Because I like the language
- Because it helps me to be able to communicate with foreigners
- Because it is very widely spoken in the world today
- Because it helps me to pass the exams
- Because it helps me to get information or pleasure (e.g. reading English-language newspapers, watching English films)
- Because it is fashionable
- Because it helps me to learn about other cultures through English
- no particular reason
- other reasons (Please specify _____)

4. How many times have you been to countries where you have to use English language?

never 1-2 3-4 more than 5

5. What is the longest period of your stay in number 4? _____ months/years

6. How often do you do such activities?

[5 = very often 4 = often 3 = sometimes 2 = rarely 1 = never]

	5	4	3	2	1
Read English-language newspapers, magazines, Internet information, or other English texts, outside classroom					
Speak English outside classroom					
Watch English movies or listen to English songs					
Go to language lab or self-study room after class					
Write letters in English or chat via the Internet in English					

7. How many English courses have you taken so far at your University (NOT including this semester)?

1-3 4-6 7-9 10-12 12 -15 more than 15

8. Apart from (Paragraph Writing), what English courses are you taking this semester?

9. How many hours per week are you taking English courses outside your University this semester?

not taking any 1-2 3-4 5-6 7-8 9-10 more than 10

10. Before this semester, how often did your English teachers do the following things in class?

[5 = very often 4 = often 3 = sometimes 2 = rarely 1 = never]

	5	4	3	2	1
Correct language errors for you (e.g. in a paragraph or an essay)					
Ask you to find missing words from context (e.g. cloze test)					
Ask you to guess unfamiliar words from context					
Ask you to remember lists of vocabulary and/or give dictations					
Ask you to observe grammar points by yourself from songs, newspapers, or other given examples					
Ask you to do grammar exercises (e.g. change verb tenses or change active voice to passive voice)					
Ask you to correct language mistakes by yourself					
Give and explain grammar rules or ask you to read grammar books					
Play language games or communicative activities					
Ask you to do translation exercises					

11. How much do you agree or disagree with the following statements?

[5 = totally agree 4 = agree to some extent 3 = neither agree nor disagree 2 = disagree to some extent 1 = totally disagree]

	5	4	3	2	1
The teacher should be the centre of English classes					
The students should try to find and correct language errors all by themselves					
The learners should discover grammar rules from examples by themselves without any help from the teacher					
The teacher and the students should play an equal role in English classes					
The teacher should obviously correct the student's errors					
The learners should be given some rules first and then do some practice					
The students should be the centre of English classes					
The teacher should let the students learn from examples first and then give and explain language rules					
The teacher should point out errors for students and ask them to correct the mistakes by themselves					

Appendix C Questionnaire 2

(Administered at the end of the course)

Name _____ ID _____ Section _____

Please give some comments on the supplementary materials (The ones we normally do at the beginning of class)

1. **How many times did you miss the class?**

never 1-2 3-4 5-6 more than 6

2. **How many times did you come to class late and thus didn't do the exercises?**

never 1-2 3-4 5-6 more than 6

3. **How often did you do some of the units given as homework or self-studymaterials?**

every time often sometimes rarely never

4. **How often did you do exercises with concordance lines before taking this course?**

every time often sometimes rarely never

5. **How much do you agree or disagree with the following statements? (About theDDL units in general)**

[5 = totally agree 4 = agree to some extent 3 = neither agree nor disagree

2 = disagree to some extent 1 = totally disagree]

	5	4	3	2	1
1. The units are interesting					
2. The format or presentation of the units are good					
3. The units help you improve your writing skills					
4. The units help you improve your reading skills					
5. The units are not too long and can be done in 10-15 minutes					
6. The units are not difficult to complete					
7. The units should be used every time you come to writing class					
8. The units are relevant to paragraph writing course					
9. The units help you discover new patterns					
10. The units help you learn new vocabulary, idioms, expressions					
11. The units help you learn grammar or structure					
12. The units help you learn how to define something in your paragraph					
13. The units help you learn how to connect cause-effect clauses					
14. The units help you learn how to connect clauses of comparison and contrast					
15. The units help you learn how to make a list in your writing (enumeration)					
16. The units help you learn how to narrate an event that has happened to you					
17. the instructions are easy to follow					
18. The language points selected are useful					
19. The concordance lines are not difficult to read					
20. The concordance lines are well chosen (e.g. vocabulary not too difficult)					
21. Observing concordance lines is an interesting way of learning English					

6. What are your favourite units? (If you can remember)

7. What are the units you do not like or find it too difficult to do? (If you can remember)

8. If you think these units are useful, what have you learned from these exercises?

9. What language points/aspects should be presented in these units?

10. Please make some suggestions as to how to improve these units.

Appendix D

Interviews

The oral interview session was planned to be conducted right after the post-test session in the DDL group. The aim was to supplement questionnaire two in regard with evaluating the participants' attitudes towards the DDL method. The session was tried to be an informal Q&A meeting between the teacher and a sample of the students randomly selected. According to the principles of semi-structured interviews introduced by Nunan (1992) and Dornyei (2007), no particular list of questions was prepared in advance. Yet, the researcher had a general idea of what to ask about and what kind of questions might arise during the session. The general topics of how the students might have felt at the end of a term getting familiar with DDL units, the kind of activities they had done, and their expectations of such kinds of units could form the questions of the interview.

The following is the complete list of the questions asked during the 9 interviews.

1. What is your idea about the DDL method in general?
2. Do you think the method is worthy enough to spend our time on that?
3. What are the advantages and disadvantages of the method?
4. What did you learn from this method?
5. What aspect of language do you think DDL helps us more to learn better? Writing? Reading? Grammar? Or Vocabulary?
6. Do you remember any particular unit that has helped you considerably?
7. Don't you think that any more exercises would make the units too lengthy, and boring?
8. Which of the DDL activities do you think were directly relevant to your needs in the exam session and the paragraph that you were required to write?
9. Do you know any one of your fellow students who has had some kind of negative attitudes toward the class activities we had, the DDL units, or thought that the method is difficult, time consuming and boring?
10. What is your idea about the possibility of having books with concordance lines and other DDL activities all through the book?
11. We focused on patterns we needed for paragraph writing according to the syllabus of the textbook. Do you think we can have a book based on DDL activities to cover all of the course materials?
12. Which pattern do you remember now from among the ones we had in the DDL handouts?
13. Don't you think the method is time consuming and needs a lot of time to cover all subjects and topics of the book?
14. Could you use anyone of the patterns learned during the term in your writing exam that you had just now?
15. How were the DDL exercises? Weren't they too simple or too difficult?
16. The first DDL lesson, which was on different parts of a person's face, was the only lesson on vocabulary. Our other units focused on writing and learning necessary patterns for writing. How do you evaluate the units which focus on writing? Do you think the DDL method is appropriate for teaching/learning writing skill?

Mahnaz

Motivation: Intrinsic	Learning strategies: Inductive
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The first interviewee is Mahnaz. She is a 21-year-old student in her third year with a GPA of 14.5 out of 20. She has expressed that her interest in learning English for communication with foreigners made her study English at the university. She sometimes reads English newspapers and magazines, tries to speak English with her friends outside class, often watches movies in English or listens to English songs. She rarely writes in English or chats via the Internet and never goes to language lab or self-study room after class. She has taken 11 courses at the university so far (not including this term) and is not taking any language courses outside university.

With regard to language learning strategies, Mahnaz strongly agrees that the teacher should let the students learn from examples first and then explain language rules. She believes that the teacher should point out errors for students and ask them to correct the mistakes by themselves. The three following questions were asked from Mahnaz: 1) what is your idea about the usefulness of this method in general? 2) As a student, what do you think about the possibility of having a book with concordance lines all through the pages? And 3) did any of your fellow students have some kind of negative attitudes toward the class activities we did, the DDL units, or thought that the method is difficult, time consuming or boring?

Researcher (R): 1) what is your idea about the usefulness of this method in general?

Student (S): First of all I would like to thank you for the activities and handouts you prepared for us. It was a very new method and different from all of the other methods we had experienced before. The handouts were useful and helped us learn the language practically. We could make use of what we had learnt. Moreover, the method of presentation and your corrections on our paragraphs were instructive. In many cases we didn't need to read the book because we had already taken the points while doing DDL activities in or out of the class.

R: 2) As a student, what do you think about the possibility of having a book with concordance lines all through the pages?

S: I think it will be an interesting book that will involve the students with learning activities.

R: 3) Do you know any one of your fellow students who has had some kind of negative attitudes toward the class activities we had, the DDL units, or thought

that the method is difficult, time consuming and boring?

S: No, no, nobody. I think all of the students have enjoyed the classes and are completely satisfied with the method you used.

Azar

Motivation: Extrinsic	Learning strategies: Uncertain about LS
<p>Azar is in her second year of university studies doing English. She has been learning the language for 6 years and her main motivations for choosing this course at the university are finding a well-paid job, preparing herself for studying abroad, and wanting to be able to communicate with foreigners. She also likes to learn about other cultures through English. She is 19 and has never been to countries where she had to speak English. She has obtained a GPA of 17 in the previous terms and has taken 6 modules other than 'Paragraph Development' in this term. Azar is taking English courses outside of the university to improve her communication skills for 4 hours per week.</p> <p>As far as learning strategies are concerned, Azar agrees with the idea that the teacher should be the centre of English classes, and correct the student's errors. She neither agrees nor disagrees with the idea that the teacher should let the students learn from examples first and then give and explain language rules. She is not certain that the learners should be given some rules first and then do some practice or should try to find and correct language errors all by themselves</p>	

R: 1) what is your idea about the usefulness of this method in general?

S: Generally speaking the method was a very good method because we had to go forward finding out the patterns ourselves, and it happened step by step. For example we can find the pattern that after certain verbs an 'ing' form of the next should be used, or what the structural patterns of 'either...or', and 'neither...nor' are.

What we had before in our previous Grammar courses was in a way that the teacher used to write the patterns on the board like a number of mathematical formulae and then the students had to memorize them. Usually we forgot the patterns after a while. But in this method we discovered something. In lesson one, for example, we could find out the meaning of a word or the collocations of a particular word and in another lesson we might learn a grammatical

pattern. I personally liked the first lesson which was about the words of different parts of a person's face.

R: 2) What aspect of language do you think DDL helps us more to learn better?

Writing? Reading?

S: I think the lessons can be used both for vocabulary learning and learning writing.

R: 3) Which pattern do you remember now from among the ones we had in the DDL-handouts?

S: I had always problems with learning the patterns in which 'either' and 'neither' can be used trying to memorize them, but after doing the DDL exercises on this topic I can use them both in my speaking and writing. I used the words 'like' and 'both' in my paragraph on the exam within the same pattern we had some DDL exercises.

R: 4) Do you think we can have a book based on DDL activities to cover all of the course materials?

S: I think new textbooks can have some particular parts for concordance line. The books that we are using now are roughly in the same monotonous way of presenting their topics. I think a good method of teaching should have different methods of presenting the target topics. That will be a mixed method in which students we'll see a wide range of materials, activities, and presentations. I think a class with only DDL units might become monotonous and boring just like conventional textbooks with repetitious fixed presentations and exercises.

Parisa

Motivation: Intrinsic and extrinsic	Learning strategies: Deductive and Inductive
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The third female interviewee is Parisa, aged over 22, majoring in English and in her second year. She has been learning English for about 6 years and has been abroad 3 times with the longest period of 2 weeks. Parisa has taken 12 courses at the university with a GPA of 18 or above. She is not attending any English classes outside of the university. She mentioned 4 reasons why she is learning English: 1) 'Because it helps me to prepare myself for studying abroad', 2) 'Because I like the language', 3) 'Because it helps me to be able to communicate with foreigners', and 4) 'Because it is very widely spoken in the world today'.

Regarding language learning strategies Parisa completely agrees that the teacher should correct the student's errors and that the learners should be given some rules first and then do some practice. She also agrees to some extent that the learners should discover grammar rules from examples by themselves without any help from the teacher, that the teacher and the students should play an equal role in English classes, that the students should be the centre of English classes, and that the teacher should point out errors for students and ask them to correct the mistakes by themselves.

R: 1) What is your idea about the usefulness of this method in general?

S: In our book we were first presented by the pattern which we had to memorise and then put them into use, but in the DDL units we had to guess or let's say draw the pattern from a number of lines containing it. That was very good and something new. You know when we discover something ourselves it will remain in our minds forever.

R: 2) Don't you think the method is time consuming and needs a lot of time to cover Allsubjects and topics of the book?

S: If we could have the handouts before class session, and find out the patterns, we could save time in the classroom and have more time for more new topics. Of course, not all students are ready for this kind of learning. Most of us prefer to read or to be told new ideas, relationships, and patterns.

R: 3) Do you know anyone of your classmates who has not been satisfied by this method or thought that the method is difficult, time consuming and boring?

S: No. it was an easy method for the learners, because they had to look at a number of lines and then try to answer the questions which followed. They could get to the target pattern by answering the questions. The questions were really easy to answer but when we got to the final questions we could see that there appears a grammatical pattern. The important point here I think, is this that students who are not familiar with KWIC should be fully informed of their tasks before they start answering the questions. For, example, they should be told that the lines are not connected and they are not reading a paragraph, but just a number of lines. If they become completely aware of what they are supposed to do, the method becomes easy, and useful.

Sanaz

Motivation: Intrinsic	Learning strategies: No idea in inductive
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Sanaz, 20, the fourth interviewee, is doing her second year of BA in English. So far she has taken 10 English courses at the university. She is not taking other language courses outside university but she has been abroad for 4 years. This situation has made her learn and use English in communicating with others.

Sanaz expresses her intrinsic motivations in learning the language through these four statements: ‘I like the language’, ‘it helps me to be able to communicate with foreigners’, ‘it is very widely spoken in the world today’, and ‘it helps me to get information or pleasure (e.g. reading English-language newspapers, watching English films)’.

She agrees that ‘the students should be the centre of English classes’ but does not believe that ‘[they] should try to find and correct language errors all by themselves’ and/or ‘discover grammar rules from examples by themselves without any help from the teacher’. She strongly disagrees with teacher-centred classes. In the interview session Sanaz says that she likes the new method, lessons presented through DDL-based units, because when reading the textbook at home, she could remember the patterns and activities done before in the classroom. Several times she went back to the DDL hand-outs and found the patterns that the book was trying to explain to the readers. She believes that in this way she could study the book faster than before because she didn't need to focus on all parts of the lessons.

R: 1) what is your idea about the usefulness of this method in general?

S: I liked this method very much. When I was studying the book I remembered the patterns and activities we had done before in the classroom. It happened to me for several times that I

went back to your handouts and find the patterns that the book was trying to explain to the readers. This way I could study the book faster than before because I didn't need to focus on all parts of the lessons.

R: 2) Do you think any one of the DDL activities were directly relevant with your needs in the exam session and the paragraph that you were required to write?

S: yes, sure

R: 3) Which unit/ what was the topic?

S: The unit on cause and effect. There was a sentence that said, 'She is such a kind teacher that

R: 4) All right you mean the pattern 'SUCH+A+ ADJ+N+THAT...' How about learning words? Do you think you could learn new words and their collocations from the DDL units?

S: Yes there were some collocations in the units. But there were fewer new words that we learned from the handouts.

R: 5) We focused on patterns we needed for paragraph writing according to the syllabus of the textbook. Do you think we can have a book based on DDL activities to cover all of the course materials?

S: Yes, definitely

Ayda

Motivation: Intrinsic and extrinsic	Learning strategies No idea in inductive
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Ayda is in year 2 of her university studies, aged 21, has gained a GPA of 17 and has been learning English for 12 years. She has taken more than 15 courses at the university but not taken any courses outside the university. She says she reads English-language newspapers and magazines, goes to language lab or self-study room, and watches English movies very often. She has never been to a country where she had to communicate in English.

She seems to have both intrinsic and extrinsic motivations in studying English as she mentions her interest in getting a well-paid job and preparing herself for studying abroad through learning the language as well as wanting to be able to communicate with foreigners, and worldwide use of English. As for learning strategies, she believes that the learners should be given some rules first and then do some practice. She doesn't agree that learners should discover grammar rules from examples by themselves without any help from the teacher. She also does not agree with the equality of roles of the teacher and of the student.

R: 1) What is your idea about the usefulness of this method in general?

S: The DDL handouts were helpful for understanding what a whole chapter of the book is about. In many cases we didn't need to study the book because usually there are some lengthy paragraphs in the textbooks that take our time to read and at the end we understand that you would have lost nothing if you hadn't read that part, that is unnecessary explanations, and sometimes texts with which students might have problems of comprehending.

R: 2) What is your idea about the possibility of having books with concordance lines and other DDL activities all thorough the book?

S: Yes, that will be a very good idea. A new kind of books! I think in DDL units with KWIC formats, and other activities we will learn all necessary materials for the units and we do not have to read long and sometimes unnecessary explanations or descriptions

R: 3) Which pattern do you remember now from among the ones we had in the DDL handouts?

S: It was the pattern, ‘RESULT IN’ and ‘to have something in common’. The method in general was a good method and we were talking with our friends about the innovations of the method. The fact that we were all fully engaged in class activities, we shared ideas, and worked together. The interesting thing for me was this that we had heard about group work activities, and autonomous learning, but in reality I had not been in such a real situation as we had during the term.

Pouran

Motivation: Extrinsic	Learning strategies: No idea in inductive
<p>The sixth interviewee is Pouran, a 19-year-old female student in her second year majoring in English with a GPA of 16. She has been learning the language for 9 years, has never been abroad, and has taken more than 15 courses at the university so far. Ability to communicate with foreigners, widespread use of English around the world, higher probability to pass the exams, ability to learn more about other cultures through English language are the main reasons for Pouran to study English at the university.</p>	

R: 1) what is your idea about the usefulness of this method in general?

S: I think the method was new and useful, because the method made learners try to find out something new. It was more creative and innovative. I think the method is worth spending time in the class on the condition that students themselves try to work autonomously and be more responsible for their learning. I do not believe that the activities were simpler than the textbook exercises, but I do believe that activities required more active participations from the students’ part. The class atmosphere becomes less formal and students are in more friendly relationships. So, the method would be useful if they take the activities more seriously than just find opportunities to chat irrelevantly in the class. Yes, that’s a matter of cultural differences and it goes back to the kind of educational training in which students have had to sit silently in the classes and just listen to the lectures presented by the teachers.

R: 2) Do you remember any particular lesson from our hand-outs? (The one(s) that you think were more useful and to the point)

S: Well, they were all good, I think. Ummm, Yes, the lesson with the pattern, 'such a...' I remember was very helpful to me. It worked the cause and effect relationships.

R: 3) Could you use anyone of the patterns learned during the term in your writing exam that you had just now?

S: Yes, since the patterns were repeated through a number of lines, it made it possible to remain in mind for a longer time. Even if you could keep just a sentence in mind the whole pattern would be permanently fixed in the mind.

R: 4) Do you think a book with DDL type of lessons and activities for all of the topics can be a good replacement for the present books, like the one you have had for the course?

S: I think this kind of new book could be of a great help but there seems necessary to include some instructions, explanations and guidelines, especially at the earlier stages of working with DDL activities. I think a book of up to 70% to 80% of DDL activities would be all right. The teacher should be active for answering questions and guide them with their problems.

R: 5) Haven't you come up with anyone of your friends and classmates who were not happy with the method, and consider it too time-consuming, boring and uninteresting?

S: No, No, All of my friends and those who I had a chance to talk about the units have liked the method and they said they enjoyed it. It was something very new to us!

Mina

Motivation: Intrinsic	Learning strategies: Inductive
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Mina is the last female interviewee. She is 20 years old and in the second year of her BA. She has taken more than 15 courses at the university and obtained a GPA of 15. She is not taking any language courses outside university. Mina has been learning English for about 9 years and has never been to a country where she had to speak the language. In order to improve her language skills she reads English-language newspapers, magazines, and other English texts, watches English movies, listens to English songs, and speaks English outside classroom. Mina seems to have strong intrinsic motivation for studying English at the university as she declares she is learning English ‘because it helps [her] to prepare for studying abroad’, ‘because [she] likes the language’, ‘because it helps [her] to be able to communicate with foreigners’, and ‘because it is very widely spoken in the world today’.

R: 1) what is your idea about the usefulness of this method in general?

S: I think the units were effective because we could learn a pattern with different sentences.

One pattern could be viewed through a variety of sentences. It helped us keep the pattern in mind.

R: 2) Do you think it is worthy enough to spend so long to learn a few number of patterns?

S: Yes. When I was studying the book and getting ready for the exam, I realized that I have learned the topics in the textbook through the DDL units.

R: 3) How were the exercises? Weren't they too simple or too difficult?

S: No, they were right for me. I could learn relevant ideas and information for paragraph development course.

R: 4) What is your idea of a book with DDL units for all of the topics? What percentage of a book do you think can be based on DDL units?

S: I think it will be boring to have a book just with this kind of activities. But we can have them in most parts and points of a textbook.

Saman

Motivation: Intrinsic and extrinsic	Learning strategies: Inductive
<p>The first male interviewee is Saman, a 22-year-old student in his second year of doing BA in English language. He has taken 14 English courses and gained a GPA of 17. He has started learning the language for about 12 years and has been abroad for a month. He has chosen to study English at the university because he likes the language and believes that it helps him to get a good and well-paid job. He also thinks that knowing English will help him to prepare for studying abroad. He often speaks English outside classroom and watches English movies or listens to English songs. He is taking English classes outside the university for more than 10 hours per week.</p> <p>Saman agrees to some extent with the idea that the teacher and the students should play an equal role in English classes, and that the teacher should let the students learn from examples first and then give and explain language rules. He completely agrees that the students should try to find and correct language errors all by themselves.</p>	

R: 1) what is your idea about the usefulness of this method in general?

S: The method we used in this term was very good because we could gain a lot in a short period of time. The method helped me in having a better view towards learning the structures and patterns necessary for writing. Of course, the problem that I observed was with the readiness of the students to learn in this way. Their difficulty was not just with a number of unrelated lines having a key word in the centre (KWIC), but their main problem, I think, was the requirement of searching something new without being told in advance (induction as a method of learning). I think it goes back to our system of education in which we are always waiting for the teacher to tell us all of the content of what we are supposed to learn or what we want to learn. Students have not got used to group work in the class and because of this

you might have seen them got distracted and not work as seriously as they should have done during the activity times in the DDL classes. These classes meant more fun to some of them. It is a cultural issue that needs to be amended. The positive point that I can say is this that we could cover a good range of patterns in the term

R: 2) Do you remember any particular unit that you have seen it useful for the exam?

S: in unit 3 I remember listing signals were presented in an easy but effective way. I had problems with using enumerators in sentences and paragraphs and now, after working with the DDL units, I think I am quite aware how to use them.

R: 3) For what purpose(s) do you think this method is more effective? Teaching vocabulary or teaching writing?

S: I think the method was appropriate for writing classes. And for vocabulary we did not have many tasks to do which is quite reasonable since the course was not aimed at vocabulary development of the students. We could extract some patterns out of the DDL units and they were useful and practical in our writing performances.

R: 4) Do you know any one of your fellow students who has had some kind of negative attitudes toward the class activities we had, the DDL units, or thought that the method is difficult, time consuming and boring?

S: no sorry, nobody.

Nima

Motivation: Intrinsic	Learning strategies: Inductive and deductive
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The last interviewee is Nima. He is studying English for the BA degree and is in year 2. He has taken 10 English courses so far and gained a GPA of 18. Nima is 21 and has been learning the language for 8 years but never been to countries where he had to speak English. He has chosen this field of study because he likes the language, and because English helps him in communicating with foreigners and learning about other cultures. He thinks learning English is fashionable nowadays. Nima watches English movies and listens to English songs very often, and sometimes speaks English outside classroom but never goes to language lab or self-study room after class.

With regard to language learning strategies, Nima strongly agrees that the teacher and the students should play an equal role in English classes. He believes that the teacher should let the students learn from examples first and then give and explain language rules and point out errors for students and ask them to correct the mistakes by themselves. He agrees to some extent that the learners should be given some rules first and then do some practice.

R: 1) As a student in the ‘Paragraph Development’ course, you may remember that some parts of our classes were presented through what we called ‘DDL’. Can you tell us your ideas about the usefulness of this method in general and if you think the method is worthy enough to spend our time on that? What are the advantages and disadvantages of the method? What did you learn from this method?

S: Well! I think the method was more useful than the textbook. The book started with the rules and was trying to show us the right way of writing sentences. But In the DDL method we had to discover the patterns, and it made us concentrate, think and keep the patterns in our mind. When you discover something new, it will remain in your mind forever. Generally speaking, I think the method was better than the textbook.

R: 2) What aspect of language do you think DDL helps us more to learn better? Writing? Reading? Grammar? Or Vocabulary?

S: It was really useful for writing. For example, in writing when we know that in which sentences we can use the word ‘such’, what will be the words around it, and in what grammatical structure we can use it, it will be quite helpful.

R: 3) Do you remember any particular unit that has helped you considerably?

S: Yes. Sure, the unit on using the word ‘such’. I had always problems in using this word. The unit showed us the appropriate pattern in which we can use the word. But if I want to criticize is this that there were not enough exercises at the end of the units.

R: 4) Oh, not enough exercises?

S: Yes we usually got familiar with the pattern and in a few lines and then discover the way we can make use of that particular word or pattern. The lines were usually followed by a number of exercises in order to apply the newly learned pattern in writing activities. However, I think they were not enough.

R: 5) Don’t you think that any more exercises would make the units too lengthy, and boring?

S: Yes, but you know? We could put the same 10 exercises that you gave us into an order from the simple ones to more difficult ones so that we could cover a wider range of topics. This is of course what I am thinking about the units.

R: 6) Any other comments or suggestions in regard with learning vocabulary, reading, or writing through DDL approach? You know that the emphasis of this course is on writing, and consequently our units were on the same issue. But we focused onMicro level abilities of writing. There have been quite a

number of other works on vocabulary which was not in our direct focus of attention in this research. We were emphasizing on using DDL in writing. Do you think we can use DDL for teaching/ learning writing?

S: Yes, definitely, especially for writing correctly. Our problem as EFL learners is that we usually try to translate our ideas from Persian into English. DDL units, however, could show us the correct pattern by which we can express our ideas.

R: 7) **Thanks for attending this interview.**

S: You are very welcome.

Appendix E

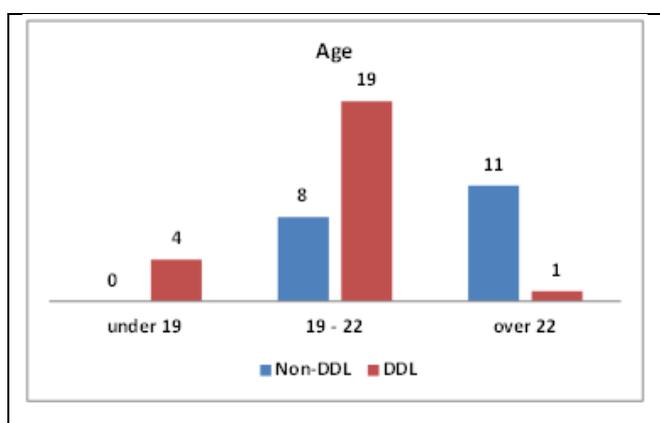
Results of questionnaire 1 (The questionnaire is reproduced in Appendix B)

Attitudes towards English/ Language Exposure/Language experience/ Attitudes towards learning strategies

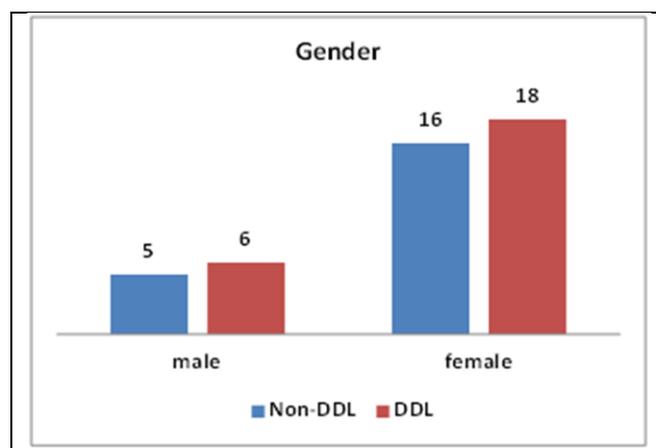
DDL = 24 respondents; Non-DDL = 21 respondents

Section 1: General information

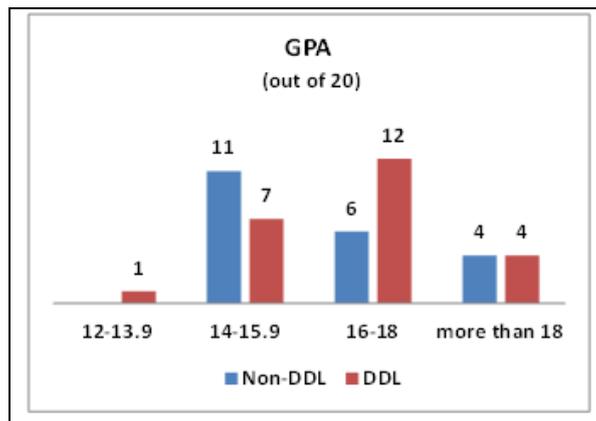
1. Age



2. Gender



3. Academic performance (average grade out of 20)



Crosstab					
			Participant's grouping		Total
			non-DDL	DDL	
GPA of participant	12 - 13.9	Count	0	1	1
		Expected Count	.5	.5	1.0
		% within GPA of participant	0.0%	100.0%	100.0%
		% within Participant's grouping	0.0%	4.2%	2.2%
		% of Total	0.0%	2.2%	2.2%
	14 - 15.9	Count	11	7	18
		Expected Count	8.4	9.6	18.0
		% within GPA of participant	61.1%	38.9%	100.0%
		% within Participant's grouping	52.4%	29.2%	40.0%
		% of Total	24.4%	15.6%	40.0%
	16 - 18	Count	6	12	18
		Expected Count	8.4	9.6	18.0
		% within GPA of participant	33.3%	66.7%	100.0%
		% within Participant's grouping	28.6%	50.0%	40.0%
		% of Total	13.3%	26.7%	40.0%
	more than 18	Count	4	4	8
Expected Count		3.7	4.3	8.0	
% within GPA of participant		50.0%	50.0%	100.0%	
% within Participant's grouping		19.0%	16.7%	17.8%	
% of Total		8.9%	8.9%	17.8%	
Total	Count	21	24	45	
	Expected Count	21.0	24.0	45.0	
	% within GPA of participant	46.7%	53.3%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	46.7%	53.3%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.705 ^a	3	.295
Likelihood Ratio	4.121	3	.249
Linear-by-Linear Association	.287	1	.592
N of Valid Cases	45		

4 cells (50.0%) have expected count less than 5. The minimum expected count is .47.

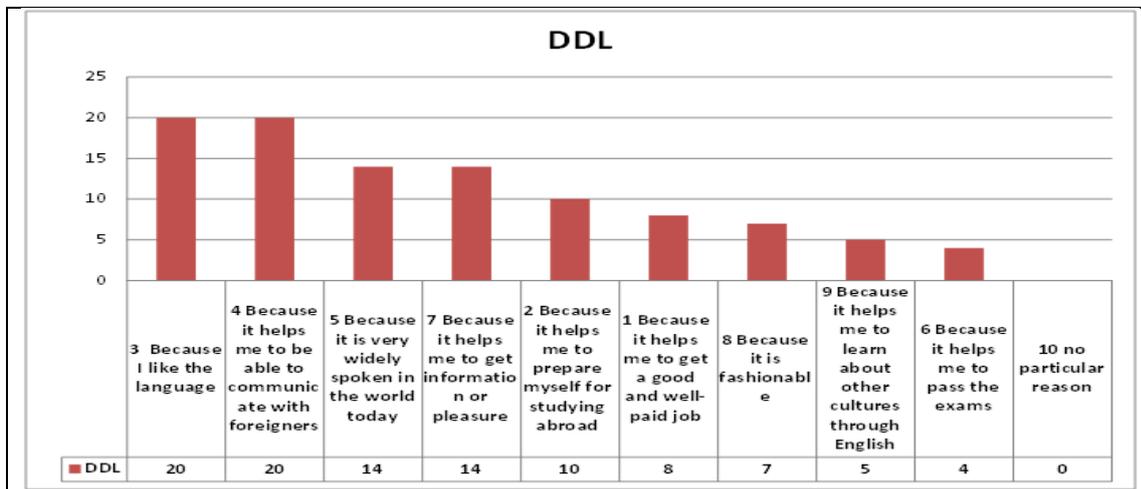
Section2: Attitude towards English

Why do you learn English? (More than one reason could be chosen by the learners)

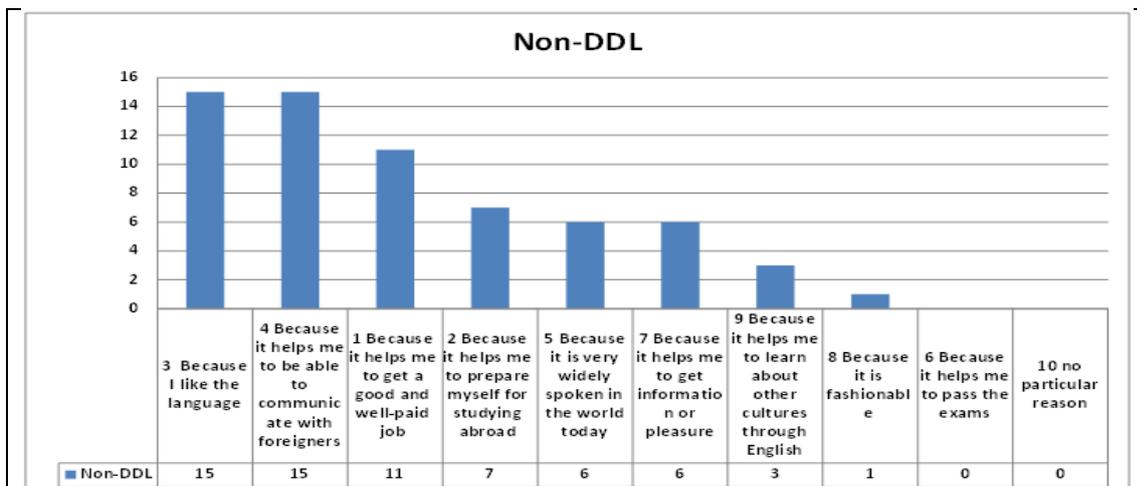
Reasons

1. Because it helps me to get a good and well-paid job
2. Because it helps me to prepare myself for studying abroad
3. Because I like the language
4. Because it helps me to be able to communicate with foreigners
5. Because it is very widely spoken in the world today
6. Because it helps me to pass the exams
7. Because it helps me to get information or pleasure (e.g. reading English-language newspapers, watching English films)
8. Because it is fashionable
9. Because it helps me to learn about other cultures through English
10. no particular reason

DDL Group

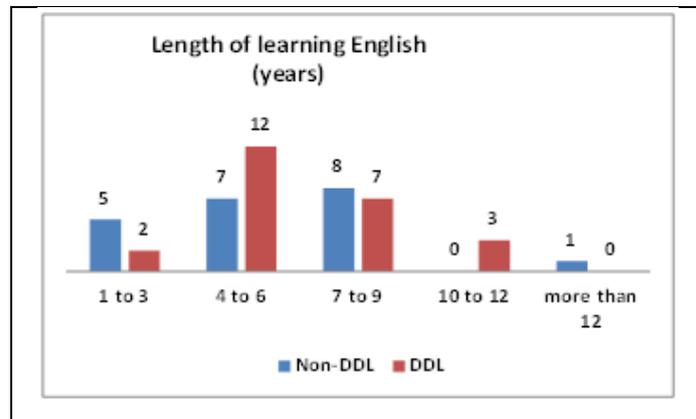


Non-DDL Group



Section 3: Language exposure

1. How long have you been learning English (Years)?

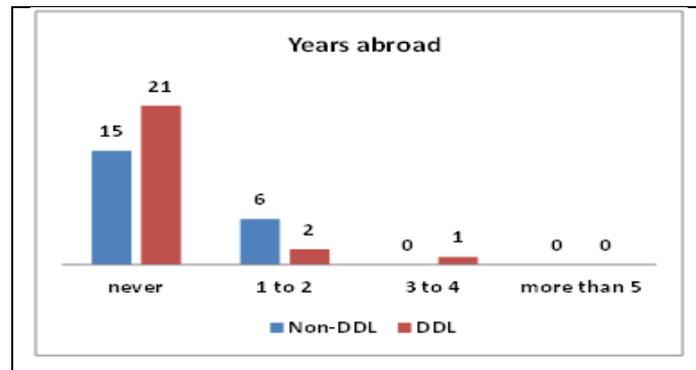


Crosstab					
			Participant's grouping		Total
			non-DDL	DDL	
Length of learning English	1-3	Count	5	2	7
		Expected Count	3.3	3.7	7.0
		% within Length of learning English	71.4%	28.6%	100.0%
		% within Participant's grouping	23.8%	8.3%	15.6%
		% of Total	11.1%	4.4%	15.6%
	4-6	Count	7	12	19
		Expected Count	8.9	10.1	19.0
		% within Length of learning English	36.8%	63.2%	100.0%
		% within Participant's grouping	33.3%	50.0%	42.2%
		% of Total	15.6%	26.7%	42.2%
	7-9	Count	8	7	15
		Expected Count	7.0	8.0	15.0
		% within Length of learning English	53.3%	46.7%	100.0%
		% within Participant's grouping	38.1%	29.2%	33.3%
		% of Total	17.8%	15.6%	33.3%
	10-12	Count	0	3	3
		Expected Count	1.4	1.6	3.0
		% within Length of learning English	0.0%	100.0%	100.0%
		% within Participant's grouping	0.0%	12.5%	6.7%
		% of Total	0.0%	6.7%	6.7%
more than 12	Count	1	0	1	
	Expected Count	.5	.5	1.0	
	% within Length of learning English	100.0%	0.0%	100.0%	
	% within Participant's grouping	4.8%	0.0%	2.2%	
	% of Total	2.2%	0.0%	2.2%	
Total	Count	21	24	45	
	Expected Count	21.0	24.0	45.0	
	% within Length of learning English	46.7%	53.3%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	46.7%	53.3%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.497 ^a	4	.165
Likelihood Ratio	8.071	4	.089

- a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .47.
b.

2. How many times have you been to countries where you have to use English language?

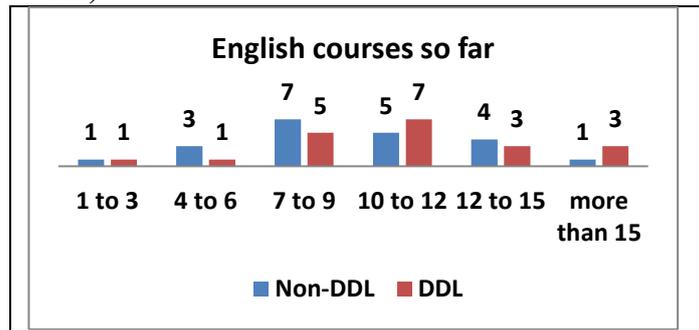


Crosstab					
			Participant's grouping		Total
			non-DDL	DDL	
How many times have you been to countries where you have to speak English language?	never	Count	15	21	36
		Expected Count	16.8	19.2	36.0
		% within How many times have you been to countries where you have to speak English language?	41.7%	58.3%	100.0%
		% within Participant's grouping	71.4%	87.5%	80.0%
		% of Total	33.3%	46.7%	80.0%
	1-2	Count	6	2	8
		Expected Count	3.7	4.3	8.0
		% within How many times have you been to countries where you have to speak English language?	75.0%	25.0%	100.0%
		% within Participant's grouping	28.6%	8.3%	17.8%
		% of Total	13.3%	4.4%	17.8%
	3-4	Count	0	1	1
		Expected Count	.5	.5	1.0
		% within How many times have you been to countries where you have to speak English language?	0.0%	100.0%	100.0%
		% within Participant's grouping	0.0%	4.2%	2.2%
		% of Total	0.0%	2.2%	2.2%
Total	Count	21	24	45	
	Expected Count	21.0	24.0	45.0	
	% within How many times have you been to countries where you have to speak English language?	46.7%	53.3%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	46.7%	53.3%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.817 ^a	2	.148
Likelihood Ratio	4.284	2	.117
Linear-by-Linear Association	.714	1	.398
N of Valid Cases	45		

a. 4 cells (66.7%) have expected count less than 5. The minimum expected count is .47.

3. How many English courses have you taken so far at your university (NOT including this term)?

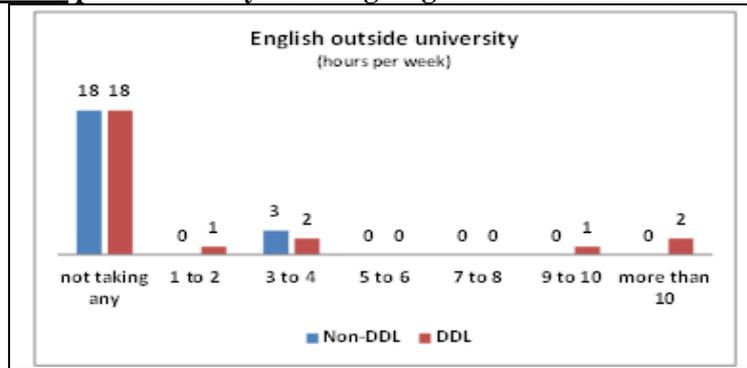


			Crosstab		
			Participant's grouping		Total
		non-DDL	DDL		
How many English courses have you taken so far at Azad University (NOT including this semester)?	1-3	Count	1	1	2
		% within How many English courses have you taken so far at your University (NOT including this semester)?	50.0%	50.0%	100.0%
		% within Participant's grouping	4.8%	5.0%	4.9%
		% of Total	2.4%	2.4%	4.9%
	4-6	Count	3	1	4
		% within How many English courses have you taken so far at your University (NOT including this semester)?	75.0%	25.0%	100.0%
		% within Participant's grouping	14.3%	5.0%	9.8%
		% of Total	7.3%	2.4%	9.8%
	7-9	Count	7	5	12
		% within How many English courses have you taken so far at your University (NOT including this semester)?	58.3%	41.7%	100.0%
		% within Participant's grouping	33.3%	25.0%	29.3%
		% of Total	17.1%	12.2%	29.3%
	10-12	Count	5	7	12
		% within How many English courses have you taken so far at your University (NOT including this semester)?	41.7%	58.3%	100.0%
		% within Participant's grouping	23.8%	35.0%	29.3%
		% of Total	12.2%	17.1%	29.3%
	12-15	Count	4	3	7
		% within How many English courses have you taken so far at your University (NOT including this semester)?	57.1%	42.9%	100.0%
		% within Participant's grouping	19.0%	15.0%	17.1%
		% of Total	9.8%	7.3%	17.1%
more than 15	Count	1	3	4	
	% within How many English courses have you taken so far at your University (NOT including this semester)?	25.0%	75.0%	100.0%	
	% within Participant's grouping	4.8%	15.0%	9.8%	
	% of Total	2.4%	7.3%	9.8%	
Total	Count	21	20	41	
	% within How many English courses have you taken so far at your University (NOT including this semester)?	51.2%	48.8%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	51.2%	48.8%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.787 ^a	5	.733
Likelihood Ratio	2.882	5	.718
Linear-by-Linear Association	1.127	1	.288
N of Valid Cases	41		

c. 8 cells (66.7%) have expected count less than 5. The minimum expected count is .98.

4. How many hours per week are you taking English courses outside university this term?



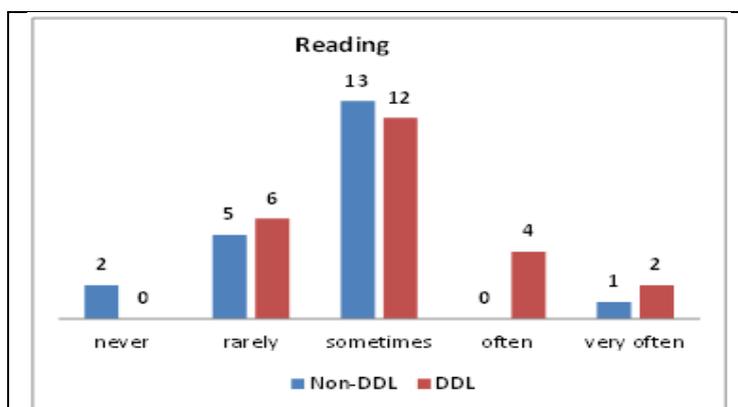
		Crosstab			
		Participant's grouping		Total	
		non-DDL	DDL		
How many hours per week are you taking English courses outside Shahrekord University this semester?	not taking any	Count	18	18	36
		Expected Count	16.8	19.2	36.0
		% within How many hours per week are you taking English courses outside your University this semester?	50.0%	50.0%	100.0%
		% within Participant's grouping	85.7%	75.0%	80.0%
		% of Total	40.0%	40.0%	80.0%
	1-2	Count	0	1	1
		Expected Count	.5	.5	1.0
		% within How many hours per week are you taking English courses outside your University this semester?	0.0%	100.0%	100.0%
		% within Participant's grouping	0.0%	4.2%	2.2%
		% of Total	0.0%	2.2%	2.2%
	3-4	Count	3	2	5
		Expected Count	2.3	2.7	5.0
		% within How many hours per week are you taking English courses outside your University this semester?	60.0%	40.0%	100.0%
		% within Participant's grouping	14.3%	8.3%	11.1%
		% of Total	6.7%	4.4%	11.1%
	9-10	Count	0	1	1
		Expected Count	.5	.5	1.0
		% within How many hours per week are you taking English courses outside your University this semester?	0.0%	100.0%	100.0%
		% within Participant's grouping	0.0%	4.2%	2.2%
		% of Total	0.0%	2.2%	2.2%
more than 10	Count	0	2	2	
	Expected Count	.9	1.1	2.0	
	% within How many hours per week are you taking English courses outside your University this semester?	0.0%	100.0%	100.0%	
	% within Participant's grouping	0.0%	8.3%	4.4%	
	% of Total	0.0%	4.4%	4.4%	
Total	Count	21	24	45	
	Expected Count	21.0	24.0	45.0	
	% within How many hours per week are you taking English courses outside your University this semester?	46.7%	53.3%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	46.7%	53.3%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.018 ^a	4	.404
Likelihood Ratio	5.546	4	.236
Linear-by-Linear Association	1.951	1	.163
N of Valid Cases	45		

a. 8 cells (80.0%) have expected count less than 5. The minimum expected count is .47

Section 4: Language learning activities outside classroom

1. How often do you read English-language newspapers, magazines, Internet information, or other English texts, outside classroom?

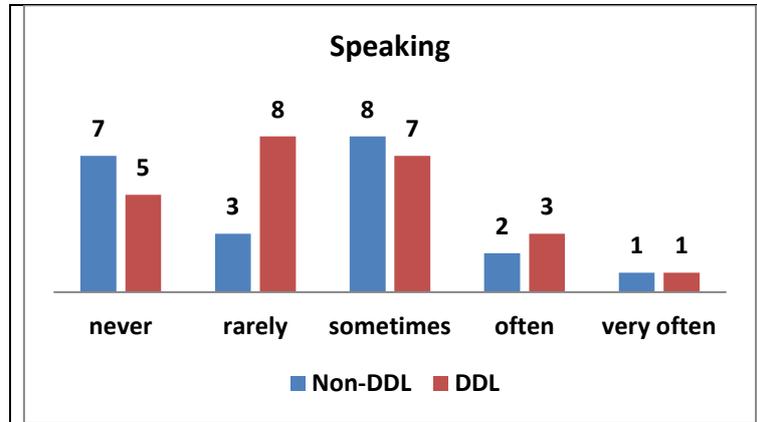


Crosstab					
			Participant's grouping		Total
			non-DDL	DDL	
Read English-language newspapers, magazines, Internet information, or other English texts, outside classroom	never	Count	2	0	2
		Expected Count	.9	1.1	2.0
		% within Read English-language newspapers, magazines ...	100.0%	0.0%	100.0%
		% within Participant's grouping	9.5%	0.0%	4.4%
		% of Total	4.4%	0.0%	4.4%
	rarely	Count	6	6	12
		Expected Count	5.6	6.4	12.0
		% within Read English-language newspapers, magazines ...	50.0%	50.0%	100.0%
		% within Participant's grouping	28.6%	25.0%	26.7%
		% of Total	13.3%	13.3%	26.7%
	sometimes	Count	12	12	24
		Expected Count	11.2	12.8	24.0
		% within Read English-language newspapers, magazines ...	50.0%	50.0%	100.0%
		% within Participant's grouping	57.1%	50.0%	53.3%
		% of Total	26.7%	26.7%	53.3%
	often	Count	0	4	4
		Expected Count	1.9	2.1	4.0
		% within Read English-language newspapers, magazines ...	0.0%	100.0%	100.0%
		% within Participant's grouping	0.0%	16.7%	8.9%
		% of Total	0.0%	8.9%	8.9%
very often	Count	1	2	3	
	Expected Count	1.4	1.6	3.0	
	% within Read English-language newspapers, magazines ...	33.3%	66.7%	100.0%	
	% within Participant's grouping	4.8%	8.3%	6.7%	
	% of Total	2.2%	4.4%	6.7%	
Total	Count	21	24	45	
	Expected Count	21.0	24.0	45.0	
	% within Read English-language newspapers, magazines ...	46.7%	53.3%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	46.7%	53.3%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.161^a	4	.187
Likelihood Ratio	8.457	4	.076
Linear-by-Linear Association	3.018	1	.082
N of Valid Cases	45		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is .93.

2. How often do you speak English outside classroom?

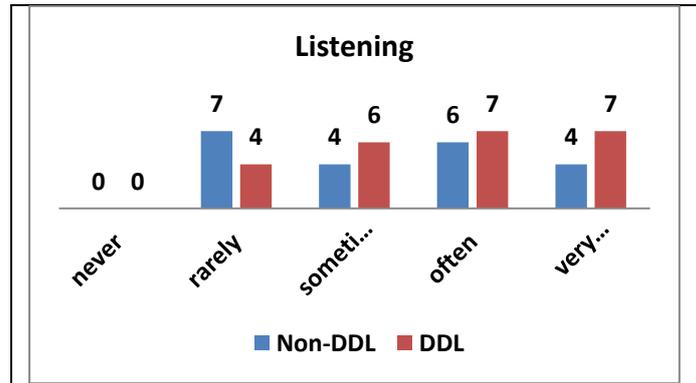


Crosstab					
			Participant's grouping		Total
			non-DDL	DDL	
Speak English outside classroom	never	Count	7	5	12
		% within Speak English outside classroom	58.3%	41.7%	100.0%
		% within Participant's grouping	33.3%	20.8%	26.7%
		% of Total	15.6%	11.1%	26.7%
	rarely	Count	3	8	11
		% within Speak English outside classroom	27.3%	72.7%	100.0%
		% within Participant's grouping	14.3%	33.3%	24.4%
		% of Total	6.7%	17.8%	24.4%
	sometimes	Count	8	7	15
		% within Speak English outside classroom	53.3%	46.7%	100.0%
		% within Participant's grouping	38.1%	29.2%	33.3%
		% of Total	17.8%	15.6%	33.3%
	often	Count	2	3	5
		% within Speak English outside classroom	40.0%	60.0%	100.0%
		% within Participant's grouping	9.5%	12.5%	11.1%
		% of Total	4.4%	6.7%	11.1%
very often	Count	1	1	2	
	% within Speak English outside classroom	50.0%	50.0%	100.0%	
	% within Participant's grouping	4.8%	4.2%	4.4%	
	% of Total	2.2%	2.2%	4.4%	
Total		Count	21	24	45
		% within Speak English outside classroom	46.7%	53.3%	100.0%
		% within Participant's grouping	100.0%	100.0%	100.0%
		% of Total	46.7%	53.3%	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.685 ^a	4	.612
Likelihood Ratio	2.761	4	.599
Linear-by-Linear Association	.052	1	.820
N of Valid Cases	45		

a. 4 cells (40.0%) have expected count less than 5. The minimum expected count is .93.

3. How often do you watch English movies or listen to English songs?

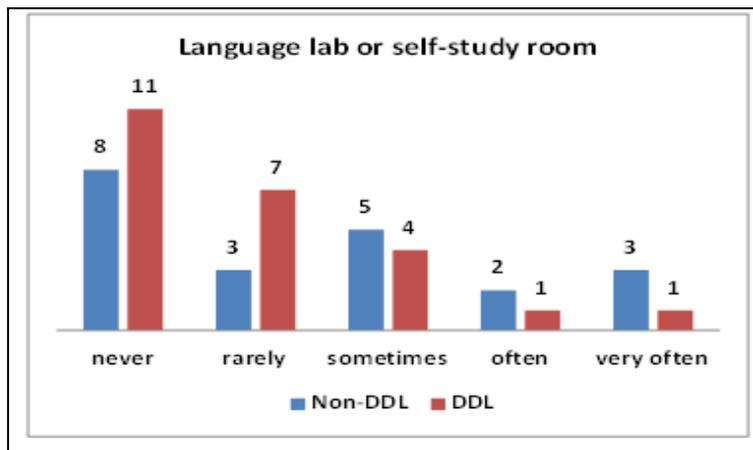


Crosstab					
			Participant's grouping		
			non-DDL	DDL	Total
Watch English movies or listen to English songs	rarely	Count	7	4	11
		% within Watch English movies or listen to English songs	63.6%	36.4%	100.0%
		% within Participant's grouping	33.3%	16.7%	24.4%
		% of Total	15.6%	8.9%	24.4%
	sometimes	Count	4	6	10
		% within Watch English movies or listen to English songs	40.0%	60.0%	100.0%
		% within Participant's grouping	19.0%	25.0%	22.2%
		% of Total	8.9%	13.3%	22.2%
	often	Count	6	7	13
		% within Watch English movies or listen to English songs	46.2%	53.8%	100.0%
		% within Participant's grouping	28.6%	29.2%	28.9%
		% of Total	13.3%	15.6%	28.9%
very often	Count	4	7	11	
	% within Watch English movies or listen to English songs	36.4%	63.6%	100.0%	
	% within Participant's grouping	19.0%	29.2%	24.4%	
	% of Total	8.9%	15.6%	24.4%	
Total	Count	21	24	45	
	% within Watch English movies or listen to English songs	46.7%	53.3%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	46.7%	53.3%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.922 ^a	3	.589
Likelihood Ratio	1.937	3	.586
Linear-by-Linear Association	1.255	1	.263
N of Valid Cases	45		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.67

4. How often do you go to language lab or self-study room after class?

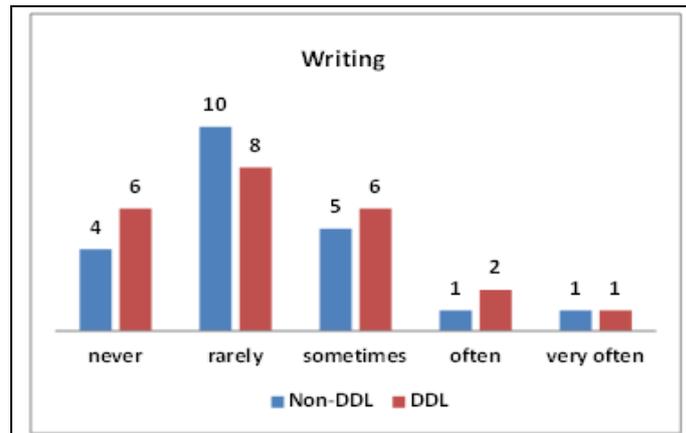


			Crosstab		
			Participant's grouping		Total
			non-DDL	DDL	
Go to language lab or self-study room after class	never	Count	8	11	19
		Expected Count	8.9	10.1	19.0
		% within Go to language lab or self-study ...	42.1%	57.9%	100.0%
		% within Participant's grouping	38.1%	45.8%	42.2%
		% of Total	17.8%	24.4%	42.2%
	rarely	Count	4	7	11
		Expected Count	5.1	5.9	11.0
		% within Go to language lab or self-study ...	36.4%	63.6%	100.0%
		% within Participant's grouping	19.0%	29.2%	24.4%
		% of Total	8.9%	15.6%	24.4%
	sometimes	Count	4	4	8
		Expected Count	3.7	4.3	8.0
		% within Go to language lab or self-study ...	50.0%	50.0%	100.0%
		% within Participant's grouping	19.0%	16.7%	17.8%
		% of Total	8.9%	8.9%	17.8%
	often	Count	2	1	3
		Expected Count	1.4	1.6	3.0
		% within Go to language lab or self-study ...	66.7%	33.3%	100.0%
		% within Participant's grouping	9.5%	4.2%	6.7%
		% of Total	4.4%	2.2%	6.7%
very often	Count	3	1	4	
	Expected Count	1.9	2.1	4.0	
	% within Go to language lab or self-study ...	75.0%	25.0%	100.0%	
	% within Participant's grouping	14.3%	4.2%	8.9%	
	% of Total	6.7%	2.2%	8.9%	
Total	Count	21	24	45	
	Expected Count	21.0	24.0	45.0	
	% within Go to language lab or self-study ...	46.7%	53.3%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	46.7%	53.3%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.436 ^a	4	.656
Likelihood Ratio	2.490	4	.646
Linear-by-Linear Association	1.747	1	.186
N of Valid Cases	45		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is 1.40.

5. How often do you write letters in English or chat via the Internet in English?



Crosstab					
			Participant's grouping		Total
			non-DDL	DDL	
Write letters in English or chat via the Internet in English	never	Count	4	6	10
		Expected Count	4.8	5.2	10.0
		% within Write letters in English or chat via...	40.0%	60.0%	100.0%
		% within Participant's grouping	19.0%	26.1%	22.7%
		% of Total	9.1%	13.6%	22.7%
	rarely	Count	9	8	17
		Expected Count	8.1	8.9	17.0
		% within Write letters in English or chat via...	52.9%	47.1%	100.0%
		% within Participant's grouping	42.9%	34.8%	38.6%
		% of Total	20.5%	18.2%	38.6%
	sometimes	Count	6	6	12
		Expected Count	5.7	6.3	12.0
		% within Write letters in English or chat via...	50.0%	50.0%	100.0%
		% within Participant's grouping	28.6%	26.1%	27.3%
		% of Total	13.6%	13.6%	27.3%
	often	Count	1	2	3
		Expected Count	1.4	1.6	3.0
		% within Write letters in English or chat via...	33.3%	66.7%	100.0%
		% within Participant's grouping	4.8%	8.7%	6.8%
		% of Total	2.3%	4.5%	6.8%
very often	Count	1	1	2	
	Expected Count	1.0	1.0	2.0	
	% within Write letters in English or chat via...	50.0%	50.0%	100.0%	
	% within Participant's grouping	4.8%	4.3%	4.5%	
	% of Total	2.3%	2.3%	4.5%	
Total	Count	21	23	44	
	Expected Count	21.0	23.0	44.0	
	% within Write letters in English or chat via...	47.7%	52.3%	100.0%	
	% within Participant's grouping	100.0%	100.0%	100.0%	
	% of Total	47.7%	52.3%	100.0%	

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.703 ^a	4	.951
Likelihood Ratio	.710	4	.950
Linear-by-Linear Association	.008	1	.927
N of Valid Cases	44		

a. 5 cells (50.0%) have expected count less than 5. The minimum expected count is .95.

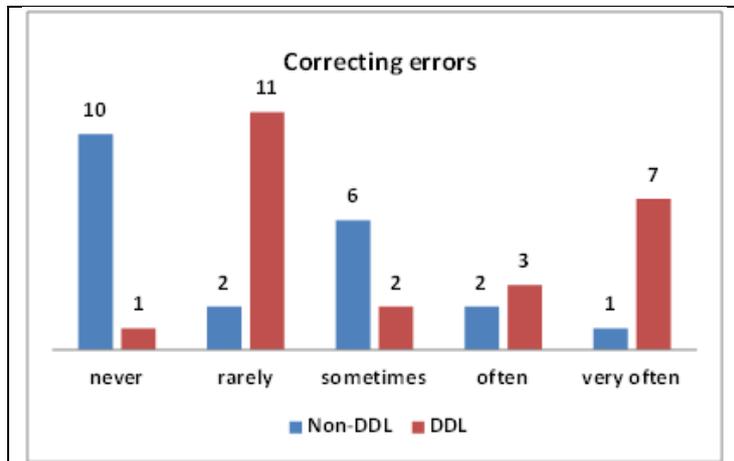
Section 5: Learning strategies (deductive learning vs. inductive learning)

(A) Language experience

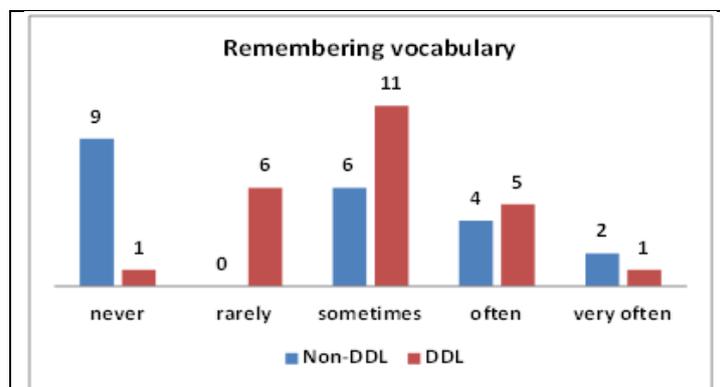
Before this term, how often did your English teacher do the following things in class?

Deductive learning

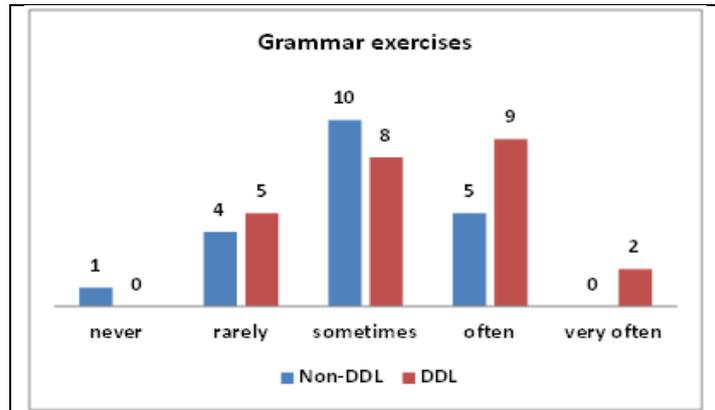
1. Correct language errors for you (e.g. in a paragraph or an essay)



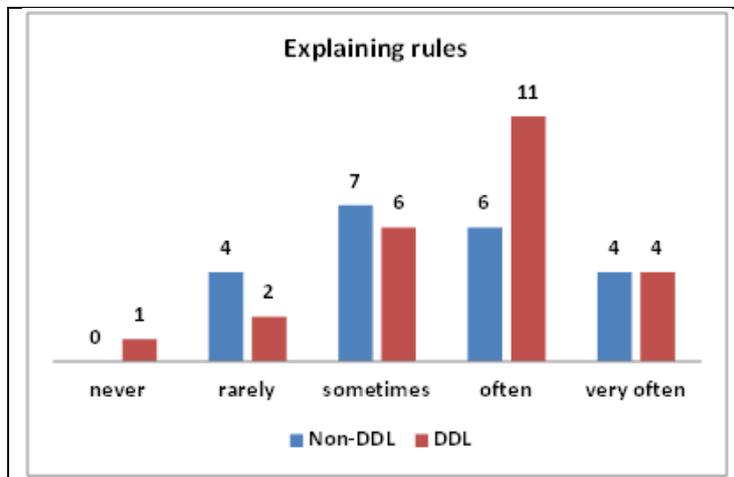
2. Ask you to remember lists of vocabulary and/or give dictations



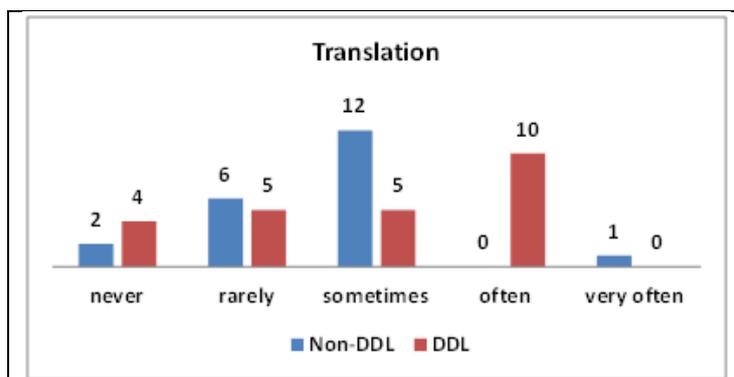
3. Ask you to do grammar exercises (e.g. change verb tenses or change active voice to passive voice)



4. Give and explain grammar rules or ask you to read grammar books

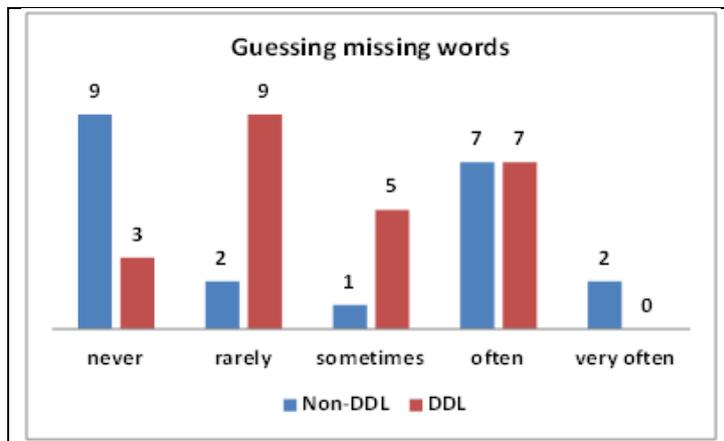


5. Ask you to do translation exercises

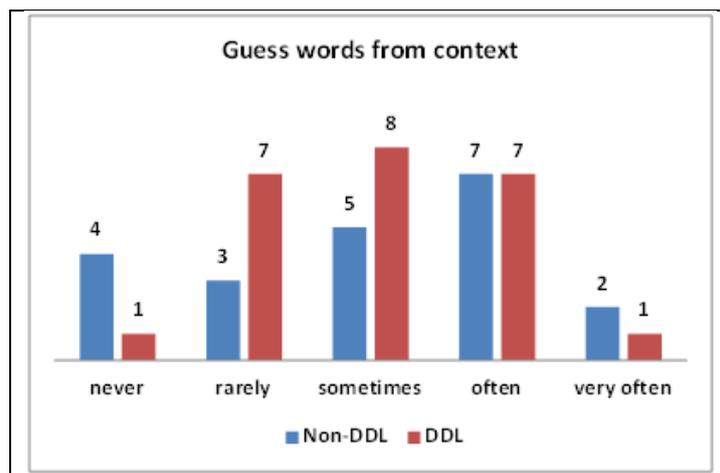


Inductive learning

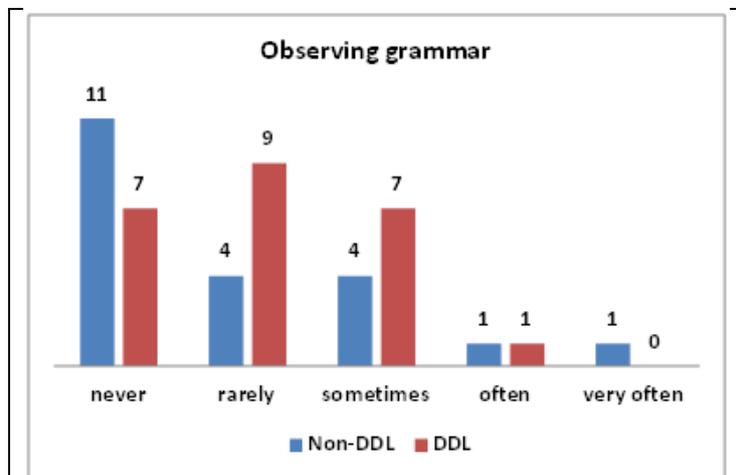
1. Ask you to find missing words from context (e.g. cloze test)



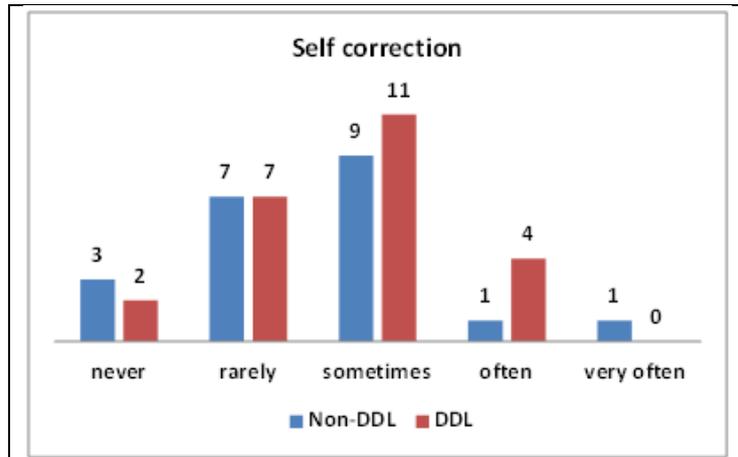
2. Ask you to guess unfamiliar words from context



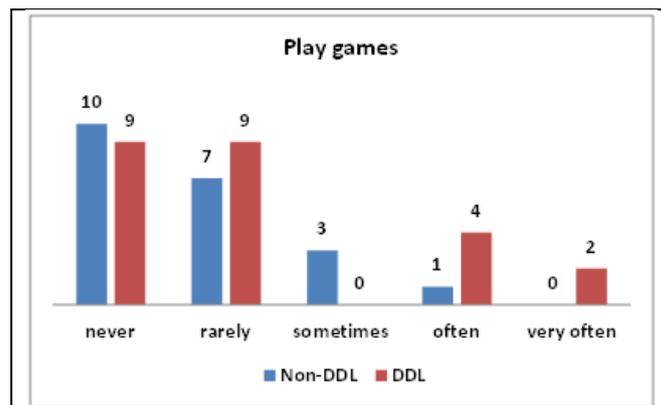
3. Ask you to observe grammar points by yourself from songs, newspapers, or other given examples



4. Ask you to correct language mistakes by yourself



5. Play language games or communicative activities

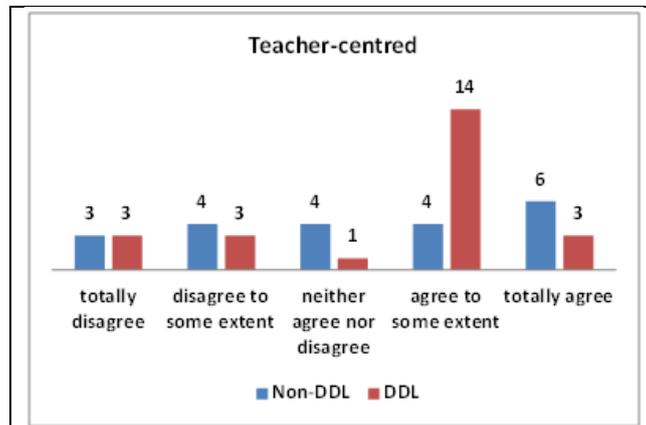


(B) Attitude towards deductive learning and inductive learning

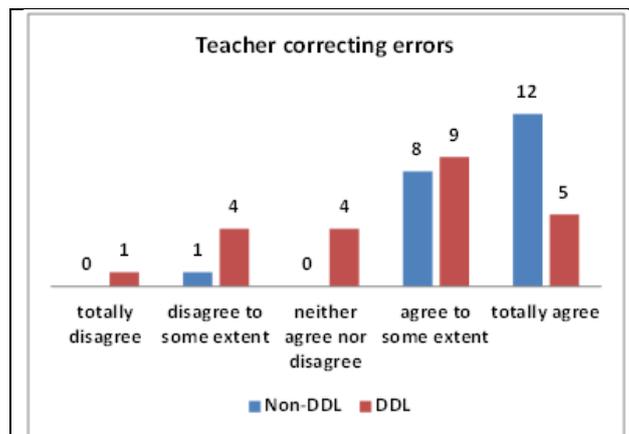
How much do you agree or disagree with the following statements?

Deductive-oriented

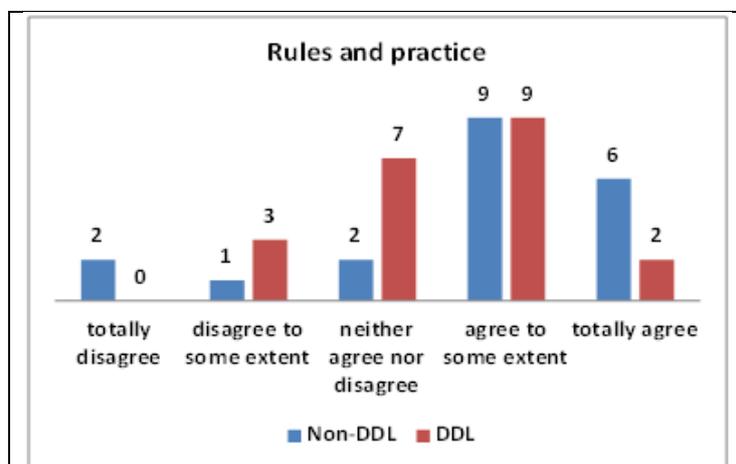
1. The teacher should be the centre of English classes.



2. The teacher should obviously correct the student's errors.

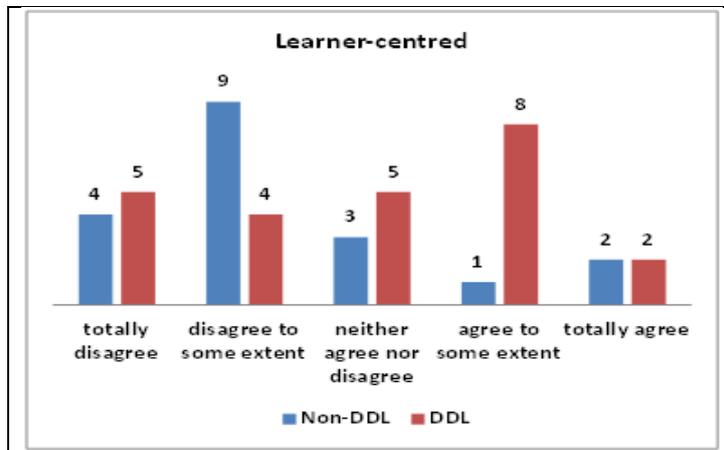


3. The learners should be given some rules first and then do some practice.

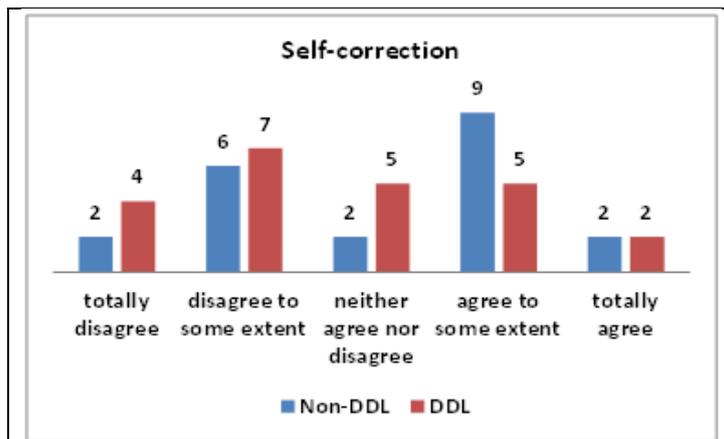


Inductive-oriented

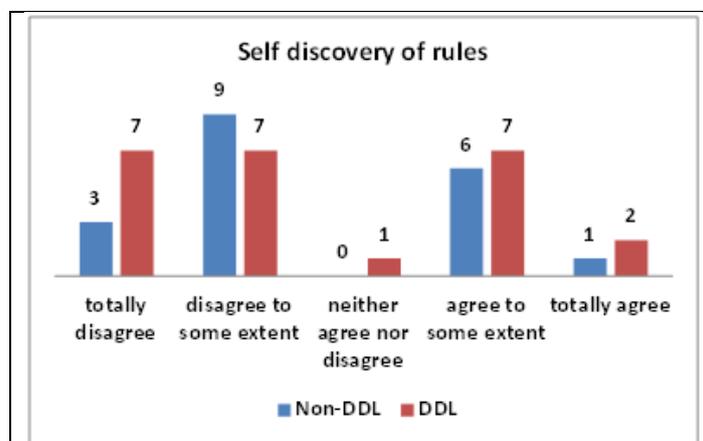
1. The students should be the centre of English classes



2. The students should try to find and correct language errors all by themselves.

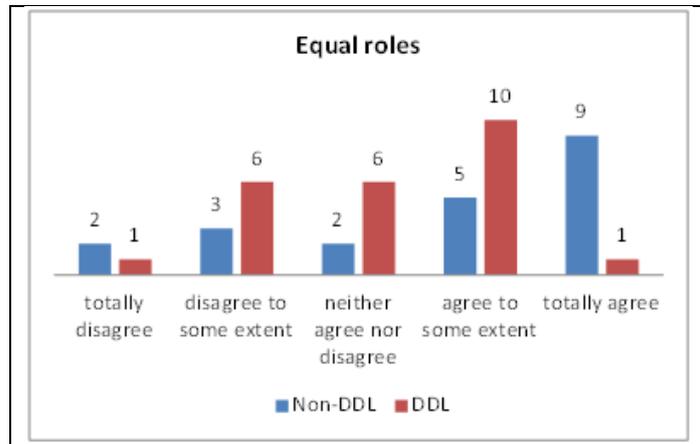


3. The learners should discover grammar rules from examples by themselves without any help from the teacher.

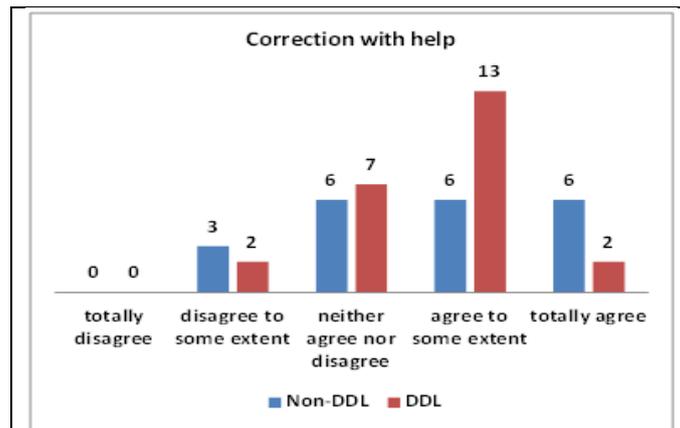


A Combination of deductive and inductive strategies

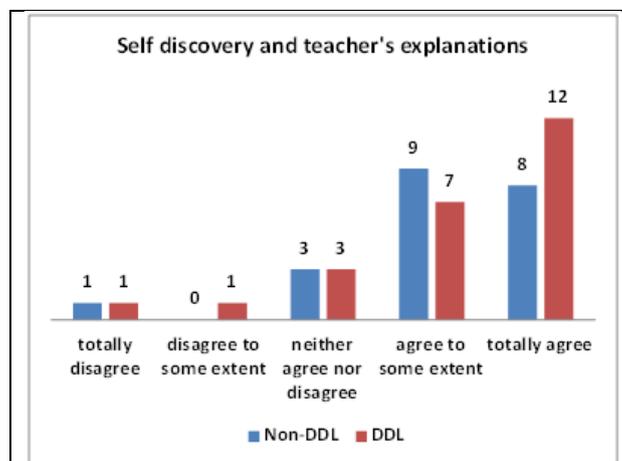
1. The teacher and the students should play an equal role in English classes.



2. The teacher should point out errors for students and ask them to correct the mistakes by themselves.



3. The teacher should let the students learn from examples first and then give and explain language rules.



14. **IDEA 1 [degree of similarity] similar to IDEA 2**

Kennedy's death was	[----] somewhat rather very quite (degree of similarity)	similar to Lincoln's in that they both died in office. ADJ PREP (basis of comparison)
IDEA 1		IDEA 2

15. **IDEA 1 V [degree of similarity] like IDEA 2**

Kennedy's death was	[somewhat] rather very much exactly (degree of similarity)	like Lincoln's in that they both died in office. PREP (basis of comparison)
IDEA 1		IDEA 2

16. **NEG SENTENCE, and neither AUX SUBJECT.**

Kennedy's assassin was not brought to trial,	and neither was Lincoln's
Kennedy didn't finish his term of office,	and neither did Lincoln.

17. **HAVE STH in common**

Kennedy and Lincoln	have	[certain] [many] [several] [two] etc.	[things] [features] [aspects] [qualities] etc.	in common.
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18. **as ADJ/ADV as**

The extrovert	isn't as quiet as isn't as reliable as doesn't learn as slowly as	the introvert.
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Appendix G
(Pre- and post-test)

Pre-test

In the Name of God	
Writing I (Paragraph Development)	Name _____
This is a pre-course exam	Date: 17/Mehr/ 1391
Time allowed 80 minutes	Instructor: Mehrdad Sepehri

<i>This exam includes 6 parts. You have 80 minutes to answer all of the questions. The exam has 60 marks in total.</i>	

Part 1: Multiple choice questions. (1 mark each- 12 minutes)	
Directions: Choose the most appropriate word or phrase in each of the following sentences.	
1. I was away on business, I met an old school friend.	
a. While b. During c. As well as d. After	
2. I cannot check my voicemail message I get home.	
a. since b. while c. until d. so	
3. There was..... that they couldn't see across the hallway.	
a. too smoke b. very much smoke c. such smoke d. so much smoke	
4. The young couple decided to get divorced because theycommon.	
a. were not in b. had nothing in c. were not the same d. had little	
5. The government has also commissioned studies on diabetes, high blood pressure, pneumonia, diseases to make sure all treatments are worth paying for.	
a. and other b. as opposed to c. such as d. due to	
6. John F Kennedy's death wasAbraham Lincoln's in that they both died when they were president.	
a. totally different from b. rather like c. as the same d. as similar to	
7. In some areas, water levels will fall;, these areas will no longer be able to support industry.	
a. resulting in b. on the other hand c. as a result d. leading to	
8. He had to retire recently bad health conditions that he was experiencing last year.	
a. because b. because of c. such d. such a	
9. The air was fresh and clean.....the heavy traffic.	
a. because of b. so that c. in spite of d. although	
10. Five officials were dismissed. four were arrested.	
a. Every b. Each c. Other d. Another	
11. I don't play the piano now, although.....	
a. it never interested me	
b. I have been skilful in sports	
c. I used to when I was younger	
d. my family advised me not to do so	

12. Although the technical revolution has provided us with means of facilitating our work and, as a whole, making our lives much easier,
- it has failed in one aspect which is the most significant one - the human soul.
 - it has helped human beings improve their understanding of the world.
 - many people have been able to cope with their living difficulties much easier.
 - everyone should appreciate the pioneers of these technological developments.

Part 2: Sentence connection: (2 marks each-10 minutes)
Connect the following sentences in each item. These sentences can be connected with one of the words or phrases given in the brackets. (write your answers on the lines provided)

Example:

- Everyone was pushing.
 - They wanted to get to the front of the queue. (in order to, although, such that)
- Everyone was pushing in order to get to the front of the queue.

1 - I came to live in the country.

I wanted to have trees around me instead of buildings. (so as to, such.....that, in spite of)

2- Criminals are sent to the prisons.

The rest of the population can have a peaceful life (such a, so that, in order to)

3. We were desperately hungry.

We had no time for lunch. (although, so.....that, such a)

4. I quite enjoyed his last book.

The book wasn't very well written. (because of, in spite of, hence)

Part 3: sentence paraphrasing (2marks each- 8 minutes)
Rewrite these sentences using words given in the brackets.

1- His voice was so soft that we could hardly hear him. (such)

2- He had suffered such a serious injury that they took him straight to the hospital. (so)

3- The traffic was so heavy that we could not get to the concert on time (too)

4- Try to write clearly so as to avoid being misunderstood. (so.....that)

Part 4: sentence completion: (2 marks each-12 minutes)
Write the missing part of the sentence with your own words.

- In spite of.....his money was still stolen.
- The disco is close by, and it's..... enough to be a nuisance at night.
- We missed most of the party. We arrived much
- He continued the race despite.....

Part 5: Guided paragraph writing:

(4 marks total -8 minutes)

Directions: Read the following paragraph and choose the best given choice to fill in the blanks.

College life

My life changed a lot when I was in college. There were 600 students in my high school and I knew nearly everyone. ___ (1) ___, there were thousands of students in my college and I didn't know anyone. I felt very lonely. In high school the classes were half boys and half girls. In college I studied engineering and there weren't many women in the classes. The biggest change in college was the style of class. We had a lot of reading and learning on our own, ___(2)___ in high school the teacher told us nearly everything to study for the exams. ___(3)___ college was more difficult, I enjoyed my life more than my school days- ___(4)___ I got used to it!

- | | | | |
|-----------------|----------------|----------------------|-----------------|
| 1. a. Since | b. Therefore | c. However | d. Moreover |
| 2. a. whereas | b. meanwhile | c. for instance | d. hence |
| 3. a. Otherwise | b. Even though | c. On the other hand | d. Consequently |
| 4. a. so | b. before | c. then | d. after |

Part 6: Paragraph writing task:

(20 marks- 30 minutes)

Group A

Instructions: Write a paragraph (150 to 200 words) on one of the following topics in which you are comparing two things, people or situations.

1. Compare two of your teachers
2. Azad versus state universities in Iran
3. Similarities and differences between you and another member of your family.

Write your paragraph in the box below.

Part 6: Paragraph writing task:

(20 marks- 30 minutes)

Group B

Instructions: Write a paragraph (150 to 200 words) on one of the following topics in which you are giving the reasons or the results of something.

1. Possible reasons for Iranian young people to stop higher education
2. The effects a teacher has had on your character, your feelings about school or your approach to life in general
3. The results of increasing population in Iran in near future (coming years)

Write your paragraph in the box below.

Post-test

In the Name of God

Writing I (Paragraph Development)

Name _____

This is a Final exam

Date: 20/Dey/ 1391

Time allowed 80 minutes

Instructor: Mehrdad Sepehri

This exam includes 6 parts. You have 80 minutes to answer all of the questions. The exam has 60 marks in total.

Part 1: Multiple choice questions.(1 mark each- 12 minutes)

Directions: Choose the most appropriate word or phrase in each of the following sentences.

1. I was in South America last year, I learned to speak Spanish.
a. While b. During c. As well as d. After
2. Our restaurant is open from 8 AM it gets dark.
a. since b. while c. until d. so
3. There was..... in the hall that nobody could hear the professor.
a. too noise b. very much noise c. such noise d. so much noise
4. The twopartners decided to end up their relationships because they
.....common.
a. were not in b. had nothing in c. were not the same d. had little
5. Measles and tetanus, along with diphtheria, whooping cough, polio, diseases, are preventable through immunization.
a. and other b. as opposed to c. such as d. due to
6. John F Kennedy's death wasAbraham Lincoln's in that they both died when they were president.
a. totally different from b. the same like
c. as the same d. quite similar to
7. We should accept that everyone has the right to become angry, but what is important is the way you express your rage. Some can not control their rage;, they will encounter some problems in their relations with others.
a. resulting in b. on the other hand
c. as a result d. leading to
8. He had to retire recently bad health conditions that he was experiencing last year.
a. because b. because of c. such d. such a
9.the heavy traffic, the air was fresh and clean.
a. Because of b. Corresponding to c. In spite of d. Although
10. Five officials were dismissed. four were arrested.
a. Every b. Each c. Other d. Another
11. I don't play the piano now, although.....
a. it never interested me
b. I have been skilful in sports
c. I used to when I was younger
d. my family advised me not to do so

12. Although the technical revolution has provided us with means of facilitating our work and, as a whole, making our lives much easier,

- a. it has failed in one aspect which is the most significant one - the human soul.
- b. it has helped human beings improve their understanding of the world.
- c. many people have been able to cope with their living difficulties much easier.
- d. everyone should appreciate the pioneers of these technological developments.

Part 2: Sentence connection: (2 marks each-10 minutes)

Connect the following sentences in each item. These sentences can be connected with one of the words or phrases given in the brackets. (write your answers on the lines provided)

Example:

- Everyone was pushing.
 - They wanted to get to the front of the queue. (in order to, although, such that)
- Everyone was pushing in order to get to the front of the queue.

1 - I came to live in the country.

Big cities might offer us more exciting and entertaining facilities as well as educational centres than smaller towns do . (so as to, such.....that, in spite of)

2- Criminals are sent to the prisons.

The aim was to create a better peaceful society for the rest of the population.
(such a, by the same token, in order to)

3. We were desperately hungry.

No one was thinking of having his or her favourite meal. (although, so.....that, such a)

4.I quite enjoyed his last book.

The book wasn't very well written.(because of, although, hence)

Part 3: sentence paraphrasing

(2marks each- 8 minutes)

Rewrite these sentences using words given in the brackets.

1- His voice was so soft that we could hardly hear him. (such)

2- He had suffered such a serious injury that they took him straight to the hospital.(so)

3- The traffic was so heavy that we could not get to the concert on time (too)

4- Try to write clearly so as to avoid being misunderstood. (so.....that)

Part 4: sentence completion:

(2 marks each-12 minutes)

Write the missing part of the sentence with your own words.

- 1- In spite ofhis money was still stolen.
- 2- The disco is close by, and it's..... enough to be a nuisance at night.
- 3- We missed most of the party. We arrived much
- 4- He continued the race despite.....

Part 5: Guided paragraph writing:

(4 marks total -8 minutes)

Directions: Read the following paragraph and choose the best given choice to fill in the blanks.

College life

My life changed a lot when I was in college. There were 600 students in my high school and I knew nearly everyone. ___ (1) ___, there were thousands of students in my college and I didn't know anyone. I felt very lonely. In high school the classes were half boys and half girls. In college I studied engineering and there weren't many women in the classes. The biggest change in college was the style of class. We had a lot of reading and learning on our own, ___(2)___ in high school the teacher told us nearly everything to study for the exams. ___(3)___ college was more difficult, I enjoyed my life more than my school days- ___(4)___ I got used to it!

- | | | | |
|-----------------|----------------|----------------------|-----------------|
| 1. a. Since | b. Therefore | c. However | d. Moreover |
| 2. a. whereas | b. meanwhile | c. for instance | d. hence |
| 3. a. Otherwise | b. Even though | c. On the other hand | d. Consequently |
| 4. a. so | b. before | c. then | d. after |

Part 6: Paragraph writing task:

(20 marks- 30 minutes)

Group A

Instructions: Write a paragraph (150 to 200 words) on one of the following topics in which you are comparing two things, people or situations.

1. Compare two of your teachers
2. Azad versus state universities in Iran
3. Similarities and differences between you and another member of your family.

Write your paragraph in the box below.

Part 6: Paragraph writing task:

(20 marks- 30 minutes)

Group B

Instructions: Write a paragraph (150 to 200 words) on one of the following topics in which you are giving the reasons or the results of something.

1. Possible reasons for Iranian young people to stop higher education
2. The effects a teacher has had on your character, your feelings about school or your approach to life in general
3. The results of increasing population in Iran in near future (coming years)

Write your paragraph in the box below.

Appendix H
Revised version of Jacobs et al.'s (1981) scoring profile

ESL COMPOSITION PROFILE			
STUDENT	DATE	TOPIC	
SCORE	LEVEL	CRITERIA	COMMENTS
CONTENT 15	15 - 14 EXCELLENT TO VERY GOOD: knowledgeable /substantive/ thorough development of thesis/ relevant to assigned topic 13 – 11 GOOD TO AVERAGE: some knowledge of subject/ adequate range/ limited development of thesis/ mostly relevant to topic, but lacks detail 10 - 8 FAIR TO POOR: limited knowledge of subject/ limited substance/inadequate development of topic 7 - 6 VERY POOR: does not show knowledge of subject/ non-substantive/ not pertinent/ OR not enough to evaluate		
ORGANIZATION 10	10 – 9 EXCELLENT TO VERY GOOD: fluent expression/ ideas clearly stated/ supported/ succinct/ well-organized/ logical sequencing/ cohesive 8 – 7 GOOD TO AVERAGE: somewhat choppy/ loosely organized but main ideas stand out/ limited support/ logical but incomplete sequencing 6 – 5 FAIR TO POOR: non-fluent/ ideas confused or disconnected/ lacks logical sequencing and development 4 - 3 VERY POOR: does not communicate/ no organization. OR not enough to evaluate		
VOCABULARY 10	10 – 9 EXCELLENT TO VERY GOOD: sophisticated range/ effective word/ idiom choice and usage/ word form mastery/ appropriate register 8 – 7 GOOD TO AVERAGE: adequate range/ occasional errors of word/ idiom form, choice, usage <i>but meaning not obscured</i> 6 – 5 FAIR TO POOR: limited range/ frequent errors of word/ idiom form, choice usage/ <i>meaning confused or obscured</i> 4 – 3 VERY POOR: essentially translation/ little knowledge of English vocabulary, idiom, word form/ OR not enough to evaluate		
LANGUAGE USE 15	15 – 14 EXCELLENT TO VERY GOOD: effective complex constructions/ few errors of agreement, tense, number, word order/function, articles, pronouns, prepositions 13 -11 GOOD TO AVERAGE: effective but simple constructions/ minor problems in complex constructions/ several errors of agreement, tense, number , word order/function, articles, pronouns, prepositions <i>but meaning seldom obscured</i> 10 – 8 FAIR TO POOR: major problems in simple/complex constructions/ frequent errors of negation, agreement, number, word order/ function. Articles, pronouns, prepositions and/or fragments, run-ons, deletions/ <i>meaning confused or obscured</i> 7 – 5 VERY POOR: virtually no mastery of sentence construction rules/ dominated by errors/ doesnot communicate/ OR not enough to evaluate		
TOTAL SCORE	READER	COMMENTS	

Appendix I

Descriptive analysis of questionnaire 2

Frequency Table

1- How many times did you miss the class?

	Frequency	Percent	Valid Percent	Cumulative Percent
never	3	17.6	17.6	17.6
1-2	12	70.6	70.6	88.2
Valid 3-4	1	5.9	5.9	94.1
5-6	1	5.9	5.9	100.0
Total	17	100.0	100.0	

2- How many times did you come to class late and thus didn't do the exercises?

	Frequency	Percent	Valid Percent	Cumulative Percent
never	8	47.1	50.0	50.0
Valid 1-2	7	41.2	43.8	93.8
3-4	1	5.9	6.3	100.0
Total	16	94.1	100.0	
Missing 99.00	1	5.9		
Total	17	100.0		

3- How often did you do some of the units given as homework or self-study materials?

	Frequency	Percent	Valid Percent	Cumulative Percent
every time	3	17.6	17.6	17.6
often	5	29.4	29.4	47.1
Valid sometimes	5	29.4	29.4	76.5
rarely	3	17.6	17.6	94.1
never	1	5.9	5.9	100.0
Total	17	100.0	100.0	

4- How often did you do exercises with concordance lines before taking this course?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid never	17	100.0	100.0	100.0

5-1- The units are interesting

	Frequency	Percent	Valid Percent	Cumulative Percent
totally disagree	1	5.9	5.9	5.9
disagree to some extent	1	5.9	5.9	11.8
Valid neither agree nor disagree	2	11.8	11.8	23.5
agree to some extent	6	35.3	35.3	58.8
totally agree	7	41.2	41.2	100.0
Total	17	100.0	100.0	

5-2- The format or presentation of the units is good

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	disagree to some extent	2	11.8	11.8	11.8
	neither agree nor disagree	2	11.8	11.8	23.5
	agree to some extent	7	41.2	41.2	64.7
	totally agree	6	35.3	35.3	100.0
	Total	17	100.0	100.0	

5-3- The units help you improve your writing skills

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	neither agree nor disagree	1	5.9	5.9	5.9
	agree to some extent	9	52.9	52.9	58.8
	totally agree	7	41.2	41.2	100.0
	Total	17	100.0	100.0	

5-4- The units help you improve your reading skills

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	disagree to some extent	1	5.9	6.3	6.3
	neither agree nor disagree	6	35.3	37.5	43.8
	agree to some extent	5	29.4	31.3	75.0
	totally agree	4	23.5	25.0	100.0
	Total	16	94.1	100.0	
Missing	99.00	1	5.9		
Total		17	100.0		

5-5- The units are not too long and can be done in 10-15 minutes

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	disagree to some extent	3	17.6	18.8	18.8
	neither agree nor disagree	4	23.5	25.0	43.8
	agree to some extent	4	23.5	25.0	68.8
	totally agree	5	29.4	31.3	100.0
	Total	16	94.1	100.0	
Missing	99.00	1	5.9		
Total		17	100.0		

5-6- The units are not too difficult to complete

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	totally disagree	1	5.9	5.9	5.9
	disagree to some extent	1	5.9	5.9	11.8
	neither agree nor disagree	5	29.4	29.4	41.2
	agree to some extent	4	23.5	23.5	64.7
	totally agree	6	35.3	35.3	100.0
	Total	17	100.0	100.0	

5-7- The units should be used every time you come to writing class

		Frequency	Per cent	Valid per cent	Cumulative per cent
Valid	neither agree nor disagree	5	29.4	31.3	31.3
	agree to some extent	7	41.2	43.8	75.0
	totally agree	4	23.5	25.0	100.0
	Total	16	94.1	100.0	
Missing	99.00	1	5.9		
Total		17	100.0		

5-8- The units are relevant to paragraph writing course

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	1	5.9	6.3	6.3
	disagree to some extent	2	11.8	12.5	18.8
	agree to some extent	9	52.9	56.3	75.0
	totally agree	4	23.5	25.0	100.0
	Total	16	94.1	100.0	
Missing	99.00	1	5.9		
Total		17	100.0		

5-9- The units help you discover new patterns

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	1	5.9	5.9	5.9
	neither agree nor disagree	1	5.9	5.9	11.8
	agree to some extent	4	23.5	23.5	35.3
	totally agree	11	64.7	64.7	100.0
	Total	17	100.0	100.0	

5-10- The units help you learn new vocabulary, idioms, expressions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	totally disagree	1	5.9	5.9	5.9
	disagree to some extent	6	35.3	35.3	41.2
	neither agree nor disagree	3	17.6	17.6	58.8
	agree to some extent	3	17.6	17.6	76.5
	totally agree	4	23.5	23.5	100.0
	Total	17	100.0	100.0	

5-11- The units help you learn grammar or structure

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	neither agree nor disagree	2	11.8	11.8	11.8
	agree to some extent	6	35.3	35.3	47.1
	totally agree	9	52.9	52.9	100.0
	Total	17	100.0	100.0	

5-12- The units help you learn how to define something in your paragraph

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid					
	totally disagree	8	47.1	47.1	47.1
	disagree to some extent	5	29.4	29.4	76.5
	neither agree nor disagree	3	17.6	17.6	94.1
	agree to some extent	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

5-13- The units help you learn how to connect cause-effect clauses

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid					
	disagree to some extent	1	5.9	5.9	5.9
	neither agree nor disagree	2	11.8	11.8	17.6
	agree to some extent	6	35.3	35.3	52.9
	totally agree	8	47.1	47.1	100.0
	Total	17	100.0	100.0	

5-14- The units help you learn how to connect clauses of comparison and contrast

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid					
	totally disagree	1	5.9	5.9	5.9
	disagree to some extent	1	5.9	5.9	11.8
	neither agree nor disagree	1	5.9	5.9	17.6
	agree to some extent	7	41.2	41.2	58.8
	totally agree	7	41.2	41.2	100.0
	Total	17	100.0	100.0	

5-15- The units help you learn how to make a list in your writing (enumeration)

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid					
	totally disagree	1	5.9	5.9	5.9
	disagree to some extent	1	5.9	5.9	11.8
	neither agree nor disagree	3	17.6	17.6	29.4
	agree to some extent	6	35.3	35.3	64.7
	totally agree	6	35.3	35.3	100.0
	Total	17	100.0	100.0	

5-16- The units help you learn how to narrate an event that has happened to you

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid					
	totally disagree	9	52.9	52.9	52.9
	disagree to some extent	5	29.4	29.4	82.4
	neither agree nor disagree	2	11.8	11.8	94.1
	agree to some extent	1	5.9	5.9	100.0
	Total	17	100.0	100.0	

5-17- The instructions are easy to follow

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
disagree to some extent	3	17.6	17.6	17.6
neither agree nor disagree	2	11.8	11.8	29.4
agree to some extent	7	41.2	41.2	70.6
totally agree	5	29.4	29.4	100.0
Total	17	100.0	100.0	

5-18- The language points selected are useful

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
neither agree nor disagree	5	29.4	29.4	29.4
agree to some extent	6	35.3	35.3	64.7
totally agree	6	35.3	35.3	100.0
Total	17	100.0	100.0	

5-19- The concordance lines are not difficult to read

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
disagree to some extent	3	17.6	17.6	17.6
neither agree nor disagree	1	5.9	5.9	23.5
agree to some extent	8	47.1	47.1	70.6
totally agree	5	29.4	29.4	100.0
Total	17	100.0	100.0	

5-20- The concordance lines are well chosen (e.g. vocabulary not too difficult)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
disagree to some extent	1	5.9	5.9	5.9
neither agree nor disagree	4	23.5	23.5	29.4
agree to some extent	7	41.2	41.2	70.6
totally agree	5	29.4	29.4	100.0
Total	17	100.0	100.0	

5-21- Observing concordance lines is an interesting way of learning English

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
neither agree nor disagree	2	11.8	11.8	11.8
agree to some extent	9	52.9	52.9	64.7
totally agree	6	35.3	35.3	100.0
Total	17	100.0	100.0	

**Appendix J
(Original)**



UNIVERSITY OF
BIRMINGHAM

Graduate School of Arts and Law

Participant Information Leaflets and Consent Forms

برگه اطلاعات شرکت کنندگان در تحقیق و فرم رضایت نامه اخلاقی

دانشجوی گرامی

بدینوسیله از شما درخواست می شود در صورت رضایت کامل مراتب موافقت خود را مبنی بر استفاده اینجانب از اوراق امتحانی شما در انجام پروژه تحقیقی خود که در حال انجام است اعلام نمایید. برگه های امتحانی شما (پس از تصحیح و اعلام نمرات پایان ترم) داده های مورد نیاز بنده خواهند بود. لطفا اطلاعات زیر را در مورد این تحقیق بخوانید (بخش 1) و سپس در صورتی که همکاری خود را تأیید می کنید، فرم مربوط (بخش 2) را امضا فرمائید. لازم به یادآوری است که تمامی اوراق امتحانی بصورت بی نام تجزیه و تحلیل خواهند شد و اطلاعات شخصی شما به هیچ نحو اعلام نخواهد شد. اینجانب (به عنوان پژوهش گر این پروژه) تنها فردی خواهم بود که به اطلاعات شخصی شرکت کنندگان دسترسی دارد.

بخش 1: اطلاعات مربوط به پژوهش

موضوع پژوهش: پیشرفت مهارت نگارش در فراگیران ایرانی زبان انگلیسی

هدف پژوهش: این پژوهش به دنبال آن است که چگونگی پیشرفت مهارت نگارش در زبان آموزان ایرانی در درس پاراگراف نویسی را مورد بررسی قرار دهد. از آنجایی که پژوهش گر این پروژه به عنوان مدرس درس (نگارش 1) امکان دسترسی به برگه های امتحانی شما را داراست، از شما دعوت می کند در فراهم آوری داده های مورد نیاز همکاری نمایید. تجزیه و تحلیل های آماری بر برگه های امتحانی شما پس از تصحیح و نمره گذاری انجام خواهد شد. پذیرش یا عدم پذیرش این دعوت کاملاً اختیاری است. در صورتی که قصد انصراف از حضور در این پژوهش را داشته باشید می توانید تا پایان فروردین 1392 اعلام انصراف کنید که در این صورت تحلیل های آماری بر عملکرد شما در درس مذکور انجام نخواهد شد. لازم به تأکید است شرکت شما در این پژوهش هیچ گونه تأثیری بر روند آموزشی تان نخواهد داشت. جهت اعلام انصراف از شرکت در این پژوهش می توانید با پژوهشگر (مهرداد سپهری) و یا استاد راهنما دکتر پائول تامپسون تماس حاصل کنید.

پژوهشگر: مهرداد سپهری

عضو هیات علمی دانشگاه آزاد اسلامی، ایران
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بخش 2: فرم رضایت نامه

- تائید می کنم که اطلاعات مربوط به این پژوهش را خوانده ام و از اهداف آن آگاه هستم.
- امکان طرح سوالات احتمالی را داشته ام و در صورت سوال پاسخ های قانع کننده از طرف پژوهش گر دریافت کرده ام.
- شرکت من در این پژوهش اختیاری است و حق انصراف از ادامه حضور در این پژوهش تا پایان فروردین 1392 برایم محفوظ خواهد ماند و در صورت انصراف داده های به دست آمده از برگه امتحانی من در تجزیه و تحلیل های آماری لحاظ نخواهد شد.
- بر اساس موارد بالا شرکت خود در این پژوهش را تائید می نمایم.

• نام شرکت کننده تاریخ..... امضا.....

• نام پژوهش گر..... تاریخ..... امضا.....

یک رو نوشت از این رضایت نامه نزد شما (شرکت کننده) و یک رونوشت نزد پژوهش گر خواهد ماند. در صورت نیاز به تماس با اینجانب با شماره تلفن همراه و یا نشانی الکترونیکی زیر تماس بگیرید.

ایران:

.....
.....
.....

**Appendix J
(English version)**



UNIVERSITY OF
BIRMINGHAM

Graduate School of Arts and Law

Participant Information Leaflets and Consent Forms

Dear student

I would like to ask for your agreement for me to use your writing examination scripts for research purposes. I am doing doctoral research into the writing of Iranian university undergraduate students and I would like to use your examination scripts as data for my analysis.

Please read the information given below (part 1) and sign the form (Part 2) if you confirm your participation in the project. It should be mentioned that all the exam transcripts will be analyzed anonymously for research purposes and no personal information of the participants will be disclosed. The researcher will be the only person who has access to the participants' ID information.

Part 1: Participant Information Leaflet

Title of the research: Iranian EFL Learners' Writing Skills Development

The aim of the research: The research is aimed at examining in what ways Iranian EFL learners' writing skills develop during a Paragraph Writing Course.

Invitation to participate: Since the researcher has had the opportunity to collect your writing exam scripts as the teacher of your two-credit 'Writing 1' course during the current semester, he is now inviting you to allow him to use the scripts of your exam as the data for the above mentioned research study. This analysis will be done after scoring and announcing your results. There is no compulsion for you to participate in this research project and if you do choose to participate, you may at any stage until the end of March 2013 withdraw your participation. Your participation in the project has no effect on your final term results.

In order to withdraw your participation you can contact the researcher (Mehrdad Sepehri) or his supervisor (Dr Paul Thompson) either by phone or email.

The researcher: Mehrdad Sepehri

PhD student at the University of Birmingham, UK

Lecturer at Islamic Azad University-Shahrekord Branch, Iran

[Redacted contact information for Mehrdad Sepehri]

Supervisor: Dr Paul Thompson

[Redacted contact information for Dr Paul Thompson]

Address : Arts Building, University of Birmingham
Edgbaston, Birmingham
B15 2TT
UK

Part 2: Statements of understanding/consent

- I confirm that I have read and understand the participant information for this study.
- I have had the opportunity to ask questions if necessary and have had these answered satisfactorily.
- I understand that my participation is voluntary and that I am free to withdraw at any time until the end of March 2013 without giving any reason. If I withdraw my data will be removed from the study and will be destroyed.
- Based upon the above, I agree to take part in this study.

Name of participant..... Date..... Signature.....

Name of researcher/
individual obtaining consent..... Date..... Signature.....

One copy of this form will be kept by the participant; a second copy will be kept by the researcher.

If you have any concerns about the project that you would like to discuss, or you want to withdraw from the project please contact the researcher either via mobile or email.

Contact number of the researcher: [redacted]
[redacted] [redacted]
[redacted] [redacted] [redacted]

Appendix K
An outline of the lesson plan for the DDL class

Weeks	lessons	unit	Theme: topics covered
1	Introducing the course/ Administration of the pre-test and questionnaire 1		
2	Paragraph, Topic sentence (No DDL activity)		
3	Paragraph Unity / Coherence/ Chapter 1 (No DDL activity)		
4	Introducing DDL*	An introduction to concordances	KWIC/ full-sentence concordances
		People and their body parts	adj + person + <i>with</i> + adj + body part
5	DDL Unit 1	(This is the first lesson...	Enumeration:LS*, sentence. The LS enumerator V The adj enumerator V
6	DDL Unit 2	Order of listing	Enumeration (Contd.): Ascending Vs descending Order: Article+ ADJ+ enumerator+ VP (predicator) But the adj enumerator VP The adj enumerator, however, VP
7	No DDL activity	Revision of students' previous paragraphs	
8	DDL Unit 3	pointing out likenesses- part 1	Compare and comparison: 'similar to', 'like', 'the same', 'either', 'neither'
9	DDL Unit 4	pointing out likenesses- part 2	Compare and comparison (Contd.): 'in common', 'as...as', 'similarities between'
10	No DDL activity	Revision of students' previous paragraphs	
11	DDL unit 5	'Thanks to' and 'Owing to'	Cause and effect: positive vs. negative meaning
12	DDL Unit 6	I will become so experienced that...	Cause and Effect: so + adj + that + clause such + (a) NP + that + clause 'since', 'because'
13	DDL unit 7	Hard work leads to success	Cause and Effect: 'cause', 'result in', 'lead to', 'due to', 'result from', 'result of'
14	Administration of the post-test, questionnaire 2, and interviews		

*Lessons prepared by Sripicharn (2002: 426, 428)

Appendix L
An example of a short paragraph of an extended definition
(taken from Arnaudet and Barret (1990: 167))

A wristwatch is a mechanical device which is used for telling time. Its main advantage over other types of time-telling devices (such things as clocks, sundials, or hourglasses) is that it is small enough to be worn on the wrist, so that one can easily know the time by looking down. Wristwatches come in various shapes and sizes, but all have one thing in common: a band or strap with which they may be attached to the wrist. In the United States, where "time is money," practically everyone wears a wristwatch.

Appendix M

An Error Analysis Study of the Iranian EFL writings

Introduction

This error analysis survey was conducted as the second step towards identifying the linguistic features and elements which DDL materials should have been prepared for. The aim was to determine the common and more frequent erroneous structures that students might make at this level. To do so, a collection of Iranian EFL learners' writings in similar courses from 2 universities was collected. It comprised 95933 word tokens collected from BA students. These writings had been assigned to them either as weekly assignments or end of the term projects. Students had been asked to write in different text types and send them to their teacher via email. Both classes have been instructed by the same teacher.

In order to analyse these EFL learner-written texts a collection of the teacher's comments and corrections was collected. Then, I tried to search for the same groups of errors in other writings. Two methods were applied for this purpose. Either I read them personally and searched for the erroneous structures, vocabulary misuses etc. or searched through the corpus via the Antconc software to see if other instances of the same errors could be found in the corpus.

Errors found

The next step was to classify the errors according to the linguistic type of the error. For example, verb subject agreement, relative pronouns misuses, wrong collocation etc. Then, I tried to specify the point, lexical, grammatical, collocational, or whatever item that needs to be focused on in preparing teaching materials.

As far as errors categorisation is concerned, I have classified them into two main groups of Structural (STR) and Lexical (LEX). STR errors are the kind of errors made in using function words and structural patterns of the language. Errors like 'false structures' (FSTR), 'false word form' (FWF), 'count/un-count nouns' (C/UN), and 'articles' (ART) are the major types of structural errors. LEX errors are mostly misuses of the content words, formulaic expressions, idioms and collocations. Yet, there are some features which we cannot precisely distinguish between STR and LEX such as linking adverbials. For the case of linking adverbials, I have considered them as a group of lexico-grammatical (LEX-GR) errors.

Table 1 illustrates what has been done at this stage. It shows a sample of 20 erroneous sentences and the class teacher's feedback. The *italicized* words indicate the erroneous item and the **bold** words are corrections made by the class teacher. Column three shows the classifications of error types and column four illustrates the linguistic item that might be focused on in teaching materials preparation stage.

Table 1: A sample of analyses done on 20 erroneous sentences and the class teacher's feedback accompanied with the target linguistic item for the materials development stage.

No	Erroneous sentence and its correction	Error type	Target linguistic item for the teaching units to be developed: Word/ phrase/structure.
1	An example of <i>this such</i> distortions is the news from Gaza. (Delete 'this')	LEX-GR ^[1]	Such/ such a/such as
2	Have you ever experienced <i>such situation</i> ? (such situations)	LEX-GR	Such/ such a/such as
3	This internet classes <i>come to existence</i> Russia and suggested wonderful results (came into existence)	LEX (IDM) ^[2]	Come into existence
4	<i>Entrance University Exam</i> Should Cease to Exist. (University Entrance Exam)	STR ^[3]	NNP/ Noun determining noun
5	The Koran states that " <i>He deserves paradise, who makes his companions laugh.</i> " "He, who makes his companions laugh, deserves paradise"	STR	Relativization/ Relative clause structures
6	The second one is that a good friend <i>should be whom others</i> consider as a wise one. (a good friend should be somebody whom others consider as a wise one)	STR	Relative clauses
7	He/She should be able to make wise choices, for his/her choices may affect my decisions <i>either</i> . (too)	LEX-GR	Either/too/also/as well "Either" is used for negative sentences.
8	Making good friends is very important in our lives and we should <i>pay attention to choose</i> the best ones. (pay attention to choosing)	STR	After prepositions, we must use "ing" form of verbs.
9	<i>internet</i> and computer technology (the Internet)	LEX (Voc)	The word "Internet" is always written with a capital letter and preceded by the word "the."
10	Sometimes students have to go to <i>the another</i> city to study. (to the other city/ to another city)	LEX-GR	other/ the other/ another
11	<i>Although</i> being a good friend is somehow difficult, <i>but</i> we should try our best because we can't ignore the great effect that our good friends have upon us during our life. (Delete 'but')	LEX-GR	Although, though, in spite of,

Table 2: Two main groups of language items for materials preparation stage

Error type		Parts of speech	Example
STR	Function words structures	Articles Determiners Conjunctions Linking adverbials conditionals Noun phrases Relative clauses Subject/verb agreement	A, an, the Such, such as, Either, too, as well Although, though Not only..., but also... ...such (a) NP that... However, therefore, moreover etc. Entrance University Exam Vs. University Entrance Exam Whom, which, that
LEX	Content words Formulaic expressions Idioms collocations	Verb, Noun, Adjective.....	In other words, to some extent... On the other hand, To have in common Critical of/ critical for

Having classified the errors made in the studied writings, I could now refer back to the corpus in order to retrieve the items suggested in the fourth column. This was done to have a look at all instances of the item in the corpus. It would be helpful in making sure if the item was necessary to take into account in preparing the teaching materials.

Appendix N

Teaching materials prepared for the DDL group

An introduction to concordances (1)¹

What are concordances?

Concordances or concordance lines are examples of a word or a phrase with some context on its left and right sides. There are two main types of concordances. The first type is called '**Key Word In Context**' or '**KWIC**'. In this format, the key word is placed in the middle of each line. Here are examples of KWIC concordance for the word '**commit**'.

for divorce, yet we know that men **commit** adultery more often, which suggests their blackness that has made them **commit** crime, but we cannot ignore the not accept the charge that he might **commit** fraud against Simex by failing to fat German know that I will **commit** hara-kiri with my Eurosceptics the jury to decide if he intended to **commit** murder and grievous bodily harm. kidnapping and conspiracy to **commit** rape. Police photographs taken CHILDREN aged 10 to 13 who **commit** robbery, rape, assault, burglary conspiracy to defraud, conspiracy to **commit** theft, false accounting, and VAT fitted his theory. He wanted to **commit** suicide, leaving orders

The second type is called '**full-sentence**' concordance. In this format, the key word is presented in a full/complete sentence. Here are examples of full- sentence concordance for the word '**escape**'.

Some Jews in other situations did manage to **escape** from the Nazis.
He never learnt how to love his father, but he learnt how to **escape** from him.
Nor can we **escape** from the monster.

What can you observe from concordance lines?

Now, let have a look again at the concordance lines for '**commit**', and answer the questions.

1. for divorce, yet we know that men **commit** adultery more often, which suggests
2. their blackness that has made them **commit** crime, but we cannot ignore the
3. accept the charge that he might **commit** fraud against Simex by failing to
4. jury to decide if he intended to **commit** murder and grievous bodily harm.
5. kidnapping and conspiracy to **commit** rape. Police photographs taken
6. CHILDREN aged 10 to 13 who **commit** robbery, rape, assault, burglary
7. to defraud, conspiracy to **commit** theft, false accounting, and VAT
8. fitted his theory. He wanted to **commit** suicide, leaving orders
9. fat German know that I will **commit** hara-kiri with my Eurosceptics

1. What do all the underlined words have in common? What do people normally '**commit**'?

2. How are the actions in line 8 and line 9 different from the others?

¹The first two units (Introduction to concordances) and Unit 5 have been taken from Sripicharn (2002: 426, 428, 442)

An introduction to concordances (2)

People and their body parts

What is the missing word in each set of the concordance lines? To give you a clue, all the missing words are parts of your body!!

Set A The missing word is _____

a very attractive girl with lovely _____ and skin". The pretty girl Neil
its next to a tall man with big _____, a grey beard and a Powerbook:
a tall, dignified old man with sad _____. May I speak with you in
a quiet woman with bright shining _____, does not believe all the stories
a wedge. A young woman with bright _____ and short hair peered out t him
very attractive woman with large blue _____ and jet-black hair that she kept to

Set B The missing word is _____

a wonderful woman, with her handsome _____ like a Roman emperor's and hearty
judge, a middle-aged man with a red _____, was sitting behind a squat wooden
been." A tall, gangly man with a kind _____, he says quietly that he can't feel
on 'every old woman with a wrinkled _____, a furred brow, a hairy lip, a
an old couple, a woman with an oval _____ that must once have been handsome.
was a small, compact man with a baby _____. Ross took Harry by the arm. Harry

Set C The missing word is _____

was a fascinating man, with wonderful _____ and a distinctive style of
a middle-aged man with strange long _____ who looked like the Earl of
tall, powerfully built man with short _____ and a well-trimmed moustache, he
had a premonition of a girl with dark _____, in dark jeans, walking along near a
a middle-aged woman with dyed ginger _____, came in with their coffee. She
for an American girl with big blonde _____, long legs, big teeth. It smells

Set D The missing word is _____

those of a certain girl with a big _____. How I walked the twenty-five steps
as a short, pudgy man with a red _____ approached them. Hi," he said. You
rough-tongued man with a long _____, heavy jaw, sharp mind and highly
a small, thin woman with a flattened _____ also gazed at the stage. Their box
life. This little man, with his sharp _____, has worked his
My role is a girl with a runny _____. She's a slight eccentric. It's a

Activity

As you may notice, all the above concordance lines share the pattern "**adj. + person + with + adj. + body part**". In groups of three or four, try to describe your friends and their body parts using that pattern. For example, "**The person sitting next to me is a nice, attractive woman with big eyes**". The concordance lines above may give you some ideas.

Unit 1 (This is the first lesson...)

TASK 1 Read these sentences and then answer the following questions.

1. I found that there are two kinds of imagination.
2. I think there are two main types of society.
3. we can watch different types of documents on television.
4. As a whole there are two types of knowledge - theoretical and practical.
5. Hong Kong is suffered from various kinds of pollution: land pollutions, water pollution and
6. Most students can successfully apply different kinds of credit cards easily.
7. Human nature has two main aspects: the physical and the spiritual.
8. All these characteristics are typical of the English language.
9. but salary varies according to lots of factors.

1. In sentence 1, which word helps us enumerating 'imagination'?
2. In sentence 2, which word helps us enumerating 'society'?
3. Can you try the same question for the other sentences?

1. Enumerators:

Words such as kinds, types, aspects are called **enumerators**. These words help you tell the readers exactly what you are listing or enumerating. When you use enumerators you can organize your paragraphs in a clear unified way. Enumerators will also help your readers to follow your line of paragraph development more easily.

1. Which word follows the enumerators in the above sentences?
2. Can you guess the structural pattern in which enumerators are used?

TASK 2 Read the following sentences and make a list of enumerators.

1	The tourism sites in Hong Kong can be classified into four main categories - cultural, natural, man-made and historical.	
2	In this essay, I examine the advantages and disadvantages of using credit cards during....	
3	Chemical medicines are in some aspects better than natural medicines.	
4	By making films, he tells stories about various levels of life. According to Kieslowski,	
5	There are certain characteristics that usually form a group of people into one nation.	
6	The audience, however, can be divided into two groups. There are people who go to see a film in order to..	
7	In Hong Kong, some groups of women can have abortion legally.	
8	Then, a university offers two great advantages: a chance to improve one's capacity to think and	
9	Bulgarians certainly recognise the advantages of having higher education. One of these is the	

1. Enumerators in the above sentences are: _____
2. Read the above sentences again and put a check mark (√) in front of the ones that can be a good starting sentence (topic sentence).

1. Making a list

The purpose of an enumerative paragraph is to develop a general class or a whole into its parts, categories, types, etc. Therefore, the writers may need to make a list when supporting their topic sentences. In this case, they need to arrange their supporting sentences through the use of listing signals. For example, for sentence 1 above (task 2), the writer may need to give a list of the four main categories of the tourism sites in Hong Kong. In sentence 2, the writer will make a list of advantages and disadvantages of using credit cards and in sentence 3 the writer may want to prepare a list of the aspects in which chemical medicines are better than natural ones and so on.

Task 3: Take a quick look at the following concordances.

Group 1

1 distinguishing characteristics for these movements: First, they focus on problems specific for women as wome
2 this period, there are two reasons to support me. First, it is not suitable for Hong Kong government to sp
3 The process is carried out in three major stages. First, waste materials (e.g. newspaper) are collected
4 their identity. Let us explain these two points. First, Europe 1992 means the birth of a new economic and
5 tage and disadvantage in the following paragraph. First, I would say something for I to support having cyb
6 Many advantages of banning smoking in restaurants. First, it can protect the health of people who do not sm
7 in our mind and nothing can cut it out of there. Second, there is no one who hates dreaming. And, if you l
8 s more or less dreamy than we are disposed to be. Second, our world isn't perfect, is it? I bet that you're a
9 as there is a way to recruit China professionals. Second, importing elite from China may results higher une
10 and taverns to improve their respiratory health. Third, it can also attract more people to the restaurants
11 ernment should give more welfare to these people. Third, it also affects the health of people in other publ
12 learn how to use a credit card with a right way. Third, students can get instant cash with credit card if
13 can't do other activities. It wastes their time. Third, children make bad friends at cyber cafes. At cybe
14 make more money for the employees for retirement. Third, the contribution of employees can be classified
15 se of its dimensions and its wholesome functions. Next, there is another important characteristic typical
16 necessary to teach in what scene English is useful. Next, it is important to make the opportunity about which
17 we can learn the latest languages from sentences. Next, it is using the Internet. We can get more recent
18 imals even though they may learn many from books. Finally, a zoo is a place for fun. In fact, this is why it
19 know the weather is like in the following week. Finally, television is a great creation of human beings.

Now try to answer these questions.

1. What is the general term for the words 'first', 'second', 'third', 'next', and 'finally'?
2. What punctuation mark follows the listing signal?
3. The listing signal in each sentence is followed by a.....
 - a. Relative clause
 - b. prepositional phrase
 - c. Complete sentence
 - d. Modal verb
4. Can you try to work out a general pattern of enumeration according to the above concordance lines?

Now compare the above set of concordances with the following set.

Group 2

1 y, appears to have a great deal of disadvantages. The first kind of disadvantage is that it can lead students
2 the surgery of abortion in Hong Kong Legally. The first kind of people are those women who have physiologi
4 roject. The projects will not be very profitable. The second argument is that it is vital for Hong Kong people
5 ind, travelers always can check both the sources. The second advantage of cyber cafe is that it provide
6 ogical problems of people may be led more easily. The third argument is that country parks have a potential t
7 hardly can. They have no control of their temper. The last group consists of people, who say that they killed
8 ch pressure reluctant women not having abortions. The second argument in against of abortion is seriously harm
9 l of liberalism of that kind is changing rapidly. The last decade has brought some phenomena that even an un
10 een and blooms - it looks like a little paradise. The next advantage is that you have your own harvest. I li
11 the cold manners and selfishness of the English. The next stage is getting to know the foreign country bett
12 eself with candy, the moment awaited for so long. The next group includes so-called occasional candy eate

1. What word comes before the listing signal?
2. What is the general term for the words after the listing signals?
3. Underline the verbs after the listing signals.
4. What kind of verbs are they?

Unit 2 (Order of Listing)

Task 1: Read the concordance lines below and answer the following questions.

1 orting abortion are selfish and cool-blooded. The second point of supporting abortion is that abortion is
 2 me back to cosmopolitanism of Middle Age Europe. The last development has just opposite direction. From the
 3 e student and it may affect their own studies. The third disadvantage is the security problem. If the stud
 4 m bank by students is pros more than cons. The last problem is cheating, it is because students are
 5 king, barbecuing and camping in country parks. The third disadvantage is about outdoor education. Along th
 6 ts in Hong Kong are small scale and primitive. The first step of recycling is to collect and separate the
 7 t our help and support to the suffered people. The final factor that makes news undesirable is our culture
 8 t is terrible that their solution is cheating. The final reason why some students cheat at the exams is
 9 manners and selfishness of the English. The next stage is getting to know the foreign country better

1. What are the listing signals?
2. Complete the following table by writing the enumerators found in each sentence.

1.point	2.	3.
4.	5.	6.
7.	8.	9.

Task 2: Now study the following five patterns:

- A. Listing signal + enumerator + (wh clause) is.....
- B. Listing signal + enumerator + (prep. Phrase) is....
- C. Listing signal+ enumerator+ (infinitive clause) is....
- D. Listing signal+ enumerator+ verb + noun phrase....
- E. Listing signal+ enumerator+ that clause.....

1. B	2.	3.
4.	5.	6.
7.	8.	9.

Match the patterns with each sentence above (in task 1). Write the correct letter in the box below.

Task 3: Using the concordance lines in task 1, fill in the table below:

In sentence	1	the writer is listing	points of supporting abortion.
	4		
	6		
	7		
	8		

Task 4: Take a look at the following concordances and do the exercises below.

1 implemented banning smoking in restaurants. The most important advantages of banning smoking in restaurants is that it cou
 2 nvincing people through imagines and words. The most important factor is that the politic parties have a great influence
 3 d railway link is worth to be built or not. The most important issue is that if it can satisfy most of the needs of people
 4 e according to your purpose and your topic. The most common approach is using examples to explain your purpose. These exam
 5 ich adds to the ocean of one's experiences. The most crucial reason for trying to be highly educated is improving our so
 6 ess to you, then tear them to be forgotten. The most useful way is remembering God - one who brings you both happiness and
 7 e infancy, so they live under the pressure. The major group against abortion is religious people. The three main religions
 8 nt. Capitalism is not necessary graspiness. The primary goal of businessmen is not a comfortable life in luxury but the
 9 we must not forget the main objective here. The primary area of interest has to be the economy. If the economy does not
 10 one is entailed in an irreversible process. The essential cause is the fact that one has not made the difference between
 11 here are only bad programmes and bad users. The major problem with television is that it turns people into "TV-addicts".

1. Fill in the following table based on the above concordances.

The	most important most crucial	approach reason	is..... .
Article	ADJ (listing signal)	enumerator	VP (predicator)
	

2. What other adjectives you would like to add to the list above?
3. What other enumerators you would like to add to the list above?
4. What is the main difference between concordance lines in group 3 and 4?
5. Underline the prepositions after each enumerator.

The writers of the above sentences try to organize their paragraphs in a **descending order**. They are developing their topic sentences by mentioning the most important first, and then go on to speak of the other points.

Example:

1) The doctor explained the list of possible side effects of the new drug. From common to rare: First, was dizziness; second was nausea; and third was chest pain.

2) The most important and essential quality of good teachers is their knowledge. A good teacher ought to be an expert in his/her field. They must have in-depth and thorough knowledge of the subjects, and be able to explain confusing and complex subjects. Furthermore, an excellent teacher is supposed to be motivational. He should show a positive caring attitude, and encourage the students to strive to achieve their goals. To be motivational, a good teacher can provide constructive feedbacks, and monitor the student's progress. All these lead to make a positive motivation in students. In addition to knowledge and motivation, a good teacher must have a flexible well-balanced personality. In a class the students are from various social classes and family backgrounds; clearly, it is not easy to make contact with them. A good teacher; therefore, must patiently respect their ideas and points of view, and according to Palmer, good teachers are: "people who have some sort of connective capacity, who connect themselves to their students, their students to each other, and everyone to the subject being studied."

Task 5: Now read the following concordances and then answer the questions.

1 n choose a suitable area of learning. But the main shortcoming is that most university degrees are theoretical and
2 g TV. It has it's good and had sides. But the main problem is that television is now really the opium of the masses
3 ecome criminals. We must remember it. But the most important thing is to prevent committing a crime.
4 e, we can send this person to prison. But the best way to prevent a new crime, she believes, is to put this person
5 roblems caused by "money inequality". But the biggest problem lies in the lack of money, in those people who don't
6 ated corner for the children to play. But the best thing with McDonald's is the fact that it's open almost 24 hours
7 al values. The most important aspect, however, is that it is only a vital source of income
8 s. The most important aim of the law, however, is to help people already addicted.
9 imagining everyday life without them. However, the most emblematic product of science and technology is the omnipresent
10 ns for banning smoking in restaurant. However, the most important reason is passive smoking. Either the customers,
11 often too short to be spent at home. However, the most serious problem is money. The daily allowance is ridiculous
• tishment somehow should be regulated. However, the most important thing is our own consciousness of the problem.

5.1. What is the function of the words **But** and **however** in the above sentences?

5.2. What is the main difference between the sentence arrangement in group 4 and 5?

5.3. Can you think of a general sentence pattern for the sentences with '**But**'?

Answer:

5.4. Now do the same for sentences with 'however'.

Answer:

Unit 3 (pointing out likenesses- part 1)

Task 1: Take a quick look at the following concordances.

1. bal land. The history of people who stay here are similar to those of their neighbouring Country Botswana. To
2. l the unpleasant smoke occasionally. This is just similar to have meals in a restaurant where there are no smo
3. or dreaming and imagination. This opinion is very similar to mine. I would say that there is a place for dream
4. peace the power of the Finnish President is quite similar to that, for instance, of the King of Sweden. He/She
5. reat tragic figure in this sense, and he is quite similar to the figure of Satan. Actually *blasphemy* in lin
6. hat some are more equal than others. This is very similar to the way of ruling during the Russian revolution,
7. her. The role TV plays in modern society is quiet similar to the two sides of the coin. In modern society, whe
8. Thomas Jefferson was describing a government very similar to Rousseau's, where people themselves were the ulti
9. ollection of short-stories. It is structured very similar to Sherwood Anderson's 'Winesbury, Ohio', that is, a
10. from the influence of television are in some way similar to the ones that derive from the dependency of drugs
11. her. The role TV plays in modern society is quiet similar to the two sides of the coin. In modern society, whe
12. peace the power of the Finnish President is quite similar to that, for instance, of the King of Sweden. He/She
13. ally interesting to visit Alaska; Alaska is quite similar to Russia's Tiumen region " , said Victor Dolinger,
14. ult language acquisition. Some people think it's similar to adult language acquisition. However in my opinion
15. haverizen to power and initiated something very similar to it. It is a very interesting theory which has stu

- 1.1. What is the key phrase in these lines?
- 1.2. What are the words exactly before the key word?
- 1.3. Can you list the most frequent verbs used in these lines?
- 1.4. In two of the above lines, a word is misspelt. Which one is it?

Task 2: Study the following concordance lines.

- A. Blacks, for example, today have all the **same** legal rights as others. They can do the **same** things as whites can.
- B. People who cannot speak English are not able to stand at the **same** starting line as those who can speak it fluently.
- C. It is part of our everyday life - we all have the **same** rights and responsibilities as citizens of our community.
- D. Today, also members of minorities should have the **same** blessings and opportunities as everybody else.
- E. Women are not properties of men and basically they have the **same** rights and capabilities as men do.
- F. He is interested in all kinds of news. Newspapers have got the **same** value for him as the Bible has for a Christian.

- 2.1. What is the part of speech of the word '**same**' in these sentences?
- 2.2. What preposition follows the adjective '**same**'?
- 2.3. What kind of information is given between the adjective and the preposition?
- 2.4. How can you summarize the pattern that you have observed in these sentences?
- 2.5. Fill in the table below according to the information you find in the above sentences. (The first one has been done for you as an example.)

sentence	Comparing items	verb	Points of comparison
A	Blacks/whites	have	Legal rights
B			
C			
D			
E			
F			

2.6. Write a sentence with your own words using the pattern observed in sentences A to F above.

Task 3: Read the following sentences and underline the words indicating the degree of similarity.

- 3.1. All around the world women have almost the same difficult role as a mother, as a spouse and as a daughter of her
- 3.2. Unborn children should have exactly the same rights in respect of their own bodies as men and women.
- 3.3. I can say that punishment and rehabilitation are just the same things.
- 3.4. The basic needs of individuals are almost the same across the globe.
- 3.5. In the National Championships the rules are practically the same as the regular game. The challenge is perhaps greater.

Task 4: Read the following sentences and then answer the questions.

- For many school boys reading a novel is more like a duty than a pleasure.
- My experience is very much like that described in the book.
- He's growing more like his father every day.
- I tried fried fish. It was very good. It tasted so much like chicken, even maybe better than chicken.
- The wolves looked rather like foxes and were perfectly still and silent, with large tails and alert ears.

4.1. What is the common preposition in these lines?

4.2. What verbs can you see before 'like'? What kind of verbs are they?

4.3. The writers of the above sentences are trying to express some kind ofrelationship.

- a. cause b. effect c. contrast d. comparison

Task 5: Matching questions. Match the sentence starting parts in **A** with sentence endings in **B**.

A	B	
1. Kennedy's death was rather similar to	a. his father every day.	
2. I've had problems somewhat similar to	b. people were in the 19th century.	
3. Often Dawson's ideas are remarkably similar to	c. Lincoln's in that they both died in office.	
4. people in some countries are still treated almost like	d. yours.	
5. My experience is very much like	e. that described in the book.	
6. He's growing more like	f. those of Eliot.	

Task 6: Read the concordances below. (Supplementary activities)

1. ed States - women are not property of men and basically they have the same rights and possibilities as men do. But the fact is, that in
 2. or education. Women want to study the same subjects and to go to the same educational institutions as men, but there is no need to bre
 3. heir independence years ago. After a long struggle they now enjoy the same educational opportunities as men in most parts of the world.
 4. ften compared with adult language acquisition. Some people think it's similar to adult language acquisition. However in my opinion, the
 5. this particular topic. In the same way, the attitude towards Jews is similar to the one towards coloured people. Prejudices, though not
 6. . Now I understand that the life of soldiers in this country is very similar to that of criminals in prisons. But this coin can also h
 7. oor Thanks for the Advice! Can you even imagine what it used to be like when people in the past faced problems and needed some advice?!
 8. now I know where they are coming from. Friends, in my opinion, are like flowers or even colours; each and every one of them is differen
 9. nk. This is named literary plagiarism in western countries. You are like a man stealing other's property.' If you are bombarded with su

6.1. In sentences 1-3, what is the key word?

6.2. In sentences 4-6, what is the key word?

6.3. In sentences 7-9, what is the key word?

6.4. What is the common preposition appearing in sentences 1-3?

6.5. What are the comparing points in sentences 1-3?

6.6. What kind of meaning relationship is common in all the above sentences?

6.7. complete these 3 sentences with your own ideas.

- a) Womenthe same..... as men.
- b) The attitude towardsis similar to.....
- c) Friends are like.....

Task 7: A. Look at the concordances below. (Supplementary activities: Attached statements, Either/ neither)

- ard about computers. At that time, I wasn't into the software-business at all, and I wasn't tempted either. When it came to
- rced into it. It is a fact that many men are not fit to be a soldier and they should not have to be either. They would proba
- those people who share this opinion. I'm certainly not one of them and I believe many others aren't either. The strongest ar
- hat if you are raped and nobody believes you? Life is not always fair and the justice system is not either. It consists of p
- I have never been in the situation of a victim in such a severe case and I have not been concerned either. Although I am ag
- s are very extreme. Murderers shouldn't be rehabilitated and they shouldn't be treated like animals either. But what about m

7A.1. what is the position of either in each line? Final position in the sentence

7A.2. Underline the first '*and*' before either in each line and then the first '*not*'.

7A.3. what kinds of statements are there before and after the underlined '*and*'?

7A.4. How can you summarize the pattern observed in these sentences?

7A.5. Write two sentences using this pattern.

B. Look at the concordances below.

- He could do nothing, and neither could she.
- My fiancé doesn't actually smoke, and neither do I.
- The rich peasant was not a bourgeois and neither was the white-collar employee.
- No building can stand without firm foundations, and neither can a marriage.
- The importers weren't reliable, and neither were the craftsmen,

7B.1. what is the position of '*neither*' in each line?

7B.2. what is the part of speech of the first word after neither?

7B.3. What is the difference between the auxiliary verbs before and after '*neither*'?

7B.4. what kinds of statements are there before and after the underlined '*and*'?

7B.5. How can you summarize the pattern applying on these sentences?

7B.6. Write two sentences using this pattern.

Unit 4 (pointing out likenesses- part 2)
Words and expressions used in expressing likenesses

Task 1: Read the following concordances.

1. days, but I guess that we still have some dreams in common. We still dream about true
2. erience that theory and practice have very little in common. Moreover, the two often
3. e borrowed from his library. We did not have much in common. But it did not matter.
4. er. Parallel straight lines do not have any point in common. We see in the book that
5. isonment is community service which have features in common with the mediation. Th
6. The radio comedy of a few decades ago has a lot in common with the popular series of
7. this science), people found that they had things in common with others, i.e. a whole
8. peoples whose history and traditions have nothing in common with Western civilization.
9. o decide for himself where to stand. It has a lot in common with science, technology,

1.1. The key word in these lines is _____.

1.2. Underline the first verb before the key word?

1.3. What kind of information can you find between the verb and the key word?

1.3. How are the subjects in lines 1, 3, and 7 different from the subjects in lines 2, and 4?

1.4. Can you write the patterns applied in these sentences?

Task 2: Read these concordances of the word ‘as’.

1. our solar system, a space telescope with a mirror as wide as a football field is
2. rivers whose outbursts of rage turned their faces as red as a beetroot. The inhab
3. aper and better. First of all, the cell phone was as big as a handbag and was hard
4. e of car drivers. These stupid men who mean to be as brave as lions by driving lik
5. ation too. Deciding to have a baby is not as easy as deciding to buy a new dress.

Now fill in the following paraphrases. The first one has been done for you as an example.

1	A telescope mirror and a football field have <i>the same width.</i>
2	Their faces and a beetroot have
3	The cell phone and a handbag were
4	These stupid men claim to be
5	Deciding to have a baby is deciding to buy a new dress.

Task 3: Read these concordances of the word ‘similarities’ and then answer the following 3 questions.

1. In the last chapter I outlined certain similarities between karate competition and boxing.
2. This is an example of the striking similarities between karate and taekwondo.
3. There are thus clear similarities between the two approaches. However, there are
4. Although they capture some superficial similarities between the two issues,
5. There are some obvious similarities between country A and country B in the
6. There are significant similarities between the major European languages and Sanskrit

3.1. What is the part of speech of the word before ‘*similarities*’?

3.2. Underline the word ‘and’ after ‘similarities’.

3.3. How would you summarize the pattern applied to the above concordance lines?

Unit 5 'Thanks to' and 'Owing to'

(Taken from Sripicharn, 2002: 442)

Here are full-sentence concordance lines for '**thanks to**'. In each sentence, try to find out the part that suggests the '**cause**' of the event and the part that suggests the '**effect**' of the event. The first line has been done for you.

effect

cause

1. Tahiti may have higher living standards than its neighbours **thanks to** its ties with France.
2. **Thanks to** film, future generations will know the 20th century more intimately than any other period in history.
3. They won 2-1, **thanks to** an 89th minute penalty.
4. Most people are environmentally aware, **thanks to** the work of people like the Greens.
5. **Thanks to** recent research, effective treatments are available for even the most pugnacious of headaches.
6. Incidents of violence were relatively few, partly **thanks to** a massive police presence and a ban on the sale of alcoholic drinks on the day of a match.

Here are full-sentence concordance lines for '**owing to**'. In each sentence, try to find out the part that suggests the '**cause**' of the event and the part that suggests the '**effect**' of the event. The first line has been done for you.

effect

cause

1. The England No.1 will miss the Dutch Open, **owing to** a heel injury.
2. **Owing to** bad weather, the race had already been delayed for a considerable time.
3. The metabolism of most Americans is lower than it should be **owing to** an inadequate amount of regular physical exercise.
4. **Owing to** errors in medical procedure, her son was defective at birth.
5. The bill stands little chance of becoming law **owing to** lack of parliamentary time.
6. The company was facing bankruptcy **owing to** its inability to repay 500,000 pounds loan.

Discussion

According to the data above, which phrase ('thanks to' or 'owing to') is used to suggest negative cause/effect? Which phrase is used to suggest positive cause/effect? Underline words or phrases that give you the clues.

Unit 6

I will become so experienced that...

Task 1: Take a quick look at the following sentences and try to answer the questions below. (Do not read through the lines completely.)

1. eries, containers, clothes, and really beautiful paintings. They were so amazing that I even did not notice the passing of time.
2. hem jumping over it while doing funny things, and redness of fire are so attractive that nobody likes to miss them. Let's say group activit
3. y other bank, for example, from Melli to Saderat. Cash cards are so beneficial that worth trying. Pay your bills and draw money from yo
4. ld I used to play Football with my friends in our lane because it was so easy that we could play everywhere but the children nowadays can bu
5. the most important advantage of living in a dorm is that I will become so experienced that I can solve my problems easily.
6. ads. Today the cost of making an ad and broadcasting in television is so high that some businessmen with that money sponsor producing program
7. of relief and confidence for any man who really believes it. It is so important that it needs to be more seriously treated as of energy
8. isome, for, on one hand, children have found these flickering screens so interesting that they spend much of their time in front of them, an
9. sometimes missed exams. I often used the computer to chat, which was so interesting that I did not leave myself enough time to study. In a
10. people have many thoughts and wishes a bout. My wishes for future are so many that I cannot count .But first of all, I have always wished to
11. they qualified him, he was shocked because they rejected him. He was so unhappy that he could not eat for about 3 days. To make a long stor
12. pment of children in some other ways. Unfortunately, sometimes it was so unscheduled that results in not doing any beneficial thing, and was
13. f India. The love of the king to his wife, Momtaz Mahal, was so great that Shah Jahan ordered to build the most beautiful mausoleum for her.

1. What is the part of speech of the word after 'so'?
2. What is the second word after 'so'?
3. Underline the complete sentence after so in lines 1, 9, and 11.
4. In line 7 the best word for the missing part is..... a. an origin b. a source c. a root d. an aspect
5. In sentence 10, what is it that the writer cannot count? Why cannot s/he count it/them?
6. In line 6, why did Shah Jahan order to build the mausoleum?
7. According to the answers given to questions 1.5 and 1.6 above, can you guess the relationship between the clauses after and before 'that'?
8. Can you write a general pattern for the sentences in this concordance? Please show the relationships between the clauses around 'so'.
9. In the above concordances, underline the verb in the cause clause.

Task 2: Look at the following concordances and then complete the activities.

1. e only participant to ask questions directly: 'So was that a yes or a no?' whilst the majority of sentence moods used b
2. oint for the human race, but we did not react. So, after that, vast killing of animals started for the sake of epicures
3. became frightened of flowers because they grew so slowly that he couldn't tell what they planned to do. His mind learne
4. ory and this is evident in no one society more so than that of the Greeks, most notably that of the Athenians. Consider
5. ten times a day. When I left it at home, I got so anxious that I wanted to go back home immediately. Now, cellular phon
6. jurisprudence, social conditions have changed so completely that a blind adherence to some of the rules, torn out of t
7. nd perhaps this is why Barbara Bodichon states so strongly that women held no importance or status in Victorian society
8. the other hand, the Tiger is also personified, so does that make him the Devil? I think it does not. William Blake, on
9. onastery schools. Their development took place so slowly that it is difficult to know the point at which they became un

1. Which line follows the pattern as in the previous activity?
2. Underline the verbs before 'so' in lines 3, 6, 7, and 9.
3. How are these verbs different from the verbs in question 9 above?
4. Write a general pattern for lines 3, 6, 7, and 9 similar to the previous pattern.

Task 3: Read the following sentences.

- 1 Video games can be so addictive that children spend almost all their free time playing them.
- 2 The intrusive noises of a television show are so annoying that you cannot concentrate on your work.
- 3 protagonists are so brave that they physically eliminate their antagonists
- 4 Today technology is so developed that manpower is not needed any more.

A) Answer the questions below.

- 3A.1. In sentence 1, children seem to waste their free time. Why?
- 3A.2. In sentence 2, what is the reason 'you cannot concentrate on your work'?
- 3A.3. In sentence 3, what is the result that protagonists are brave?
- 3A.4. In sentence 4, why manpower is not needed?

B) Paraphrasing: Write a paraphrase sentence for the above sentences. (Sentence 1 has already been done for you.)

- 3B.1. *Children spend almost all their free time playing video games because they are very addictive.*
- 3B.2. _____
- 3B.3. _____
- 3B.4. _____

Task 4: Take a look at these concordances and then answer the questions that follow.

1. In short, make yourself such a valuable worker that neither your clients nor your boss and colleagues want to lose you
2. t you should bear in mind. He is such a kind teacher that we can get help from to discover our forgotten values
3. lution. Some criminals committed such awful crimes that the only sentence can be death. Not the cruel death
4. ybody wanted to meet him. He was such a kind man that he hadn't even a minute for himself. The two soc
5. ey of most of things. We are in such terrible living conditions that people are used to bad things with the
6. Southern hemisphere always faces such great financial problems that they are in crises that cannot be credi
7. d them that my parents came from such poor families that they had had to earn their own living since they w
8. argue that nuclear weapons have such destructive potential that war should be abolished to avoid the possi
9. Indeed, individual adjustment is such a complex phenomenon that it cannot be tested in experiments. Moreove
10. in an up-to-date way... It has such a great influence that we don't exchange ideas anymore during an even
- 11.Indeed, individual adjustment is such a complex phenomenon that it cannot be tested in experiments. Moreove
12. New species are appearing at such a rapid rate that the important process of scientifically identifying spe

A) Pattern noticing

- 4A.1. What is the key word in the above concordance lines?
- 4A.2. Underline the word '*that*' after the key word.
- 4A.3. What is the grammatical structure between the key word and '*that*'?
- 4A.4. In which lines '*such*' is followed by an article?

B) Fill in the blanks

- 4B.1. In line 3 criminals would be sentenced to death because.....
- 4B.2. In sentence 5, terrible living conditions have caused.....
- 4B.3. What is the meaning relationship between the clauses before and after '*that*' in these lines?

Task 5: Matching Activity. Match the right hand side clauses below (numbered 1 to 5) with the left hand clauses (lettered A to E).

1	My father has so much money	that	I wanted to go back home immediately.	A
2	I expect the president to have such a strong self-confidence		it is impossible to overlook the problem.	B
3	He is such a kind teacher		he can buy millions of dolls if I just ask him to.	C
4	When I left it at home, I got so anxious		we can get help from to discover our forgotten values.	D
5	we are now in such a critical situation		he dares to say his opinions aloud.	E

1. 2. 3. 4. 5.

Task6: Gap filling activity. Fill in the blanks with the appropriate given phrases.

- A. so advanced that B. such a success that C. so desperate that D. so addictive that E. so abstract that F. such a way that

1	So I wonder if the theoretical knowledge is		the students nearly learn nothing.
2	Video games can be		children spend almost all their free time in front of the screen.
3	People began to build robots and by time they became		they could think.
4	People are		they cannot see real values of our life. Values turned up.
5	Our pupils behave in		we would like to smack them or send them to a loony-bin.
6	This experiment has been		it is going to be continued and expanded.

Task 7: What does the word ‘since’ mean in these sentences?

A) Read the sentences below and try to figure out the meaning of the word ‘since’ in each line.

Put **B** in the box in front of each line if the word ‘since’ means **because**, and put **F** if it means **from the time**.

1	Since everyone’s life experiences are unique, people can make their lives like if they believe their thoughts.	
2	Since from the very ancient time, fire has been the symbol of light, hotness, and also beauty.	
3	Besides this personal experience, religious people believe in after life since God warned them that their life is continued after death.	
4	I’ve decided not to continue my studies since I delivered my speech on last Friday.	
5	Among the best stories I have never read, Jane Eyre is the pick of the bunch since I have found it fascinating in many aspects.	
6	Since I will become familiar with different thoughts and cultures in the dorm, my thought will improve.	
7	Cosmetics surgery has been increased uncontrollably in Iran since last year.	
8	In the end, natural order of life and death says: “People must die, since some others are about to be born”!	
9	After more than half a century since the innovation of the first TV in the world, and after its worldwide acceptance in all	
10	Music has been a part of people’s lives since the time civilization began.	

B) Rewrite sentences in which ‘*since*’ means because in the spaces provided below. Replace since with other words or expressions with the same meaning.

Unit 7
Hard work leads to success

Task 1. (Familiarization) In this section you will see two groups of concordances. Read through the lines in each group and try to find the meaning relationships between the parts (phrases, clauses) before and after the Key words- **cause, result in, lead to, and due to.**

Group 1

1. In fact, experiments have shown that lack of sleep during a day can **cause** mental weakness.
2. Doing all the household or garden work is not fun for anyone and can **cause** an enormous amount of displeasure.
3. Diseases such as depression and anxiety are other factors that can **cause** addiction.

4. Prolonged breathing tobacco smoke may **result in** respiratory diseases.
5. Successful implementation of group technology will **result in** a great performance of the manufacture.
6. More accurate measuring equipment would **result in** a more accurate calculation of the strain.

7. Only irrational use of the natural resources could **lead to** this state of affairs, and people were responsible for it.
8. The process of abortion can **lead to** many side effects to women if the surgery is carried out under bad conditions.
9. Threatening or unemployment may **lead to** a loss of self-esteem and a sense of uselessness.
10. Artificial insemination might **lead to** psychological problems for children of single mothers.

Group 2

1. Sometimes low marks are **due to** the students' lack of attention to lessons and not due to the teachers.
2. Secondly, physical problems, which are **due to** the stressful life, are considerable.
3. Many couples divorce **due to** the lack of meeting their conjugal rights from their partner's side.
4. That is why Buddha states: "all what we are, is the **result of** what we have thought".
5. So, no doubt many scientific breakthroughs are the **result of** someone's imagination –
6. Morality forms the basis of laws which are the **result of** people's beliefs, costumes and traditions
7. Their shyness could be the **result of** their serious self-doubt. In other words, they don't know who they are.
8. There are many damaging outcomes which can **result from** a long term drinking problem.
9. Hypochromic anaemia may **result from** a combination of chronic disease and poor dietary nutritional content.

Group 1 meaning relationships: _____

Group 2 meaning relationships: _____

Task 2. Paraphrasing: Rewrite the following sentences from group 2 above in a way that the order of cause and effect changes. Sentence 1 has been done for you as an example.

1. Sometimes low marks are due to the students' lack of attention to lessons and not due to the teachers.
Sometimes students' lack of attention to lessons leads to low marks.

1. Secondly, physical problems, which are due to the stressful life, are considerable.

2. Their shyness could be the result of their serious self-doubt. In other words, they don't know who they are.

3. That is why Buddha states: "all what we are, is the result of what we have thought".

4. There are many damaging outcomes which can result from a long term drinking problem.

Task 3: Gap filling: In each group of the following concordances one word or phrase is deleted. Choose the correct option from the list below to fill in the blanks. (One word may need to be used twice.)

Lead, result, due, cause

- | | |
|--|--|
| <p>1. They should consider the serious damages that their decisions could Issue for some young people in our country. 5. Computer games can for people to suffer from poverty. In London, unemployment can</p> | <p>in their children's future lives. The fact of not having a normal fam mental problems for children below the age of ten. 1.newspaper t has a great impact on increasing the rate of poverty</p> |
| <p>2. e than their advantages because these unnecessary uses of cell-phones eed behaviours could be prevented. The reducing of the crime rate will phat is very bad for their health. Watching too much TV will not only</p> | <p>in losing the greatest thing that is called Time. So, we can say in more peaceful surrounding. Furthermore, keeping the capital in short-sighted but also the development of the brain. While</p> |
| <p>3. Ing has caused serious threat to the families. The use of alcohol can are on heart. If you are fat, your heart has to work harder. This may is to get divorced. And it is no doubt that the unemployment may</p> | <p>to uncontrolled behaviours and the people, who regularly use to a heart attack. to increase the rates of divorce.</p> |

4. What mother finally decides to do will probably be the WHO is a good indicator of this "...all physical characteristics erialist " theory 21, 22. This theory states that "health inequalities from the opinion of someone else. from the interaction of heredity and environment...Body measurements from differential accumulation of exposures and experiences that have the
5. s to celebrate them, etc. Many of the habits and norms in society are ow, most of the misunderstandings in international communication are gerous pitfall. It is common knowledge that most cases of divorce are to religion. The long "marriage" of state and church is one of the reasons to difficulties in understanding the other people's ideas and culture. T to the fact that a man and a woman did not know each other well enough a

Task4. Fill in the blanks with the given choices. (Each choice might be used only once.)
result, cause, due to, result from, lead, result of

1. The slightest mistake in the procedure may in fatal defects. Playing with genes is not that easy as it may seem.
2. It is easy to imagine that having inadequate English proficiency could..... difficulty for immigrants to find a job.
3. Increases in money wages are seen to..... the activities of strong trade unions that make use of their power in the control of the supply of labour.
4. Most of the reasons why people become criminals are the fact that there is no complete equality for everybody provided by society.
5. Lack of moral and religious values are the the exasperation of the capitalistic society.

Task 5: Fill in the blanks with your own words.

1. In a migraine attack blood vessel walls swell. This..... to the decrease in the amount of blood that goes to brain.
2. The other problem is that using credit card too frequently may students get into debt.
3. I do think that people who can danger to society should be imprisoned but also helped and supervised.
4. Many problems in the society of today are..... matters of the economic nature.
5. Extra body fat and sugar in many cases can..... our heart to become larger and also can high blood pressure and irregular heartbeats which is a serious danger for heart attacks