The Impact of Teaching Topical Structure Analysis on EFL Writing with Special Reference to Undergraduate Students in Libya

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ABSTRACT

In the ESL writing literature, coherence, cohesion and other rhetorical features are still the main difficulties that face ESL learners. Coherence is claimed to be the most abstract but essential criterion of English writing, but it is difficult to describe, teach and learn. This study investigates the impact of teaching Topical Structure Analysis (TSA) on the writing performance of Libyan university students studying English as a foreign language. Its main aim is to explore the effect of teaching this strategy in promoting EFL students' awareness of coherence and further improving it in their writing.

TSA is a text-based analysis technique that refers to the semantic relationships which exist between sentence topics and the discourse topic. These relationships are studied by looking at sequences of sentences and checking how the topics within them work together through the text to build meaning progressively. Three possible types of progressions of sentences were identified: parallel, sequential, and extended parallel progression.

In order to explore the impact of teaching TSA on EFL Libyan university students, quantitative and qualitative methods were adopted. quasi-experimental design, semi-structured interview and observation were used to collect the data required for the study. Sixty-three third-year university students whose major was English were divided into control and treatment groups. For three months, both groups were placed in the same conditions and taught the same traditional syllabus used in the university. The only difference was that the treatment group was explicitly taught TSA as a

learning and revision strategy. In order to compare achievement in the two groups, pre- and post-tests were carried out. Students' compositions were rated by three native English speaking teachers who used different approaches to scoring. Moreover, the essays were analysed according to TSA procedures, and pre- and post-test scores of both groups and the results of the structural analysis of pre- and post-test essays were compared. This was followed by interviews with six participants from the treatment group who were asked about their experiences, opinions and how they handled TSA. In addition to the experimental method and the qualitative interviews, the present researcher recorded observations of both groups to be used as another source for data of this study.

The results demonstrated that the treatment group achieved significant progress, which was reflected in post-test scores which were higher than both their pre-test scores and the pre- and post-test scores of the control group. The topical structure analysis of the post-test essays further showed a balanced use of the three types of progression. On the other hand the qualitative data revealed that the participants in the treatment group were more aware of the essence of coherence. This was manifested by students' consideration of the planning and revising stages, and they also tended to ask for feedback from the teacher and their peers and to write more than one draft before the final version of their compositions. Discussion of the findings suggests variant pedagogical implications for the teaching of writing in Libyan universities and other similar contexts.

DEDICATION

To the memory of my mother

DECLARATION

I hereby certify that this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or currently submitted for any other degree at the University of Newcastle or other institutions.

Name: Abdulhameed Ali Attelisi

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LIST OF ABBREVIATIONS

CG   Control Group

EFL   English as a Foreign Language

EPP   Extended Parallel Progression

ESL   English as a Second Language

PP   Parallel Progression

SP   Sequential Progression

TG   Treatment Group

TP   Topical Progression

TS   Topical Structure

TSA   Topical Structure Analysis

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Chapter 1 : Introduction

1.1 Background

In second language classrooms, writing is one of the most challenging aspects of second language learning. It requires extensive effort from the learner and specialised instruction from the teacher. This is because ESL/EFL student writers have to learn both the linguistic features of the English language and its rhetorical aspects and conventions, which are usually different from those of their L1, in order to communicate effectively with presumed readers. However, while features such as grammar, vocabulary, and spelling are nearly always stressed in ESL/EFL classrooms, rhetorical aspects such as cohesion and coherence are focused on less, or are sometimes ignored.

Coherence has been claimed as a major rhetorical aspect of good writing. It is seen as the smooth connections of ideas in a text. Each piece of information is linked to others and all sentences flow smoothly from one to the next. On the other hand, writing a coherent text entails a process of interaction between the text and reader, since considering the reader's expectations of how a text should be organized is a crucial factor that leads to interpreting and appreciating that text. For this reason coherence is identified as an important indicator of effective writing (Hughes, 2003). Although coherence has this important role in the assessment of writing, it is still problematic for most writing teachers and learners because of its abstract and complex nature.

In the Arab world, many descriptive studies have drawn specific attention to the problems of Arab EFL student writers. In addition to linguistic problems, these studies refer to difficulties with rhetoric and convention, such as lack of

sufficient information about the topic, coherence and cohesion (Khalil, 1989; Qaddumi, 1995; Shamsher, 1995; El-Aswad, 2002). According to these studies and the present researcher's own experience, students' problems can be attributed to two main factors: lack of emphasis on discourse features by teachers, who usually adopt traditional methods of teaching (see Chapter 2); and another factor is the interference of the students' own Arabic culture which is based more on oral rhetoric. Libyan university students face the same difficulties that are encountered by their counterparts in other Arab countries. In his study of the writing processes and strategies used by Libyan learners, El-Aswad (2002) pointed out that they "were generally not aware of English rhetoric and writing conventions and switched to using L1 conventions; the result of this was the production of extremely disorganized paragraphs in their L2 essays" (316).

Accordingly, ESL/EFL writing teaching is still in need of effective instruction in coherence. To achieve this, more in-depth studies are required to identify practical and tangible approaches to the teaching of coherence. Few researchers have tackled this issue and suggested strategies that can be applied in the real ESL/EFL classrooms (Connor and Farmer, 1990; Lee, 2002a, 2002b). One of these techniques is topical structure analysis (TSA) which was proposed by Lautamatti (1987). TSA is a text-based analytic technique that refers to the semantic relationships between sentence topics and the overall discourse topic. These relationships are studied by looking at sequences of sentences and checking how the topics within them work together through the text to build meaning progressively. Three possible types of progression of sentences were identified: parallel, sequential, and extended

parallel. Apparently, due to its simplicity and practicality, TSA is now a commonly used approach for describing coherence (Witte, 1983a, 1983b; Connor and Farmer, 1990), and several studies have adopted TSA to assess ESL/EFL learners' writing. More recently, it has been suggested that TSA should be taught as a self-revision strategy for ESL learners (Connor and Farmer, 1990). It has been claimed that, when applied as a self-revision strategy, TSA has helped university students to identify their coherence breaks and produce more coherent essays (Connor and Farmer, 1990; Chiu, 2004). However, in spite of the pioneering contributions of these studies which have touched upon the potential benefits of TSA as a pedagogical device, the feasibility of the implementation of TSA instruction in ESL/EFL writing classrooms still needs to be investigated.

Following previous research, this study adopts Lautamatti's (1987) TSA approach as its theoretical background. The main objective of the study is to investigate the impact of teaching TSA on the writing performance of Libyan university students. It is hypothesised that the explicit teaching of TSA to such students will increase their awareness of coherence and produce more coherent essays. To examine these assumptions the following research questions are investigated:

● Does teaching TSA to Libyan university students have any effect on the quality of their writing?

● What kind of differences can be observed between students with TSA instruction and those without TSA instruction?

● Does using TSA raise students' awareness of coherence?

● How do Libyan university students perceive TSA? Do they find it helpful and motivating in improving their writing coherence?

● When applying TSA, what kinds of difficulties do students encounter?

To address these questions three main approaches to data collection were adopted: a quasi-experimental design, semi-structured interviews and observation. The experimentation was conducted on 63 third year university students who were randomly assigned to control and treatment groups. For three months, both groups were placed in the same conditions and taught the same traditional syllabus used in the university. The only difference was that the treatment group was explicitly taught TSA as a learning and revision strategy. In order to compare the achievements of the two groups, pre- and post-tests were carried out. Students' compositions were rated by three native English speaking teachers, each of whom used a different approach to scoring. Moreover, the essays were analysed according to TSA procedures. The pre- and post-test scores of both groups and the results of the structural analysis of the essays were also compared. This was followed by interviews with six participants from the treatment group who were asked about their experiences, opinions and how they handled TSA. In addition to the experimental method and the qualitative interviews, a teacher-researcher recorded his observations of both groups to be used as a secondary source of data in this study

1.2 Significance of the study

As indicated in the previous section, coherence is still considered as one of the main obstacles that ESL/EFL student writers and teachers encounter. This

is due to its abstract nature and the lack of practical and tangible techniques for teaching it. In spite of the substantial number of studies that have investigated problems and difficulties with coherence among ESL/EFL learners (Todd, Khongput, and Darasawang, 2007), few practical pedagogical strategies have been suggested that can be easily used by teachers and understood by learners. TSA is one of the techniques that it has been suggested could be taught to ESL/EFL learners in order to help them improve their writing performance. However, in recent decades the focus of most studies on TSA has been on evaluating learners' texts in terms of comparing high-rated to low-rated compositions or comparing different groups of texts written in different languages. Studies which have focused on teaching TSA to ESL/EFL learners are still relatively scarce. The possibility of teaching TSA to ESL learners still needs to be investigated, including how these learners would perceive this technique. More details are still needed of the effects of TSA on the general writing quality of EFL learners.

Therefore this study is intended to shed more light on the effect of teaching TSA to Libyan third year university students whose major is English. The study was conducted in the department of English at the Faculty of Arts in Baniwaleed, Libya. This is a context where English is considered a foreign language and students are taught by non-native-speaking teachers. In contrast to previous studies, this study explores the impact of teaching TSA on the writing performance of Libyan university students from three perspectives: (a) learners' general quality of writing, which was measured by three different methods of scoring adopted by three different English native-speaking assessors; (b) the changes that occurred in the topical progressions

used by the learners who learned and applied TSA and the difference between them and their counterparts who did not learn and apply TSA; and (c) the learners' perception and acceptance or not of TSA and the difficulties faced when applying it.

This study adopts three research methods in order to achieve these objectives. The findings of previous TSA studies have been based mainly on only one method of research - usually the observation of participants. In contrast, the data in this study were obtained by using three approaches to data collection with appropriate study samples. Moreover, apart from the comparison of the pre- and post-test scores of the two groups, the pre- and post-test essays were analysed and compared according to the TSA procedure as described in Chapter 6. The rationale for this comparison is to trace the topical progressions used by the students in both groups before and after the treatment group had been explicitly taught TSA. On the other hand, the semi-structured interviews with some participants from the treatment group, and the teacher-researcher's observation of both groups during the whole study semester could provide more insight into the students' writing performance and their perceptions of TSA.

Keeping in mind the above-mentioned points, it can be claimed that this study is the first of its kind to be conducted in an EFL writing context. More specifically, no academic study has so far investigated this topic in Libyan universities. It is hoped that the findings of this study can bridge some of the gaps that exist in the ESL/ESF writing literature, and provide ESL/EFL

teachers and learners with a simple and practical technique for teaching and learning coherence.

1.3 Scope of the study

The aim of the study is to investigate the impact of teaching TSA on the writing performance of Libyan university students whose major is English. In order to specify the research scope, the literature related to ESL/EFL writing teaching was reviewed. A methodology of triangulation was chosen to collect the required data from third year English department students. The size of the sample was determined as appropriate for such a study (63 participants). Accordingly a vast amount of data was generated. The data could be used to highlight different aspects of the research problem, which centres on the difficulties faced by Libyan students in their writing classroom and how TSA can help them to overcome some of these difficulties. However, the study is not intended to investigate all the difficulties encountered by Libyan writing classroom, some of which other studies have tackled. The study focuses only on the effect of teaching TSA on the writing performance of Libyan university students, and particularly the effect of TSA on the expository compositions written by them. Other composition types, such as narrative or argumentative texts are not considered in this investigation. The rationale for this is that Lautamatti's (1987) TSA was proposed originally as a technique of textual analysis applied to expository texts. The topical progressions used in other genres are likely to be different from those used in expository texts.

1.4 Thesis organization

In addition to the introduction, this thesis is divided into two main parts, and part one is devoted to the relevant literature concerning related topics. These

topics are discussed in chapters 2, 3 and 4. Part two of the thesis consists of four chapters which cover the research methodology, data analysis, discussion of findings, and conclusions.

The second chapter discusses the main approaches to ESL/EFL writing, and it presents a brief historical overview of the theoretical and pedagogical perspectives that underlie ESL/EFL teaching practice. These approaches are grouped around three main titles: focus on form, focus on process and focus on genre. The chapter also refers to the emphasis that has increasingly been placed on rhetorical features, and mainly coherence, while ESL/EFL research and teaching has proceeded to use various approaches reflecting the general developments in second language teaching and learning.

The third chapter sheds more light on the conception of coherence, aiming to reach a clear definition to be adopted in this study. Accordingly, concepts such as cohesion and unity, that share characteristics with coherence are discussed and defined. Furthermore, the literature related to the teaching of coherence is reviewed. The techniques that have been proposed by some recent studies or textbooks are presented and discussed.

The fourth chapter provides a general background to TSA. It discusses the theoretical assumptions based on Prague School research (see section 4.2); and illustrates its procedures. Moreover, this chapter reviews the previous studies that have been conducted on TSA as a technique used to assess coherence or as a strategy taught to ESL student writers to improve their writing.

The fifth chapter deals with the methodology of the study. Issues such as the research problem, research questions, participants, and procedures are discussed. Moreover, issues such as validity and reliability of the methods used and the ethical issues involved are all explained.

The sixth chapter is devoted to the analysis of the qualitative and quantitative data gathered in the study. The findings are presented in three sections each of which is followed by a general summary of the main results. For the analysis of the quantitative data, the results of statistical tests conducted using SPSS software are reported.

The seventh chapter discusses the findings of the study with reference to the research questions and the relevant literature. The eighth chapter then presents the general conclusion of the study, its limitations and pedagogical implications. Suggestions for further studies are also made.

Chapter 2 : Approaches to Teaching ESL/EFL Writing

2.1 Introduction

The last three decades have witnessed the emergence of ESL writing as an area which has been specifically addressed in research and developed in practice. Several different and overlapping approaches have prevailed in this period. On the one hand, these echo developing perspectives in ESL teaching and learning in general, and on the other hand they are a replication of major approaches to L1 composition. In other words, we cannot separate ESL/EFL writing teaching from general approaches to the teaching of L1 or L2 (Ferris and Hedgcock, 2005). Moreover, language skills are integrated and complement each other, especially in ESL/EFL. The other point which should be considered here is that ESL writing teachers and researchers are always aware of the relationship between L1 and L2 writing and they tend to utilize and adopt new theories of teaching and learning L1 writing (Ferris and Hedgcock, 2005). Accordingly, reconsideration of approaches used in teaching ESL writing should take a broad view of several trends from different disciplines which have contributed to the development of ESL/EFL writing instruction.

However, what has to be remembered here is that these approaches complement each other and are not contradictory in the ESL classroom. The accumulation of various theories has provided the opportunity for ESL teachers to select what suits their contexts. In Raimes's (1983b: 5) terms "There is no one answer to the question of how to teach writing in ESL classes. There are as many answers as there are teachers and teaching

styles or learners and learning styles." Thus, the context of teaching ESL writing sometimes requires more reliance on a certain theory rather than others, but not at the expense of the latter. Accordingly, a chronological survey of the approaches used helps in understanding how ESL writing approaches have evolved to culminate in what has been called a genre-based approach.

Unfortunately, the ESL writing literature does not provide us with clear-cut definitions of the different approaches, most of which overlap or share similar characteristics. Different ESL researchers view these approaches from different angles and classify them accordingly. For ease of discussion, the major approaches to the teaching of ESL/EFL writing are presented under three broad categories depending on the main focus of the approach, whether it is on form, process or genre. Presumably, each of these approaches does not represent a single or separate approach, but are rather several similar trends and methods proposed by researchers and adopted and applied by teachers. Thus this chapter reviews the major components of these three approaches, depicting the roles played by the teacher and the learner; and the techniques used with a special focus on rhetorical features and their position in each approach. Finally, the context of EFL writing teaching in Arab countries, mainly Libya, is highlighted where appropriate.

2.2 Focus on form

In the days of the audio-lingual method of ESL teaching, which extended up to the early 1970s, ESL writing instruction focused mainly on teaching writing as a means of reinforcing the oral linguistic features of the target language (Rivers, 1968; Raimes, 1991; Matsuda, 2003a). This is because writing is

here seen as a product resulting from the writers' learning of grammatical and lexical knowledge. Writing is a complex skill that can only be mastered when the learner develops the ability to manipulate grammar and lexis. In practice, students were instructed to write what they had practised orally, starting with simple sentences then moving to groups of sentences, paragraphs and a composition. In all these stages, the main focus is on grammatical accuracy rather than any rhetorical aspects. This was probably, a reflection of the underlying ingredients of the audio-lingual approach, which emphasises other language skills such as reading and listening, and regards writing as a secondary skill. According to this view, all writing problems were to be overcome by mastering English syntax, morphology and other linguistic features. Typical ESL/EFL writing instruction, according to this approach, usually consists of a four-stage process. Firstly learners are introduced to certain grammar and vocabulary to be familiar with these new linguistic items. These items are usually taught through a text. The next step is controlled writing in which learners use the linguistic features they have just learned. Techniques such as substitution tables, transformation, expansion, and completion are usually preferred in this stage. The third stage is guided writing which is similar to the second but goes further to involve reading and analysing a model to be imitated by learners. In the fourth stage learners are asked to manipulate the pattern they have learned to write a composition. Following these stages in the ESL/EFL writing classroom allows students to practise and utilise correct patterns to be ready to write on their own. Students also have the opportunity to use a wider range of text construction. The teacher's role, however, is to assess the finished work, comment on it and

correct errors in order to reinforce the value of target language structures. Although rhetorical features such as cohesive ties are implicitly included in writing instruction, they are presented as grammatical devices used to connect sentences and paragraphs, whereas coherence is usually presented merely as a synonym to cohesion.

Later on, a forward step was undertaken in broadening this model. This new version of this traditional approach, known as current-traditional rhetoric (Silva, 1990), was based on the assumption that ESL/EFL student writers need more than the grammatical structure and vocabulary to write extended texts. What is needed is to know how sentences and larger patterns are organized in a way that does not violate the expectations of the native reader. Originally this notion was based on Kaplan's theory of contrastive rhetoric, in which he defines rhetoric as "the method of organizing syntactic units into larger patterns" (1967:15). Kaplan is one of the first researchers who have addressed the importance of considering rhetorical aspects of the target language in L2 writing instruction. Teaching L2 rhetoric is intended to prevent first language interference, which usually extends beyond the sentence level, and to help students employ target language rhetorical aspects to meet the expectations of their native readers. The logical construction and arrangement of discourse forms are the main focus of this approach. At paragraph level, attention is given to its elements (topic sentences, support sentences, concluding sentence, and transitions) and to several ways of rhetorical development (comparison, contrast, exemplification, illustration, etc.). Similarly, essay elements (introduction, body, and conclusion) and writing modes (narration, description, exposition, and so on) are regarded as crucial

features that should be taught to ESL/EFL students. In practice, classroom procedures now differed little from these of the previous traditional approach.

 In spite of this extension to ESL pedagogy, accuracy and form continued to dominate over the acquisition of skills and communicative efficiency, and writing was used to practise form rather than as a means of communication. On the other hand, writing processes were not considered central in this approach. The proponents of those methods are not interested in the way the writer writes, conveys his/her ideas, or the steps he/she follows to produce his/ her composition. Moreover, coherence and cohesion were not given clear and explicit instruction to help ESL students write according to native readers' expectations. Although this form-dominated approach has been regularly criticized, its influence is still found in many ESL/EFL classrooms.

Writing as a means of communication between writers and readers has been emphasised in communicative approaches to language teaching. Concepts such as language use and communicative competence have contributed to reforming the teaching of ESL writing. Questions such as 'why do students learn to write and about what themes?' were raised in criticizing the audio-lingual method whose dominance was the main reason for the neglect of writing until the 1960s (Leki, 1992; Susser, 1994).

These new communicative ways of conceptualizing ESL writing teaching put more emphasis on the purpose of writing. In order to learn how to write, ESL students not only need to know the grammatical structures of the target language but they also need to know which forms of these structures should be used to convey their ideas. In other words, an ESL writing course should

relate syntactic and morphological patterns to meaning, because certain language structures are used to communicate particular functions. Thus students should learn the functions which are relevant to their needs. This approach enriched the ESL/EFL teaching of writing by introducing features of the process approach which puts more emphasis on the purpose and the audience of students' writing. Activities such as pair and group work, role play, the exchange of information, problem-solving, and self-expression are all encouraged. Employing such activities probably encourages learners to be involved in actual interaction in the classroom, thus developing the four language skills as in their real life. The teacher's role, however, is to help learners to develop and achieve communication or meaning. He/she is regarded as a facilitator who organizes the resources and the activities for the class in order to ease the communication process.

However, in spite of the improvement in ESL writing pedagogy once it was broadened to include the content and purpose of writing in addition to structure, these approaches still did not have very significant implications on the ground. ESL/EFL writing instruction continued with its emphasis on language at the expense of content, purpose and communication (Raimes, 1983a).

All in all, form-focused approaches as manifested in ESL/EFL classrooms in different contexts are mainly concerned with the product rather than the process, content or genre. Priority is given to linguistic features, recognizing the learner's need for linguistic knowledge about texts. ESL/EFL student writers are always in a position where they have to deal with several difficult tasks at the same time. On the one hand they need to learn grammatical

structure, spelling, vocabulary, punctuation, and so on; and on the other hand they need to use these features in well-organized extended texts. This problem clearly becomes more serious in contexts where English is taught as a foreign language (such as in Libya) and when the students' opportunity to be exposed to it is limited. On the other hand, the same difficulty is encountered by teachers whose role is usually dual: teaching writing as a skill and teaching the linguistic aspects of the language. In most contexts, however, neither students nor teachers can handle these two tasks at the same time due to several factors such as limited time, the prescribed syllabus, and class size. Unsurprisingly, in situations like this, the major focus tends to remain on form rather than process.

2.3 Focus on process

A process-based approach to ESL/EFL writing did not involve a shift from focussing on the product to concentrating on the writer. It was rather a reform movement aiming to improving ESL writing pedagogy without replacing traditional methods. This approach mainly attempts to pay attention to what writers actually do when they write. It considers cognitive processes and strategies which are employed as writers write (Raimes, 1991). Originally, this trend emerged in L1 composition pedagogy, and ESL researchers and teachers then adopted its principles to suit their contexts. According to their proponents, process approaches refer to two main notions: expressivism and cognitivism (Faigley, 1986).

Expressivists such as Elbow (1973, 1981) and Zamel (1982, 1983), among others, view writing as a means of conveying the writer's voice and ideas irrespective of the context or the reader. It is "a creative act in which the

process - the discovery of the true self - is as important as the product"
(Berlin, 1988:484). According to this view, ESL students are encouraged to
express themselves, find their own voice and produce free and spontaneous
writing. Unlike teacher-centred pedagogy, a process-based approach is
writer-centred. Tasks are designed around the student's experiences and
opinions, whereas the teacher's role is to help the students to make their
meaning and express themselves in an appropriate environment. Pre-writing
tasks are devoted to stimulating students' motivation and ability to generate
ideas in writing. Presumably, this notion has increased teachers' awareness
of the importance of writing as a creative activity that can facilitate clear
thinking and which satisfies students' needs. However, this method is not
appropriate for ESL/EFL students for two main reasons: The first is that
ESL/EFL students, and especially those who are beginners or at intermediate
levels, are unlikely to be fluent in writing because their L2 linguistic
competence is not yet strong. They lack probably the sufficient vocabulary
and grammatical structures that would enable them to express themselves as
native students do. The second factor is that expressivism, in spite of its
impact on L1 writing instruction in western countries, has not been welcomed
in ESL/EFL contexts. The cultural background of students and their purpose
for learning English in general and writing in particular sometimes contradict
the main principles of this approach. As argued by Hyland (2003a: 37) "The
attitudes, approaches, and strategies we encourage and reward in our
classes might therefore contrast and even conflict with those that are known
and valued by our students".

Similarly to expressivism, cognitivism emphasizes the writer's role as an independent producer of texts, but the scope is broadened to include cognitive processes as crucial to writing activities. Therefore the role of teachers is to help students learn and develop these strategies to be able to perform writing tasks. According to this approach, writing is viewed as a "non-linear, exploratory, and generative process whereby writers discover and reformulate their ideas as they attempt to approximate meaning" (Zamel, 1983:165). Flower and Hayes (1981) and Flower (1989) established an original framework of writing processes which has been widely accepted by ESL/EFL writing teachers. This framework consists of three types of main processes: planning (pre-writing), writing (drafting), and reviewing and editing. These stages are not linear, but they occur in a recursive manner. A variety of activities can accordingly be used to engage students in learning to write. This basic model of writing gives the writer the chance to collect relevant information, revise the plan, write several drafts and seek feedback from the teacher and/or peers in order to produce a text which is readable, comprehensible and acceptable to audiences. The writer can go backwards and forwards among these activities at any time.

A typical ESL/EFL class adopting this approach would vary the activities within the three main stages. In the planning (pre-writing) stage, students are encouraged to write freely without paying any attention to mechanics or grammatical mistakes. Their writing in this stage might be sentences, phrases or even words as long as they reflect the writers thoughts, ideas and experience. This activity is followed by selecting the most relevant ideas and grouping them in paragraphs. To generate ideas, students are engaged in

brainstorming activities and discussions with the teacher or peers. Actually, there are many pre-writing activities that have been suggested by researchers or applied by teachers, but all of them are seen as warm-up activities whose function is to ease the process of writing, prevent students from being too serious or anxious about writing, and to allow them to explore the possible ideas before they start writing their first draft.

In the writing (drafting) stage, students examine what they have written in the pre-writing stage and organize the ideas following different methods such as temporal, chronological, or conceptual organizational techniques (Williams, 2003). In other words, ideas can be arranged chronologically if they are time-based, or conceptually if the emphasis needs to be on logical relationships such as cause and effect, results, reason and purpose. Such organizational techniques employed in the writing stage can help ESL/EFL student writers make decisions, specify their topic and eliminate irrelevant ideas. The writing or drafting stage implicitly stimulates the students' sense of unity and coherence in their compositions.

In the post-writing stage, which consists of revising and editing processes, students re-read their texts, correct any organizational problems, and develop, select and shape their ideas. They decide what to leave out and what to add. They talk about their ideas with themselves or with their peers in order to clarify meaning and get feedback. Generally speaking, this is a process of refining the text. Editing, however, is a stage in which students polish their ideas and consider the accurate use of grammar, spelling and punctuation.

In all these stages, the teacher's role is to facilitate the writing process by allowing time and opportunity for selecting topics, generating ideas, drafting and revising. He/she avoids imposing his/her own ideas or language behaviour on students. Furthermore, the teacher provides feedback at any stage and not only in the final one. Basically, the teacher's main focus is "on developing writers' intramental processes, particularly cognitive and metacognitive strategies for creating, revising, and correcting their texts independently" (Ferris and Hedgcock, 2005: 6).

Finally, process approaches do not prescribe one theory or method in teaching writing, but rather several approaches which become more or less prominent depending on the context where the language is taught and the teachers' attitudes and beliefs. However, process approaches in general tend to encourage students to focus on composing processes, purposes, audiences and feedback. The approach does not ignore the linguistic features of language but gives them a secondary position. It "is by its very nature concerned with product" (Zamel, 1984: 154). Regarding the topic of this study, which is coherence, this approach encourages ESL students to spend more time on planning and revising to shape their ideas and organize them appropriately. Moreover techniques such as collaborative learning, and peer discussion and feedback all increase students' awareness of audiences and their expectations.

Recent decades have witnessed the spread of process pedagogy and its growing impact on ESL/EFL writing. ESL/EFL teachers and researchers have had the opportunity to examine, adapt, and reflect on the major underlying

principles and implications of this approach, and to detect its limitations in order to extend, modify or shift its focus. Various such limitations have been identified by several ESL/EFL researchers and teachers (Atkinson, 2003; Hyland, 2003a, 2003b; Ferris and Hedgcock, 2005) whose reservations concerning process approaches are summarized as follows:

● Process approaches are overly concerned with individual writers and the writing process itself, and have little to say about the way language is used in human interaction. ESL/EFL writers need to compose texts for academic and professional readers. In other words, writing is not learned for its own sake but rather to accomplish social, academic, and communicative purposes in different contexts. This, in turn, entails variations in the ways language is used.

● Process approaches minimize the teacher's authority. The teacher's intervention is relatively limited in order allow students to express themselves, promote and process their writing strategies, whereas language and rhetorical organization are delayed until editing stage. This offers students "no way of seeing how different texts are codified in distinct and recognisable ways in terms of their purpose, audience and message" (Hyland, 2003b: 19).

● Process approaches have failed to make clear what types of texts students need to write. Students are not explicitly taught the structures and rhetorical organization of target texts but instead are supposed to discover the appropriate forms while they are practicing the writing process itself.

To overcome these limitations, process approaches have been broadened offering teachers more authority in order to scaffold students' learning. This

can be achieved by helping students to realise that writing is learned in order to achieve social purposes and to communicate with certain audiences. In other words, the structure of texts and their rhetorical organization vary according to genre.

2.4 Focus on genre

Genre does not represent another approach to the teaching of writing, but it is a social dimension that has been proposed to enrich process approaches. As mentioned in the previous section, process approaches focus on the cognitive processes and the way some writers write but they do not explain why certain linguistic and rhetorical features are chosen. Students are not given explicit teaching about how different text types need different structures. To deal with these shortcomings, writing instruction needs to consider the purpose of writing and the context in which it occurs. Swales, (1990: 58) maintains that:

> A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognised by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style.

Put simply, this means that a genre is a social process that is achieved by the interaction of the members of a certain community to achieve specific purposes. When a group of texts are written to accomplish the same purpose, they may share similar structures, so belong to the same genre (Hyland, 2003a). People write to achieve different purposes in different contexts, and this in turn involves variation in the ways they use language as opposed to universal rules (Halliday, 1994). The structure of a text is often determined by its purpose, the social context in which it is created, and the reader. Genres

such as letters, recipes, law or administrative reports, academic assignments, and diaries are all different genres within which texts are written to achieve different purposes, and therefore, their structure and rhetorical organization are often different.

There are three overlapping schools of genre theory (Hyon, 1996; Johns, 2002). The ESP approach views genre from a linguistic point of view, and considers it to be a class of structured communicative events used by particular members of discourse communities who share broad social purposes (Swales, 1990). These social purposes are responsible for specifying a genre and contribute to forming structure, content and style. The New Rhetoric approach sees genre "as the motivated, functional relationship between text type and rhetorical situation" (Coe, 2002: 195). This approach focuses mainly on rhetorical contexts rather than an analysis of text features. The third trend is the Sydney School, as orientation based on Halliday's Systemic Functional Linguistics (1994) which "stresses the purposeful, interactive and sequential character of different genres and ways language is systematically linked to context through patterns of lexico-grammatical and rhetorical feature" (Hyland, 2003:22). All of these schools view relationships among participants as the essence of language use and suggest that for a text to be successful it should show the writer's awareness of its context and the readers who for contribute to that context.

These new views about the purposes of writing have had an impact on ESL/EFL researchers and teachers, urging them to regard writing as an attempt to communicate with readers. In addition to learning how to write, ESL/EFL students need to learn what to write for particular kinds of readers to achieve specific goals.

In ESL/EFL classrooms adopting this genre-related paradigm, writing tasks are designed to help students learn how to use language structures to produce coherent, purposeful texts. Techniques such as genre analysis are used to describe texts in terms of both form and function, such as the way the elements of a text are arranged to make meaning and achieve its purpose. Hyland (2003a: 21) describes this method as "a process of contextualizing-modelling-negotiating-constructing." This method is presented in the form of a cycle of teaching and learning. In one phase of this cycle, students are exposed to a model of the genre they need to produce in order to be familiar with the appropriate language structure and rhetorical aspects of that genre and its purpose and audiences. This can be achieved by reading and analysing some authentic texts that represent the target genre, with a special focus on the linguistic and rhetorical features that characterize this sort of genre. With the teacher's assistance, and by manipulating several writing activities and processes, students construct texts. Gradually, the teacher's scaffolding is withdrawn giving way to students' involvement in constructing the text independently.

The genre-focused approach can be considered another forward step whose aim is to enrich the teaching and learning of ESL/EFL writing. It is a formula which contains positive aspects of the preceding approaches in addition to

new features that have been added to give writing a social dimension. Generally speaking, this approach regards writing as a social act whose ultimate aim is effective communication. The process of communication between the writer and the reader cannot be successful unless knowledge of language is taken into consideration. Moreover, a genre approach stresses the idea of writing for a purpose, which necessitates the importance of the reciprocal connection between reading and writing to be realised by students who are exposed to different genres in order to recognize their functions and audiences, and to become familiarized with their distinct language structures and rhetorical features.

2.5 The approach of this study

Having reviewed the main approaches to the teaching of EFL writing, it is useful now to touch upon the approach that has been adopted in this study. As mentioned in Chapter one, this work is intended to investigate the impact of teaching TSA on the writing of Libyan university students whose major subject is English. The research samples were students in the department of English in the Faculty of Arts at university, and were intending to become English language teachers. Therefore the four main language skills are emphasised in their curriculum in addition to other subjects such as linguistics and literature. Writing is regarded as the most important skill and, at the same time, the most difficult one. This is because writing is the means by which other subjects are assessed and it requires the mastery of language and rhetoric. In spite of its importance, it seems that writing is still not taught as prescribed in the syllabus and students still feel reluctant to practise it.

However, when conducting this study I adhered to the prescribed syllabus which corresponds with recent approaches to teaching EFL writing. This syllabus is based on the following assumptions:

● Writing, reading and thinking are interrelated activities.

● Well-written product is a result of many cognitive processes and writing strategies.

● Writing is a social event in which the context, the purpose and audience are all considered.

● Writers need to develop both fluency and accuracy. When writing, students focus on rhetorical and organization issues; when drafting, they need to pay attention to grammatical accuracy.

The main course book used is *Developing Writing Skills 3* (Smalley, Ruetten and Kozyrev, 2006). Each chapter is divided into four main sections:

● Getting started and journal writing activities: This section usually contains warming up and brainstorming activities. Students are invited to think about the theme of the chapter and share their experiences with others.

● Reading selections: Students are given passage related to the theme of the chapter accompanied by discussion and comprehension questions, an introduction to the rhetorical pattern, and the relevant composition skills. Most chapters contain readings based on a theme, with topics designed to meet the interests of academically oriented students. The readings also function as examples of genres and rhetorical modes of professional writing.

● Rhetoric section: this section provides students with the main rhetorical aspects in the chapter. Students are asked to think about rhetorical features in order to use them afterwards.

● Writing: in this section students are encouraged to recall what they have learned and start writing about a similar topic taking into consideration the necessary rhetorical features.

In general the course book encourages teachers and students to explore extra topics related to the main theme by suggesting optional internet resources. The course book also encourages classroom interaction, peer revision and group and pair work.

2.6 Conclusion

This chapter has reviewed the literature on the main three approaches to the teaching of ESL/EFL writing, focussing on form, process, and genre and has discussed their underpinning principles, and relation to classroom instruction. The review has briefly touched upon the major shifts and changes that have occurred during the evolution of these approaches. The major issues that have been stressed in this chapter are as follows:

● Approaches to the teaching of ESL/EFL writing complement each other but differ in focus.

● Students' role in the classroom has been gradually extended, giving student writers the opportunity to express themselves, discover their writing skills, consider their readers and approach writing with ease and confidence

● Collaborative writing and feedback from peers and the teacher have gradually been encouraged, adding a social dimension to writing and helping students project their audience.

● Knowledge of language is considered in all approaches, but it is not always given priority in the classroom.

● As far as the subject of this study is concerne, rhetorical features have been stressed by some of these approaches. According to current-traditional rhetoric and genre-based approaches, these features are explicitly taught; whereas process-based approaches tend to develop them implicitly. However, when it comes to coherence, the learning and teaching of coherence is still problematic, because of its abstract and elusive nature. Accordingly, the following chapter discusses the concept of coherence in an attempt to specify a manageable and concrete definition and to place more emphasis on the importance of teaching it explicitly in ESL/EFL classrooms.

Chapter 3 : Coherence

The previous chapter reviewed the main approaches to the teaching of ESL writing. It was concluded that, over the last several decades, ESL writing research and instruction have shifted from focusing on the product to the process of writing, and then to genre; from reader-responsibility to writer-responsibility where the writer is responsible for satisfying the reader's expectations. One of these expectations is that native English speaking fluent readers expect to read coherent texts. But what is meant by coherence according to the conventions of English rhetoric? This chapter is devoted to discussing definitions of coherence and clarifying the difference between coherence, cohesion and unity. This will pave the way for the discussion of types of coherence and how it is taught and measured.

3.1 Defining coherence

Coherence is a controversial term which has been defined by many scholars from different perspectives. Therefore "there is little consensus on the matter of an overall definition of coherence" Grabe and Kaplan, (1996: 67). In the nineteenth century one of the rules of the paragraph proposed by Bain (1890 cited in Bamberg, 1984: 417) was that "[t]he bearing of each sentence upon what precedes shall be explicit and unmistakeable." Bain's view of coherence prevailed until recently and was adopted by many scholars making no distinction between coherence and cohesion. For example, Bander (1983) stated that a paragraph is coherent "when its ideas are clearly related to each other in orderly sequence" (6). Similarly, Lauer, Montague, Lunsford, and Emig, (1985) maintained that "coherence is a matter of putting the selected

material in the right order with the right connectives" (94). Such definitions, however, only consider the sentential level of the text and do not go further to look at it as a whole, where the main function is to convey information from the writer to the reader. Moreover, these definitions, as mentioned earlier, do not differentiate between coherence, cohesion, and unity. Thus to clarify the concept of coherence, these concepts which share some characteristics with 'coherence' need to be explicated.

3.1.1 Cohesion

In 1976, Halliday and Hasan published their influential work *Cohesion in English,* in which they established the first systematic analysis of the devices that help render the text a coherent whole. Their focus of investigation was the relationships between sentences. They maintained that there are two types of cohesion, grammatical and lexical cohesion. The former consists of subcategories such as conjunctions, reference, and substitution; while the latter is accomplished by using reiteration and collocation. Both types of cohesion help a text to hang together. In other words, according to this theory, cohesion involves explicit linguistic devices that link sentences in a text. What is relevant here is that Halliday and Hasan's main point is that coherence is created by the linguistic features of the language.

This view of coherence as cohesion, however, has been criticised by several researchers from different perspectives (see, e.g., Morgan and Sellner, 1980; Carrell, 1982; Markels, 1983). Criticism centres on both theoretical and empirical considerations. Theoretically, the cohesion theory is criticized in the light of findings in other research fields related to cognitive psychology, artificial intelligence, linguistics and the relationship between reading and

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writing which have yielded what has been called schema theory. Briefly, this theory states that understanding a text is an interactive process between the text and the reader. The interaction between the text and the reader's background knowledge is a crucial factor in the cognitive process involved in reading of that text. It helps the reader predict upcoming textual information, and this, in turn, enables him/her to organize the text into a coherent and understandable whole. Meaning and coherence are not internal to the text only, but stem from the interaction between the reader's previous knowledge and the details in the text. Accordingly, coherence entails successful interaction between the reader's background knowledge and the text to be processed; it cannot be achieved wholly by focusing solely on textual cues (Rumelhart, 1977; Carrell, 1982).

Other studies have empirically examined the relationship between cohesion and coherence (see. e.g., Freebody and Anderson 1981 cited in Carrel, 1982; Tierney and Mosenthal 1981). The findings of such studies show that there is no necessary causal relationship between cohesion and coherence unless the reader has the appropriate background schema underlying the text; and if not, no cohesive devices can help that text to be seen as coherent by that reader.

In contrast, recent studies have revisited Halliday and Hasan' theory of cohesion and differentiate between text cohesion and text coherence (McNamara and Kintsch, 1996; McNamara, Kintsch, Songer, and Kintsch, 1996; McNamara, 2001; Graesser, McNamara, and Louwerse, 2003; Graesser, McNamara, Louwerse, and Cai, 2004). Text cohesion refers to the degree to which the ideas, concepts, and relations within a text are explicit, whereas text coherence refers to the effect of text cohesion on

readers' comprehension. It has been found that improving text cohesion by increasing referential and causal devices is successful in increasing student comprehension (Linderholm, Everson, van den Broek, Mischinski, Crittenden and Samuels, 2000; Vidal Abarca, Martínez, and Gilabert, 2000; Lehman and Schraw, 2002;). On the other hand, it has been maintained that readers who have more previous knowledge about the text content and structure better understand and learn more from it (Willoughby, Waller, Wood, and Mackinnon, 1993; Shapiro, 2004). Characteristics such as prior knowledge and comprehension skills are crucial in reading comprehension Thus, it can be said that coherence is broader than cohesion and entails two elements to be established: the reader and the text. This means that text cohesion is not coherence. It is an effect of coherence rather than its cause. It contributes to coherence but this does not mean that any cohesive text is necessarily coherent. In other words, if a text is not coherent, using cohesive devices to bond it together will not make it coherent. This is because, as stated by Halliday and Hasan (1976:26), cohesion "does not concern what a text means; it concerns how the text is constructed as a semantic edifice." For example, the following example is quite cohesive but it is not very coherent:

> This made her afraid. It was open at the letters page. His eyes were shut and she noticed the *Daily Mail* at his side. She knew then that he had read her contribution. Gillian came round the corner of the house and saw her husband sitting in his usual chair on the terrace. She wished now that she had never written to the paper (Harmer, 2004: 24).

For a reader to say that a text is coherent and can be interpreted and summarized, some kind of internal logic would need to found which can be followed with or without the use of cohesive ties. For this text to be coherent the reader needs to understand at least two things: the writer's purpose and

the writer's line of thoughts, that is, how the text is constructed and how the reader can follow its sequences which reflect the norms of the text's genre.

3.1.2 Unity

Unity is another concept that is often mistakenly used by teachers and textbook writers to refer to coherence. Traditionally, unity and cohesion were considered as the two main components of coherence. Cohesion refers to the linking of sentences while unity means sticking to the point (Johns, 1986). Unfortunately, ESL/EFL student writers still have particular difficulty in differentiating between these two concepts and coherence (Connor and Johns, 1990). As an example of this confusion,

Cernigilia, Medsker, and Connor (1990: 229) cite the following incoherent paragraph which was written by an advanced ESL student:

> It is very cold when it is snowing. In the winter time, it is very
> often cold, especially at the northern side of America. Most
> people need to have a coat for the winter time. It looks so pretty
> when it is snowing. The children like to go out to play in the
> snow. But not the adults because it is not safe when you have to
> drive on the snow to go to work every day.

What makes this paragraph coherent, according to the student, is that every sentence contains *snow.* The student could not realize that the sub-topics (sentence topics) of the sentences are different from each other. Moreover, the movement from one sentence to the next cannot be expected by the reader; therefore the whole paragraph lacks coherence. Thus this paragraph is unified but not coherent. In their textbook designed for high-intermediate to advanced learners Oshima and Hogue (2006) provide a relatively clear definition of unity followed by another for coherence. According to them, "[u]nity means that a paragraph discusses one and only one main idea from

beginning to end" (18). Coherence, however, means that "the sentences must hold together; that is, the movement from one sentence to the next must be logical and smooth. There must be no sudden jumps. Each sentence should flow smoothly into the next one" (21). In spite of their vague definition of coherence, which will be discussed in the following sections, Oshima and Hogue succeeded to some extent in helping learners differentiate between unity and coherence.

As with cohesion, it can be concluded that unity is not coherence, but it is an effect of coherence. Maintaining unity in a text entails that every sentence in a paragraph or every paragraph in a composition should be closely related to the central topic. However, this sort of organization, in spite of its importance, does not necessarily lead to coherence which is located not only in the text but is also the result of a successful interaction between the reader's knowledge about the content and the text.

3.1.3 Coherence

So far it has been maintained that cohesion and unity are not equivalent to coherence; they are not a cause but a result of it. They both contribute to coherence to some extent depending on the characteristics of the reader when interacting with the text. In order to define coherence and explore its characteristics, it is better to start from the position of a reader who is the consumer of any written text. Obviously, most written texts are intended to be read by particular readers; therefore the reader's expectations and knowledge of the content of the text should be closely considered by the writer, otherwise the message would miss its goal.

For the reader to understand and interpret a written text, the writer has to organize the ideas and construct the meanings in a way that meets the reader's expectations. The reader comes to the text assuming that it is organized and presented in one of a number of particular kinds of way that matches his/her previous knowledge not only about the content, but the form as well. In other words, coherence is both text-based and reader-based. This has been emphasised by researchers from different disciplines such as language teaching, discourse analysis, contrastive rhetoric, and genre studies.

In the language teaching field, researchers into reading have investigated the possibility of applying schemata theory to reading (Carrell,1983a, 1983b) According to schemata theory, the reader's effective comprehension of a text entails the ability to link the content and the structure of the text to the reader's own knowledge. According to Eskey (1989: 96), readers "reconstruct a plausible meaning for the text by relating what it says to what they already know about its subject matter and the world in general". Carrell (1983a) suggests distinguishing three types of schemata, or forms of reader's knowledge: linguistic (language knowledge), content (knowledge of topic), and formal (background knowledge of the rhetorical structures of texts). What is most relevant here is the last one, knowledge about the text structure, which mainly refers to coherence. Meyer (1985) states that knowledge about text structure is "the interrelationships among items of information which compose the text, as well as indicating the subordination and coordination of this information"(187). When text structure is familiar to or expected by the reader, the reading process is easy and the text is comprehended (Carrell, 1984a,

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1984b). In other words, when the reader and the writer share the same or similar background knowledge i.e. belong to the same discourse community, the writer does not need to use so many textual cues. Clarifying this point, Enkvist (1990) gives the following mini-paragraph:

> The net bulged with the lightning shot. The referee blew his whistle and signalled. Smith had been offside. The two captains both muttered something. The goalkeeper sighed for relief.

In spite of the lack of textual cues such as cohesive devices or any connectives, this passage can be considered coherent if the reader has some background knowledge about soccer; otherwise it might be seen as incoherent because the textual surface does not help the reader "to build up a plausible scenario around it" (Enkvist 1990:13), and thus the text cannot be easily summarized or interpreted. Some studies have reported an interaction between the reader's prior knowledge and text structure (McNamara, Kintsch, Songer, and Kintsch, 1996; McNamara, 2001). These studies show that prior knowledge helped readers perform better at text comprehension.

A similar idea has been stressed by researchers working in genre studies which investigate the way different types of texts are organized and presented to the reader. It has been found that genre analysis can help readers, including ESL/EFL students, read and write more effectively (Swales, 1990; Hyland, 1992). When reading a narrative text, for instance, the reader expects a certain chronological sequencing of the events. When reading an expository text, another type of arrangement is used which is based on presenting the old or given idea followed by the new one. In other words, the writer's purpose of writing determines the macrostructure (global coherence) of the text. "Macrostructure is an outline of the main categories or functions of the text"

(Lee, 2002b: 33). Thus, the reader's knowledge about the genre of the text makes that text appear coherent and thus understandable.

Writer-reader interaction has also been considered by scholars of contrastive rhetoric, which is "the study of similarities and differences between writing in a first language and second language or between two languages" (The Longman Dictionary of Language Teaching and Applied Linguistics, 1997). Contrastive rhetoricians such as Kaplan, (1987; Ostler, (1987); and Connor, (1996) have demonstrated that language and writing are cultural phenomena and consequently each language tends to have its own rhetorical conventions which are unique to it. According to this hypothesis, ESL/EFL student writers differ substantially in their rhetorical schemata. These differences create a gap between the writer and the reader who is usually a native speaker of the target language. As a sequence, the writer-reader interaction may not be achieved. For example, when the writer and the reader have different rhetorical backgrounds, for example from belonging to different cultures, a writer may produce a text which is coherent according to his/her rhetorical conventions; but it may be seen as incoherent by the reader. Accordingly, ESL/EFL student writers need to learn English rhetorical conventions in order to meet the reader's expectations. Arab EFL students, for instance, should be taught the characteristics of coherent texts according to English rhetorical conventions. The current study suggests the teaching of topical structure analysis to EFL students in order to raise their awareness of coherence in English. Inevitably, the key question here concerns the characteristics of English rhetorical conventions. More specifically, what makes texts coherent? How are propositions organized in order to form a coherent text? Answers to

these sorts of questions have been provided by researchers in discourse analysis.

Researchers in discourse analysis address issues concerned with extended discourse rather than individual sentences. In their influential book *Cohesion in English*, Halliday and Hasan (1976) define the concept of text as a semantic unit, the parts of which are linked together by explicit cohesive ties. These linguistic signals of cohesion can help writers establish connectivity to the surface text and guide the reader to interpret the text as intended by the writer. As mentioned in the previous sections, this theory has been investigated by many researchers and the predominant conclusion now is that cohesion is the explicit aspect of coherence; it is the result of coherence not a cause of it.

Another promising branch of research has evolved from the study of 'topic' in discourse. Prague School linguists such as Danes (1974), Firbas, (1974), and Mathesius (1975) have contributed to the analysis of extended texts, emphasising the role of sentences in the context of whole texts, rather than any individual units of discourse. Seeing sentences in this way can result in identifying how ideas are developed. The notion of theme/rheme (topic/comment or old/new) has been introduced and linked to information structure and its relation to text coherence. Drawing on Prague School research, Lautamatti (1987) developed what she called topical structure analysis (TSA) as a tool for analysing the coherence of writing. Chapter 4 discusses these issues in detail.

Thus, from this linguistic perspective, coherence is primarily text-based. A piece of writing is said to be coherent if its units (sentences or paragraphs) are related locally and globally. Local coherence means that each sentence is related to the one that precedes it and others that follow. This relation can be achieved explicitly by using cohesive ties, or implicitly by presenting pieces of information logically and smoothly. Globally, all sentences have to support, explain, or develop the overall discourse topic or the main idea of the text.

This linguistic view has broadened our understanding of the concept of coherence in writing due to its focus on the surface and underlying relations between sentences. To put it another way, a written text has to have both local and global coherence in order to be conceived, interpreted or summarized by the reader. Single aspects of coherence do not by themselves help to achieve this goal. Local coherence does not prevent sentences from deviating from the discourse topic. In other words, sentences can be connected to each other but develop no central idea. On the other hand, global coherence is not concerned with relations between sentences, but rather with how all sentences are held together to develop the central idea of the whole text. Therefore, a written text needs to be both locally and globally coherent to facilitate the reader's interpretation.

To sum up, coherence is interpreted as having two divergent and at the same time integrated sources - linguistic and non-linguistic. From a linguistic perspective, coherence is text-based; whereas from non-linguistic sources, coherence tends to be reader-based. Put another way, for a text to be coherent, the writer has to consider both its sources. The writer needs to define the reader, his/her culture, and previous knowledge about the topic, in

addition to the whole context and genre. Knowing all these elements can help the writer select the structure and rhetorical features that accord with them. For example, in case of any deficiency in one or all these elements, the writer relies on linguistic devices and rhetorical features to compensate and achieve coherence. Accordingly, it is essential to teach these strategies to students, especially ESL/EFL student writers, to enhance their ability to communicate with their readers.

3.2 Teaching coherence

Coherence is one of the most important rhetorical features to be taught to ESL/EFL students. However, some researchers claim that it is not possible to teach it. Witte and Faigley (1981: 202), for instance, argue that "coherence conditions—conditions governed by the writer's purpose, the audience's knowledge and expectations, and the information to be conveyed—militate against prescriptive approaches to the teaching of writing". Yet, many researchers believe that it is important to teach coherence by offering students clear definitions and sequential task-dependent exercises (Fahnestok, 1983; Johns, 1986). Moreover, recent approaches to the teaching of ESL/EFL writing have stressed the importance of teaching rhetorical features to ESL/EFL students (see Chapter 2). Nevertheless, coherence is still problematic and difficult to teach or learn (Connor and Johns 1990). That is because it is often regarded as a fuzzy and controversial concept.

The difficulty of teaching and learning coherence is evident in students' written performance and beliefs; and in the pedagogical instruction manifested in prescribed textbooks and teachers' feedback. Research has reported that ESL/EFL student writers focus mainly on the linguistic features and individual

sentences rather than rhetorical conventions and the organisation of the whole text (Bamberg 1984; Ferris and Hedgecock, 2005). Most ESL/EFL students feel that "their only sense of security comes from what they have learned about grammar" (Leki 1996:34) and that mastering grammar is the only thing they can use in writing English compositions (Silva 1992).

One of the factors behind this problem is probably the teaching practices. Teachers do not have a clear and specific definition of coherence that can be accessible for ESL/EFL students. They "tend to refer to 'coherence' in abstract terms without making systematic attempts to explain and to teach it" (Lee, 2002a:136). Furthermore, when they assess students' writing or provide feedback, most teachers focus on the linguistic rather than rhetorical features (Lee, 2009). In two separate studies investigating teachers' feedback, Connors and Lunsford (1988) and Stern and Solomon (2006) found that technical writing components such as grammar, spelling, punctuation, and word choice are the features taken into consideration most. This sort of teacher feedback, albeit important, does not encourage students to improve their writing and produce more coherent texts.

Many writing handbooks and composition texts do not provide students with a specific and manageable definition of coherence either. In most cases coherence is construed narrowly in terms of cohesion and paragraph unity rather than discourse unity and local and global coherence. Moreover, coherence is defined in abstract and vague terms such as "[a] coherent paragraph contains sentences that are logically arranged and that flow smoothly" (Smalley, Ruetten and Kozyrev, 2006:24). Such fuzzy descriptions

of coherence are commonly found in writing textbooks (Langan 1996; Langosch 1999; Oshima and Hogue 2006).

The elusive and abstract definition of coherence is likely to be one of the main factors in the difficulty of teaching and learning it. As Grabe and Kaplan (1996:76) have maintained, "defining the concept of coherence in some manageable way seems to be crucial to any understanding of how texts are constructed." It is very important for ESL/EFL learners to be provided with an operational definition of coherence. This definition should help them create coherence in writing by employing the linguistic resources available. To achieve this goal, ESL/EFL researchers have proposed various strategies to be taught to students. Cheng and Steffensen (1996) conducted a quasi-experimental study in which the treatment group were taught metadiscourse using texts about coherence and cohesion in addition to a process method. University-level students were asked to read six theoretical articles on text analysis and metadiscourse, and the results indicated that those who were taught metadiscourse wrote more coherent essays and their awareness of coherence and audience was raised. Accordingly the researchers recommended the use of metadiscourse as a tool to improve students' writing. However, using metadiscourse in this way is unlikely to be applicable in all contexts. This study was conducted in Hong Kong where English is a second language; but in EFL contexts students might find it difficult to read complex theoretical articles in addition to their other curricula tasks

Also at Hong Kong University, Lee (2002a) conducted a study in which 16 first year university students were explicitly taught a number of coherence-creating features. These features were connectivity (cohesion), information structure,

global coherence, and metadiscourse features. The students showed improved coherence in their writing and became more aware of what effective writing should entail. Again this study was carried out in an ESL context and therefore might not be replicated in other EFL situations. Moreover, the results of this study need to be validated due to the small size of its sample and the absence of a control group.

Cerniglia, Medsker, and Connor (1990) and Connor and Farmer (1990) taught Lautamatti's TSA as a revision tool to ESL students at Indiana University in the USA. They reported that this tool had a positive impact on the students' writing. What characterized these two studies was that they suggested a practical technique (TSA) that could be used by both ESL/EFL teachers and students. To the present author's knowledge, this is the only easy and practical technique that can be employed in and out of the classroom especially in contexts where teachers and students are not native speakers. However, these studies have not been replicated and their results have not been validated in EFL contexts. The current study therefore investigates the effect of teaching TSA on EFL students' writing.

3.3 Measuring coherence

As mentioned in the previous section, ESL/EFL teachers and students usually encounter difficulties in teaching and learning coherence because of the lack of a concrete and manageable definition, and the lack of focus on developing appropriate methods and materials. Consequently, measuring coherence is also difficult. Students in ESL/EFL classes need to know if their essays are coherent especially in the revision stage. Likewise, teachers are supposed to consider coherence when assessing students' text or providing feedback. In

most cases, however, teachers, contrary to their own beliefs, tend to avoid assessing coherence in their students' composition (Stern and Solomon 2006; Lee, 2009). On other occasions teachers use analytic scoring methods which include descriptors concerning discourse features such as coherence. Although the aim of using these descriptors is to increase the reliability of scoring, the descriptors themselves are usually confusing (Todd, Thienpermpool, and Keyuravong, 2004). Moreover, the methods of scoring are not specifically designed to assess coherence, but are used by teachers to evaluate all features, including coherence. On the other hand, these types of methods are used by teachers and researchers but cannot be used by students as a self-assessment or revision tool. Therefore it is important to find a tool with which both teachers and students can assess coherence in writing. Such a tool is even more important in contexts where teachers are not native speakers.

To solve this problem, researchers have proposed various techniques by which teachers can measure coherence. Most of these techniques are based either on statistical analysis, such as the Latent Structure Analysis proposed by Foltz, Kintsch, and Landauer, (1998), or discourse analysis procedures which are usually complicated and more appropriate for academic research (see for example, Todd, Thienpermpool, and Keyuravong, 2004; and Liu and Braine, 2005). These techniques are unlikely to be employed by teachers or students because they are time-consuming and require a considerable amount of training. The only technique that seems accessible and practical is Lautamatti's TSA (Knoch, 2007). Building on previous studies which used TSA (see Chapter 4), Knoch (2007) used TSA as a technique for assessing

coherence in comparison with another traditional method of assessment. His results revealed that TSA is more objective and practical. It seems that TSA is an appropriate technique that can be used by both teachers and students for measuring coherence in writing. However, it is worth remembering here that no techniques and methods of assessment will be perfectly accurate simply, because of the subjective nature of coherence itself. As mentioned in Section 3.1.3, coherence is not only text-based but reader-based as well. The reader's intuition plays an essential role in measuring coherence in writing (Van Dijk, 1977). In response to these issues, the current study adopts TSA and three other traditional methods of scoring in comparing the pre- and post-test essays of the study groups. To represent native readers, the raters were English native speaking teachers (see Chapter 6).

3.4 Conclusion

This chapter has focused on coherence attempting to clarify this elusive concept in order to find an appropriate technique for teaching and measuring it. From the relevant literature the differences between cohesion, unity and coherence have been highlighted. Drawing a line between these confusing terms is the first step in specifying the concept of coherence. While cohesion is concerned with the explicit links on the textual surface, unity refers to the central idea around which all text sentences revolve. Cohesion and unity are both textual elements that can help the reader to interpret and appreciate the text but they are not the only important factors. The reader's previous knowledge about the content, the language used and the genre of the text all are also crucial in making the text coherent. Thus coherence is internal to both the text and the reader. Accordingly, the responsibility of the writer is to

consider the reader by employing the structures and rhetorical conventions that are likely to be expected by the reader, otherwise the text might not be interpreted successfully.

In the ESL/EFL classroom, however, students need to be aware of all of these issues in order to communicate successfully with their native readers. This can be achieved by teaching students practical and manageable techniques for creating and measuring coherence in their writing. One such proposed technique is TSA.

Chapter 4 : Topical Structure Analysis

4.1 Introduction

So far it has been emphasized that attention to rhetorical features is crucial in ESL/EFL writing instruction. Recent approaches to the teaching of ESL/EFL writing have stressed this point. Researchers have also proposed different techniques to help students learn these features. One of these features, namely coherence, is still problematic for both teachers and students due to its subjective and abstract nature. It is difficult to teach and difficult to learn, and therefore difficult to measure. However, researchers who are interested in this issue have developed various different techniques for teaching coherence (see Section 3.2), and TSA is one of them. It is believed that TSA is a more practical and manageable technique that can be used by both teachers and students. This chapter is devoted to discussing this issue. It introduces TSA and discusses its theoretical underpinnings. The relevant literature is reviewed and its implementation in ESL/EFL classroom is explained.

4.2. Theoretical background: Prague School

Topical structure analysis is presented here by tracing its evolution from focussing on features at or below the sentence level to considering the whole text and the relationship between and among sentences. Researchers and writing teachers are familiar with the idea of 'topic', as in 'topic sentence' and the idea of 'unity'. However, it seems that there is a consensus among writing researchers that Prague School linguists were the first to focus primarily on the way sentence topics contribute to constructing the main topic of the whole text. In other words, Prague School linguists such as Daneš (1974), Firbas

(1974), and Mathesius (1975) extended their focus across the sentence level to emphasise the importance of studying sentential relationships in the context of the whole text.

Vilem Mathesius (1975) is usually considered the father of the Prague School's research on 'topic' in discourse. He stated that a sentence consists of two main elements, called *theme* and *enunciation*. The theme refers to the main focus of the sentence, that is, what it is about; it states something that is known or which is supposed to be clear in a certain context. The enunciation, on the other hand, refers to what is said about the theme. It concerns new pieces of information added to the discourse. The writer or speaker starts from the theme to add new information, which is the enunciation. For example, in a sentence such as *John is a teacher*, the writer begins with *John* (the theme) presupposing that the reader knows this person. What is new is that he is *a teacher* (enunciation). Mathesius compared English to Slavic languages and concluded that the theme in English usually corresponds with the grammatical subject.

Drawing on Mathesius' work, Jan Firbas (1974) addressed the relationship between old and new information in texts and introduced the notion of 'communicative dynamism' which refers to the progression of information from old to new in a given text. He maintained that although the theme of a sentence announces what the sentence is about, it contributes least to the communicative dynamism. In other words, the theme which usually comes first and is the most prominent part of the sentence, but gives less information than the *rheme* (enunciation) does. Therefore, for Firbas, the rheme conveys

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new information and thus contributes most to communicative dynamism, and it usually occurs towards the end of the sentence.

Building on Mathesius' and Firbas' work, Frantisek Daneš (1974) discussed the role of the theme and the rheme in a given text, stating that:

> from the point of view of text organization, it is the theme that plays an important constructional role. The rheme shows its significance as the conveyor of the "new", actual information, while the theme, being informatively insignificant, will be employed as a relevant means of the construction (113).

Furthermore, Daneš argued that the relationship between theme and rheme in constructing a sentence can be extended across sentences and paragraphs by what he called 'thematic progression' (TP) he meant:

> the choice and ordering of utterance themes, their mutual concatenation and hierarchy, as well as their relationship to the hyperthemes of superior text units (such as the paragraph, chapter,…), to the whole text, and to the situation. (Daneš, 1974:114).

It is clear here that TP plays a very important role in creating the coherence of texts because it holds the parts of any text together; it might be seen "as the skeleton to the plot" (Daneš, 1974:114).

Daneš' notion of thematic progression was a significant development of Prague School research on 'topic' that is because it considered the progress of information from one sentence to another connecting the whole text with what he called the 'hypertheme'. Illustrating the relationships between utterance themes and how information is developed, Daneš, identified three main types of TP. In simple linear TP, the rheme (R) of the preceding sentence becomes the theme (T) of the next one and so forth.

John is at school. The school is near the park. The park is located in the city centre.

```
T1 ──► R1
        │
        ▼
    T2 (=R1) ──► R2
                  │
                  ▼
            T3 (=R2) ──► R3
```
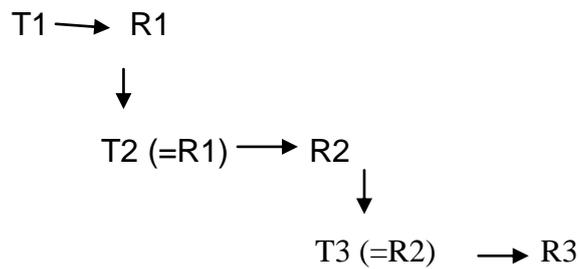
Figure 4.1 Simple linear thematic progression (Daneš 1974)

Secondly, in TP with a continuous (constant) theme, the same theme appears in a series of sentences whereas rhemes are different in every sentence.

John has lived here in London for 3 years. He moved here in 2007. He likes big cities.

```
T1 ──► R1
│
▼
T1 ──► R2
│
▼
T1 ──► R3
```
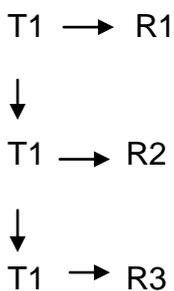
Figure 4.2 constant thematic progression (Daneš 1974)

Thirdly, in TP with derived T's, the themes are derived from a main idea (the hypertheme or the discourse topic) of the whole text and each of them presents a different piece of information about the hypertheme to create a coherent text.

This is my new road bike. The wheel rims are carbon fibre. The handle bars are also carbon fibre. But the gears are steel.
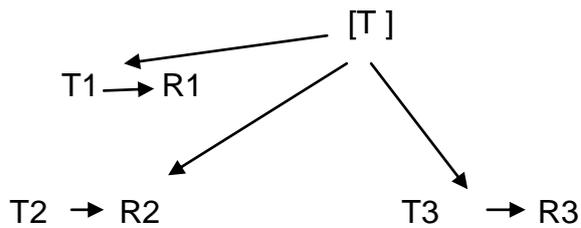
Figure 4.3 Thematic progression with derived *themes* (Daneš 1974)

These different types may be used in various combinations depending on the context of the text.

By introducing the notion of hypertheme, Daneš shifted from focussing only on the theme-rheme relations within a sentence, to viewing their relationships within the context of the whole discourse. To put it another way, it is the hypertheme that represents the main idea of the text and holds the individual sentences together to form that text. It is this explicit or implicit idea (or topic) that makes the whole discourse a cluster of sentence topics related to each other forming a coherent text. Thus, the source of a text's hypertheme (discourse topic) stems from its relationship to the text itself, "the surface representation of what the writer intends to communicate to an audience" (Witte, 1983a: 316). In other words, it is the responsibility of the writer to organize the sentence topics in such a way as to develop the text's discourse topic coherently.

4.3. Lautamatti's TSA

The relationship of the discourse topic to sentence topics and how relationship is developed throughout the text has gained interest among other researchers such as Liisa Lautamatti (1987), who worked on thematic progression and developed what has been called topical structure analysis (TSA). Her view is built on the consideration of the reader's expectations about the way written texts are structured. The job of the writer is to meet

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these expectations by producing a coherent piece of writing. What readers expect is a gradual development of the main idea of the text by presenting hierarchical sequences which make up the whole text related to that main idea, or discourse topic. Every sentence has a topic or a main idea which is, however indirectly, related to the discourse topic. Sentence topics are arranged in a hierarchical order to develop the discourse topic. Thus sentence topics are regarded as bits of meaning gathered together semantically to contribute to the development of the discourse topic.

To demonstrate the semantic relationships that exist between sentence topics and the discourse topic, Lautamatti (1987) maintains that these relationships are expressed through sequences or topical progressions. According to Lautamatti, there are three types of topical progressions which show how sentences are related to each other and to the discourse topic:

Parallel progression (PP). This type is similar to Daneš' thematic progression with a continuous theme, where the themes (topics) of successive sentences have the same referent. In other words, the sentence topic of the first sentence is semantically repeated in the following sentences. This can be achieved by using the cohesive devices of reference or substitution (Halliday and Hasan,1976) as shown in the following example:

 John bought a new car. **He** paid four thousands for it.

John and *he* are both semantically identical and represent the topic of these adjacent sentences. This type of progression is a parallel one where the same topic is repeated in each sentence by using a semantic equivalent or a pronoun.

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$$T_1 \longrightarrow C_1. \quad T_1 \longrightarrow C_2. \quad T_1 \longrightarrow C_3.$$

(T= topic, C= comment)

Sequential progression (SP). This type which corresponds to Daneš' simple linear thematic progression, where the comment in a preceding sentence becomes the sentence topic of the following one. This can be achieved by adopting Halliday and Hasan's cohesive devices such as personal references or reiteration as in the following example:

John bought a new car. *It* was made in Japan.

John in the first sentence is the topic whereas the comment is *a new car.* In the second sentence *it* (a new car) is the topic of this sentence, so that the preceding comment becomes the next topic and so forth.

$$T_1 \longrightarrow C_1. \quad T_2(C_1) \longrightarrow C_2. \quad T_3 (C_2) \longrightarrow C_3\ldots$$

Extended parallel progression (EPP). This type is a parallel progression which is temporarily interrupted with a sequential progression. For Example:

John bought a new car. *It* was made in Japan. *He* likes it very much.

In this example the topics of the first and third sentences are the same, so the progression is parallel, but the second sentence which has a different topic interrupting this progression and thus forming the extended parallel type of progression.

$$T_1 \longrightarrow C_1. \quad T_2 \longrightarrow C_2. \quad T_1 \longrightarrow C_3.$$

It is worth remembering here that the sentences in the above examples are context-reduced sentences used only to illustrate the types of topical

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progression in a simple way. In an extended discourse, however, the context and the discourse topic determine the topic of each sentence.

By identifying these progressions, Lautamatti has paved the way for learners to understand how English texts (at least simplified ones) are organized. The importance of these types of progressions stems from their description of local and global coherence, on the one hand, and their implicit consideration of the interaction of the text with the reader's prior knowledge on the other hand. As has been discussed in the previous chapter, a text can be locally coherent when each individual sentence is related to the preceding and the following ones; whereas global coherence is realized by relating the whole text to the discourse topic. However, constructing the discourse topic requires an interaction between the text and the reader's prior knowledge. In other words, the reader's prior knowledge alone cannot lead to full understanding of the text unless the reader is able to comprehend the semantic hierarchy of sentence topics within the text.

In a further step, Lautamatti clarified the relationship between the progression of sentence topics and the semantic hierarchy by employing the expression 'topic depth'. Lautamatti hypothesized that the sentence topic which comes first in a text is at the highest level in the semantic hierarchy. For her, both topical progression and depth are combined to represent the topical structure of an extended text. To arrive at a clearer understanding of TSA and how it works, the following passage (*Language and Community*), which was analysed by Lautamatti (1987), is taken as an example. For ease of reference, the sentences are numbered and the topic of each sentence

underlined. The whole text is graphically depicted illustrating how the physical progression of sentence topics and topical depth appear.

(1) When a <u>human infant</u> is born into any language community in any part of the world, it has two things in common with every other infant, provided neither of them has been damaged in any way either before or during birth. (2) Firstly, and most obviously, <u>new born children</u> are completely helpless. (3) Apart from a powerful capacity to draw attention to their helplessness by using sound, there is nothing the <u>new born child</u> can do to ensure his own survival. (4) Without care from some other human being or beings, be it a mother, grandmother, sister, nurse, or human group, a <u>child</u> is very unlikely to survive. (5) <u>This helplessness of human infants</u> is in marked contrast with the capacity of many new born animals to get to their feet within minutes of birth and run with the herd within a few hours. (6) <u>Although young animals</u> are certainly at risk, sometimes for weeks or even months after birth, compared with human infants they very quickly develop the capacity to fend for themselves. (7) It would seem that <u>this long period of vulnerability</u> is the price that the human species has to pay for the very long period which fits man for survival as a species.

(8) It is during this very long period in which the <u>human infant</u> is totally dependent on others that it reveals the second feature which it shares with all other undamaged human infants, a capacity to learn language. (9) For this reason, biologists now suggest that <u>language</u> is "species specific" to the human race, which means they consider the human infant to be programmed in such a way that it can acquire language. (10) This suggestion implies that just as <u>human beings</u> are designed to see three-dimensionally and in colour, and just as they are designed to stand upright rather than to move on all fours, so are they designed to learn and use language as part of their normal development as well-formed human beings.

Readers of this text can deduce or construct its discourse topic through their expectations about the way written texts are structured and the interaction of their prior knowledge about language development and acquisition. In other words, in addition to their previous knowledge about the topic, English readers expect that the first sentence conveys the most important piece of information in the text which is elaborated and developed through hierarchical sequences. These sequences can be easily recognized when the text is graphically represented as in Figure 4.4 below.

This diagram consists of three fields: (1) the number of sentences, (2) the topical structure of the text (topical progressions and topical depth), and (3) the number of sentence topics (or sub-topics). The diagram shows that the

passage consists of ten sentences dealing with five distinct sentence topics which are all semantically related and contribute to construct the discourse topic. Apparently, the first four sentence topics are semantically identical and therefore form a parallel progression. The three succeeding sentences

Sentence topic	Topical depth				Topic No.
	1	2	3	4	
1	Human infant				1
2	children				1
3	child				1
4	child				1
5		this helplessness			2
6			animals		3
7				this period	4
8	human infant				1
9		learning language			2
10	human being				1

Figure 4.4 The topical structure of The *Language and Community* Passage. Source: Lautamatti (1987)

5, 6, and 7, however, have different sentence topics although each is mentioned in the comments of previous one, thus forming a sequential progression. This progression in sentences 4 through 7 is the longest sequential progression in the passage and therefore it determines the topical depth of the text. Sentence 8 repeats the primary sentence topic and then sentence 9 presents a new sentence topic forming a sequential progression whereas sentence 10 re-adopts the primary sentence topic therefore constituting an extended parallel progression. This is not a new progression, but a parallel progression interrupted with a sequential progression. Generally

speaking, the passage has three types of progressions, four levels of topical depth and five topics. Six sentences out of ten have the same sentence topic mentioned in the first level of the topical depth. Lautamatti (1987:99) maintained that this indicates the importance of this topic because: (a) it is mentioned first, (b) it appears most frequently, and (c) it exists at the highest level in the hierarchy of information in the text.

In the present study Lautamatti's TSA model is adopted without adaptation because it can be applied with simplified expository texts. This type of text is very important in academic writing, especially for EFL students. In other text types there might be other topical progressions that could be added. Moreover due to the lack of research into the feasibility of TSA in EFL contexts, it is expected that students might face some difficulties when applying it. One of the objectives of this study is to investigate how EFL students can cope with and handle TSA. Accordingly, any adaption of the original model might make it more difficult for students. However, the definitions of the three types of progressions are specified in order to help students to clearly identify each one. This procedure is combined with the guidelines suggested by Schneider and Connor (1990) (see Section 6.2.3.1).

To sum up, the rationale for choosing TSA as tool to be taught to Libyan EFL students was motivated by the following considerations. Firstly, TSA explains important aspects of texts; namely, the patterns of maintenance of and shifts in topics. These patterns contribute considerably to the coherence of texts, to the identification of what an extended discourse is about, and, consequently, to the comprehensibility of texts. Secondly, the application of TSA in the

context of language teaching assumes that the quality of writing is in part dependent on the patterns of topic distribution. Finally, TSA is an easy tool which can be learned and manipulated by both teachers and students. It does not need sophisticated statistical analysis or highly qualified experts to cope with it. In other words the importance of TSA stems from its consideration of readers' expectations, and its simple and practical definition of coherence. To a large extent, TSA describes how coherence can be established through the three basic types of progression where each sentence topic is related to the preceding and succeeding ones and, at the same time, they all revolve around the same overall discourse topic. Consequently, TSA has gained favour among many ESL/EFL researchers due to this simplicity and practicality.

4.4 Implementing a topical structure analysis

Building on Lautamatti's work, Cernigilia, Medsker, and Connor (1990) and Connor and Farmer (1990) explained in a simple way how teachers can introduce TSA to their student writers in order for them to practise it. According to these researchers, students need to undertake five steps in employing TSA. Firstly, they should read the text carefully in order to construct its discourse topic. This step is crucial for identifying sentence topics. Secondly, they need to focus on individual sentences and identify their topics and comments. The topic is the main idea of the sentence or what the sentence is about. It often but not always coincides with the grammatical subject, and is related to the discourse topic. At this stage students should underline the noun or noun phrase that expresses this topic and this is now called the topical subject. The topical subject may occur at any position in the

sentence. The comment, on the other hand, is what is said about the topic, and is usually in the predicate position. Thirdly, students should now be ready to determine the topical progressions. As explained earlier, this can be done by looking at each sentence topic and seeing if it is repeated in the following sentence (parallel progression); or if the comment of the sentence becomes the topic of the following one (sequential progression); or if two identical topics are repeated but interrupted with a new topic (extended parallel progression). Fourthly, to see how the text is structured physically, students need to draw diagrams that correspond to the structure of the text, as in the above mentioned example. Finally, students need to check for coherence. This process, in fact, requires extensive practice starting with individual sentences then a whole passage. Keeping in mind the discourse topic of the text, students have to study the different progressions. At this stage they should know that relying on single progression may lead to an incoherent text. Parallel progression, for instance, is used to reinforce an idea by repeating the same topic or its synonyms and adding more information about this topic. However, the continuous use of the same topic may develop a sense of redundancy and the text may appear stylistically unacceptable. A paragraph which is heavily dependent on this type of progression may seem simplistic and repetitive. On the other hand, the sequential progression "helps to develop individual topics by adding details to an idea, thus contributing to the coherence of a text" (Schneider and Connor, 1990: 416). If overused, however, sequential progression might make sentences go off track and deviate from the main topic (discourse topic). Thus, for a text to be coherent, its sentences should relate to each other and at the same time their topics

should contribute to the construction of the discourse topic. Moreover, by visualizing the structure of the text using a diagram, students can more easily assess its coherence.

4.5. Topical structure analysis and the teaching of ESL writing

In the second chapter it was mentioned that ESL writing pedagogy has been broadened to include the writer's cognitive processes and the reader's expectations. During this process-based era which "emphasizes recursiveness in the writing process" (Connor,1987:677), and gives the emergence of genre-based instruction, TSA has been proposed as a pedagogical technique that may encourage students to pay more attention to the rhetorical aspects of the target language; and to help teachers consider the rhetorical differences between students' L1 and L2. Meanwhile, contrastive rhetoric research by Kaplan (1966) emphasizes that "writing is done distinctively by people from different cultures" (Simpson, 2004:432). Drawing on this hypothesis, several studies have employed TSA to investigate the rhetorical differences between English and other languages. Ahmad Fakhri (1995), for instance, carried out a comparative study of Arabic and English texts using TSA. His findings indicated no significant differences between Arabic and English texts in terms of topical progressions. Similarly, Simpson (2000) examined forty paragraphs selected from articles published in academic journals in English and Spanish. The comparison of the TSA of these two sets of paragraphs revealed that English paragraphs contained more parallel and sequential progressions than did Spanish paragraphs. Simpson maintained that "by knowing that English demands more internal coherence in the form of parallel and sequential progression, the teacher of

English to Spanish speakers can focus on this difference between the two languages" (306). In another study, Simpson (2004) analysed 20 paragraphs in English and Spanish selected from portfolios of first grade children at a bilingual school in Ecuador. The results of the topical structure analysis showed that the children used similar amounts of sequential progression and extended parallel progression in both languages but more parallel progression in English.

Other researchers, however, have been interested in analyzing English texts written by ESL learners to compare them with English models. This type of study investigates mismatches between what ESL student writers do and the expectations of native-English speaking readers. One of the pioneering studies in this area was Witte's (1983a) exploration of the use of TSA as a tool to understand the textual cues which may prompt revision. The subjects were asked to revise a passage and then their revisions were first holistically rated and then submitted to TSA. One of the findings of this study was that highly-rated essays contained more parallel and extended parallel progressions, whereas low-rated essays used more sequential progressions. In another similar research on first language writing, Witte (1983b) selected 48 texts from 180 essays written for a controlled assignment. The essays were rated and classified into two groups: low and high rated essays. Similar to the findings of the previous study, the results showed that low-rated essays contained more sequential progressions. Although Witte was not concerned with the use of TSA as a teaching tool, his studies drew other researchers' attention to TSA as a technique for evaluating coherence, and which could be taught to students to produce coherent texts. Following Witte but in an ESL

context, Schneider and Connor (1990) conducted a similar study using essays written for a test of written English (TWE). Their findings, however, contrasted strongly with those of Witte, indicating that the low-, medium-, and high-rated essays did not differ significantly in the use of extended parallel progression, but there was a significant difference in the proportions of parallel and sequential progression. Specifically, low- and medium-rated essays used higher proportions of parallel progression, whereas high-rated essays contained more sequential progression.

Schneider and Connor explained these differences in findings by stating that in previous TSA studies, including those of Witte, no complete and specific criteria to code progressions were given. "Differences in criteria can result in substantial difference in what counts as a repeated, or parallel, topic, and what counts as a different, or sequential topic" (Schneider and Connor,1990: 418). In response, Schneider and Connor formalized their criteria for coding progressions. These criteria have since been adopted by many researchers as well as in this study (see Section 6.2.3.1). Another TSA study comparing samples of writing based on holistic ratings was conducted by Burneikaite and Zabiliute (2003). The researchers used the original criteria for topical structure developed by Lautamatti to investigate the use of TSA in essays written by three groups of students rated as high, middle and low. Their findings were almost identical to those of Schneider and Connor (1990), indicating that the lower-level writers over-used PP whilst the higher level writers used a balance between PP and EPP.

Connor and Farmer (1990) taught their ESL students at Indiana University TSA as a revision strategy, and noticed improvement in student writing.

Accordingly, they recommended that TSA can be employed as a revision strategy so that students may be able to write more clearly and coherently. These recommendations, however, were not based on quantitative findings where control and treatment groups were pre-and post-tested. Moreover, the overall context in which TSA was taught might have an effect on those students. In other words, these students at Indiana University were taught by highly experienced native speaking teachers such as Connor and Farmer, supported by other facilitative procedures and computer programmes developed by Cernigilia, Medsker, and Connor (1990). Furthermore, this is in addition to everyday exposure to the English language in their real life. Therefore more studies are needed to investigate the impact of TSA on ESL/EFL student writers in different contexts under different conditions.

In a completely different context, Chiu (2004) conducted a case study in which she applied TSA to English composition during one-to-one conferences with a Chinese student who was studying English as a foreign language in Taiwan. The results revealed that the student became more confident about how to organize and develop ideas, and her writing improved. This implies a positive impact of TSA on the student's motivation, in addition to the student's writing skills, but due their limitations, such conclusions cannot be generalised. Particularly, the results of this study are highly expected due to two main factors: (1) there was only one participant (2) who taught by one-to-one conference technique. These two factors are unlikely to be found in most EFL contexts. Therefore there is still a gap that should be bridged. The current study attempts to explore the effect of teaching TSA to EFL university students in promoting their understanding of the essence of coherence.

Moreover, the study investigates the students' reactions to this technique. Equally important, the samples in most previous TSA studies have either been very small or the length of sample texts have not exceeded single paragraphs. In the current study, however, the 126 essays (not paragraphs) written by 63 EFL students analysed.

4.6 Conclusion

This chapter has introduced TSA, including the theoretical underpinnings of this technique, and the relevant literature has been explored. It has been shown that TSA, which was built on Prague School research, has gained the favour of many ESL/EFL researchers because of its consideration of native readers' expectations, and its practicality and simplicity. This has encouraged many researchers to utilize this technique in comparing sets of texts or examining the topical structure of selected samples written by ESL students. However, few studies have paid attention to its impact on ESL/EFL students if taught as a strategy to improve coherence in writing. Accordingly there is clearly a need to highlight this point by investigating the effect of teaching TSA to EFL students in order to improve coherence in their writing. The current study is conducted to examine the impact of teaching TSA to Libyan EFL university students and adopts both quantitative and qualitative methods of research. The next chapter explains the methodology and procedures used in this study in detail.

Chapter 5 : Methodology and Research Design

5.1 Introduction

In any study, one of the most important decisions the researcher should consider carefully is the method used to gather data. There are several kinds of methods but not all can achieve the goals of a particular study. In other words, there is no perfect method of research. Hence, choosing the method of research depends to a large extent on the goals of the study which are encapsulated in its research questions. Thus the purpose of the study determines the appropriate tools that should be used for collecting the data required. The goal of the present study is to investigate the impact of teaching topical structure analysis (TSA) on the writing of Libyan EFL university students, and the way they react to and cope with this technique. It investigates a presumed causal relationship between the teaching of the TSA technique and the quality of the written products of the students. Moreover, the study attempts to explore the way Libyan EFL students handle this technique. To accomplish these goals both quantitative and qualitative methods of research are including a quasi-experimental design, semi-structured interviews and observation.

5.2 Setting

English is a foreign language in Libya. It has been included in the Libyan curriculum as a separate and compulsory subject since the early 1950s. Students start learning English at the preparatory stage. At the university level, students who join departments of English Language either study English literature or applied linguistics in order to become EFL teachers. The present

study was carried out in the Faculty of Arts in Baniwaleed in Libya. This department opened in 1994 and focuses on applied linguistics. Students spend four years developing their language skills and learning different methods of teaching EFL. Writing is one of the skills that students are required to develop and to learn how to teach. For four years students are taught how to produce accurate and well organised texts starting by composing fragments and sentences to eventually produce complete essays.

A product-based approach to teaching EFL writing in Libya traditionally has been popular, but nowadays many teachers prefer to focus on process rather than product, or deal with both together reflecting the new trends and theories in ESL/EFL writing (El-Aswad, 2002). In this department the process-based approach is preferred without neglecting other approaches. Usually writing lessons consist of five stages: pre-writing, planning, drafting, revising, and editing. The prescribed course book is *Developing Writing Skills* which considers process and genre and the connection between reading and writing in writing instruction.

5.3 The participants and sampling

As mentioned above, the aim of the present study is to investigate the impact of a new technique in the teaching of writing in an EFL context, in Libyan universities in particular. The sampling strategy adopted is the convenience sampling, which "involves choosing the nearest individuals to serve as respondents" (Cohen, Manion and Morrison, 2007: 113). In this study the participants were EFL Libyan university students in the Department of English at Faculty of Arts, in Baniwaleed. The reason for choosing this faculty is its accessibility to the researcher in addition to its good reputation. The

experimental study was carried out with third year students in their normal classes and lasted one semester (12 weeks). Sixty three students were randomly divided into two groups according to their second year writing scores. The scores were arranged in ascending order and the students' names were numbered in the list. Students with even numbers were assigned to one group and odd numbers to the second group. One of the lists was selected randomly to be the control group (31 students), and the other one was labelled the treatment group (32 students).

5.4 Research questions

Attention was directed towards five specific main questions:

● Does teaching TSA to Libyan university students have any effect on the quality of their writing?

● What kind of differences can be observed between students with TSA instruction and those without TSA instruction?

● Does using TSA raise students' awareness of coherence?

● How do Libyan university students perceive TSA? Do they find it helpful and motivating in improving their writing coherence?

● When applying TSA, what kinds of difficulties do students encounter?

Answering these questions entailed the use of quantitative and qualitative methods. Questions 1 and 2 which concern the students' performance can be answered by using a quasi-experimental method, whereas the questions which focus on the students' awareness and motivation can be tackled using

qualitative interviews and observation where data can be generated from face-to-face interviews and discussion.

5.5 Context and participants

The main focus of this study concerns the impact of TSA on EFL undergraduate students' writing, which has not been investigated before in Libya. As noted above, the current research can be classified combining quantitative and qualitative methods. The quasi-experimental design was used to answer the first and second research questions, where the pre- and post-tests provided quantitative data which could be analysed to illustrate the impact of teaching TSA on the participants' written performance.

The qualitative interviews and observation, on the other hand, were intended to answer other research questions and to provide additional interpretation relevant to the quantitative results. It was hoped that the qualitative data collected in interviews would allow a more detailed explanation of how the participants handled the new technique, their motivation and the difficulties they may have faced.

5.6 Research procedure

The following procedures were followed when conducting this study:

● After a thorough review of the literature relevant to coherence and how it is taught, and that related to TSA as an appropriate tool for diagnosing coherence, research questions were prepared as the main guidelines for the study.

● In order to answer the research questions, quantitative and qualitative data collection methods were adopted. This was based on the review of literature

related to educational research methods. Important reference works such as those by Campbell, and Stanley (1963); Brown and Rodgers (2002); Berg (2004); Cohen, Manion and Morrison (2007); Gass, and Mackey (2007); Larson-Hall, (2010) and others were consulted.

● The main data collection method used was a quasi-experiment design which was accompanied by qualitative methods. Semi-structured interviews were carried out at the end of the semester with some participants from the treatment group and the researcher also recorded observations when he was teaching both groups.

● The pre- and post-tests (see Appendix 1) were prepared and then discussed with and confirmed by the research supervisor. Similarly, three approaches of scoring (see Appendices 2, 3, and 4) were agreed by the researcher and the supervisor for use in scoring the students' essays.

● By consulting previous studies relating to TSA, a programme was prepared for teaching TSA which would last four weeks. This programme was designed to introduce TSA to the participants at the beginning of the semester (see Appendices 8 and 9).

● Before the data collection process started, the researcher talked with faculty members who were chosen to be sources of data in the department of English. In these telephone conversations, the main goal of the study was explained to the Dean of the Faculty of Arts at Baniwaleed, and the Head of the Department of English. They welcomed the researcher and offered their cooperation.

● The study was carried out between 21st of February and 20th of May 2009, and consisted of 2 sessions weekly. On the first day a meeting was held with third year students (63 students). In this meeting I introduced myself and explained the general objectives of the study without going into the details. In addition to dealing with ethical issues, this meeting aimed to encourage students to participate and make them familiar with the researcher and the research process.

● After the meeting, students were randomly assigned to the two groups (see Section 5.2 above), and seated in two rooms. With the assistance of two other teachers, the pre-test was conducted in an appropriate environment. I explained to the participants that the test results would not negatively affect their academic progress or assessment. After 2 hours, during which all students were involved in writing, their essays were collected.

● Another meeting with the Head of English Department was held to discuss the researcher's plan for teaching both groups. This plan was as follows:

(a) Both groups would be taught by the same teacher (the researcher), use their usual materials and receive the same instruction, except that the treatment group would be taught TSA in the first four sessions and then would start applying it to the texts they read or wrote.

(b) Both groups would be taught according to the time table normally followed in the faculty. Each group would have two lectures a week.

● The lectures started as planned and lasted 12 weeks. During this period of time, I taught both groups and observed their activities and reactions. I tried to

ensure that both groups received the same instruction, activities and homework and spent the same period of time with each. The only exception was that the treatment group was taught TSA.

● At the end of the semester both groups were post-tested. Participants in both groups were given only one topic to write about in the usual classrooms. The test lasted two hours and again students were informed that the results of the test would not affect their academic process or assessment.

● Tuesday19th and Wednesday 20th May were devoted to conducting the semi-structured interviews with students from the treatment group. Six participants from the treatment group were chosen for interview. Each participant was interviewed alone after he/ she had given their agreement to that. The interviews were carried out mainly in Arabic, were recorded and transcribed immediately afterwards. Due to the reservations of some, mainly female participants about being recorded, I promised to delete the recorded interviews immediately after transcribing them on the same day and in the faculty building. Consequently, I had to interview three students per day in order to have time to be able to transcribe their interviews one by one.

5.7 Data collection methods

5.7.1 Design

Experimental method is that method of research which considers the issue of causality. Since the aim is to study the effect of a certain factor or variable on other variables, "the experiment method is the only method that directly concerns itself with the question of causality" (Smith, 1991: 177). However, due to practical and ethical reasons, true experiments are often not suitable in

social sciences and especially in the field of education (Cohen, Manion and Morrison, 2007), as in this study. In this setting the process of selecting a random sample which represents the whole population and the random assignment of the subjects in groups is impossible (Cohen, Manion and Morrison, 2007). Consequently, in educational research quasi-experimental design is preferred. In the present study the pre-test-post-test non-equivalent control group design has been adopted. This method is the ideal one in such situations (Brown, and Rodgers, 2002).

To strengthen the validity and reliability of the study certain variables should be controlled or eliminated. Therefore students who were assigned from the same department and year of study were divided into two equal groups (about 30 students in each group) and they were randomly assigned to either the treatment or the control groups. In other words, the general level of the two groups was likely to be the same. The same pre- and post-tests were given to both groups at the same time. Adopting the conventions established by Campbell and Stanley (1963); Brown and Rodgers,(2002); and Cohen, Manion and Morrison, (2007),   the experimental design of this study can be represented as follows:

Experimental   O1   X   O2

Control   O3   O4

O = observation (1, 3 is the pre-test, and 2, 4 is the post-test),

X = the independent variable (treatment)

5.7.1.1 Variables

A variable is anything which can vary or differ. In any study there might be different variables that could affect each other. However, based on the purpose of the study, a researcher decides which variables can be controlled or observed.

5.7.1.2 Treatment

The treatment or the independent variable operates to have an effect or achieve a result. It is the input which is "measured, manipulated, or selected by the experimenter to determine its relationship to observed phenomena" (Tuckman, 1999: 93). In the present study teaching TSA is the independent variable, and Libyan EFL students were taught this technique in order to use it as a learning and revision strategy to improve their writing in terms of coherence and topic development.

5.7.1.3 Teaching TSA

Four sessions of two hours each were devoted to teaching TSA. By the end of these sessions students had been taught how to identify sentence topics, determine sentence progression, and draw the diagrams of the progress of sentence topics in order to check for the coherence of ideas (details of the four sessions are displayed in Appendix 8).Then, with some help from the teacher, students began practising this technique on the model essays that they had to read in every lesson in their normal course. When writing their own texts, students were asked to apply TSA.

I decided to teach both groups. This had the advantages of controlling important extraneous variables such as personality, accent, teaching style and so forth. It also enabled me to be sure that TSA would be taught

consistently. On the other hand, choosing another instructor would entail teaching him/her about TSA. This would have been hard work for the researcher as well as for the other instructors who were busy staff members.

5.7.1.4 Measurement

In order to discover the effect of the independent variable (the treatment) tools are needed to measure this effect. In this study participants were given tests before and after the experiment. They were asked to write one expository composition of about 400 words in the classroom for each test. The tests were conducted with both groups at the same time and under the same conditions. Clear instructions and enough time were given to students in both groups (see Appendix 1). The researcher and other teachers were present in the classrooms as invigilators. The students' papers were marked by three English speaking teachers. The results were compared in order to see if there were be any significant effects of the treatment on the students' writings.

5.7.1.5 Rating and raters

As mentioned above, the students' compositions were rated by three native English speaking teachers. Before the students' papers were rated, the researcher typed them up (as they had been hand-written) to make them clear for the raters. Student names were removed and an identification number assigned to each paper so as to minimize any possibility of bias. All essays from both tests and groups were mixed together before they were rated. The researcher then met each rater, explained to them the aim of the study, and gave them the criteria according to which the essays should be scored. In order to assure reliability in rating, each rater was given five essays as a random sample to be marked and returned to the researcher. Then final

remarks and notes were discussed with each rater separately before they started scoring.

Generally speaking, there are three main methods of scoring: holistic, analytic, and trait-based methods (Hyland, 2003a). Each method has its advantages and disadvantages. In order to benefit from the advantages of all three methods and to minimize their disadvantages, each rater was asked to adopt a different scoring method in assessing their essays. The criteria used for the holistic and analytic scoring were adopted from Hyland (2003a), whereas those for trait-based scoring were based on Chiang (1999) with some modifications. All rubrics are displayed in Appendices 2, 3, and 4.

The three raters were female English native speakers. They were experienced ESL/EFL teachers, and IELTS examiners in Language Centres at Newcastle and Durham universities. They taught writing to ESL/EFL students and had a good idea of how writing should be scored.

5.7.1 .6 Text analysis

As mentioned in section 4.3, TSA has been used as an instrument for diagnosing coherence (Knoch, 2007). In this study, the pre and post-test essays were submitted to TSA for two reasons. The first was to see how the participants developed their ideas and to what extent their texts were coherent before and after attending the intervention programme. The second reason, however, was to trace changes that might occur after the treatment group had learned and applied TSA and how the resulting texts would be similar to or different from the essays written by the participants in the control group.

The procedures adopted for analysing the students' essays are described further in Chapter 6 (6.1.3.1).

5.7.2 Semi-structured interview

Although the data that are gathered by using the experimental method could show whether or not there were improvement in the participants' writing, such data would not illustrate how the participants viewed TSA as a strategy with which they could raise their awareness of coherence and topic development. Would it hinder their flow of thought or fluency? Therefore exploring these issues by employing a qualitative method of research would strengthen the study. The qualitative method used was the interview. Its main aim was to investigate the psychological, pedagogical or any other factors that might have affected students' written performance. It also aimed to shed more light on the way the student-writers coped with and handled TSA as a learning and revision strategy. In other words, qualitative interviews would provide subjective interpretations and justifications of the students' writing performance.

The interview is a widely used method of collecting data in social studies. At first glance the interview can be defined as "a conversation with a purpose" (Berg, 2004: 75). The purpose of the interview should be determined beforehand in terms of the guided questions to be asked. Then the researcher has to struggle to discover how subjects interpret the world in which they live (Cohen, Manion and Morrison, 2007). Each subject has his/her own perspectives and interpretations, and by interviewing the researcher can understand how the subject constructs his/her world.

There are many types of interviews but, generally speaking, researchers group these under three main categories: structured, semi-structured, and unstructured interviews. This classification is based on the degree of flexibility (freedom/constraint) placed on the interviewer and the interviewee (Corbetta, 2003; Cohen, Manion and Morrison, 2007). A structured interview is one where the questions are carefully prepared and presented in the same sequence to all interviewees, whose answers are then received according to a standard fixed schedule. In the semi-structured interview, however, the questions are prepared in advance but the interviewer can make changes when presenting them. He/she can change the order or the wording and explain words or questions depending on the situation and the interviewee's interaction and understanding. On the other hand, the unstructured interview is one where no questions are prepared in advance but a number of topics are presented in a conversational form. In this case the interviewer usually seeks information which he/she does not have about the topic being investigated. (Smith, 1991; Cohen, Manion and Morrison, 2007)

In the current research, the semi-structured interview is adopted because it gives the participants the opportunity to express themselves more freely, whereas the role of the researcher is "to provide a framework within which respondents can express *their own* understandings in their own terms." (Patton, 2002: 348). The participants were selected from the experiment group after the post test. Based on the students' performance during the course, the group was divided into three levels of achievement, low, medium, and high and two students were chosen from each level to be interviewed. It

was anticipated that the results of the interviews would contribute to the research by providing a clearer picture of how the subjects viewed TSA and how they had handled it.

5.7.2.1 Interview questions

The interview questions were intended to relate to the research questions in the everyday language of the subjects. They represent the framework of the interview and "should contribute thematically to knowledge production and dynamically to promoting a good interview interaction" (Kvale and Brinkmann, 2009: 131). In other words, they should be related to the main topic of the research and at the same time they should stimulate the subjects to elaborate on and express their feelings and to talk about their experience. In the current research the interview questions were mainly based on the research questions which investigate the reactions of the participants towards learning and applying TSA. However, the secondary objective of the interview questions was to generate data to provide further interpretation of the quantitative data.

In order for the interviews with the students to go smoothly and so that the students would respond spontaneously, the interviews were designed in a form of dialogue through which previously prepared themes were discussed. These themes were as follows:

● Students' previous writing experience. The aim of this theme was to investigate the student's writing experience, how he/she viewed writing tasks and the difficulties he/she faced when asked to write. The strategies students followed in their writing were also investigated. Students' responses would be

used to help to understand their written product in the pre-test. Their responses, would also allow explanation and interpretation of their scores in the test.

● Students' conception of coherence. Questions related to this theme traced the students' ideas of coherence. Did they consider it when writing? Did they know its function and importance to the reader? Did their conception of coherence change after they had learned and applied TSA? The students' responses would shed more light on their writing performance before and after the intervention. They would also show if there was any positive impact of TSA on the students' awareness of coherence.

● Handling TSA. Questions about this theme were used to investigate what the students thought of TSA, how they coped with it, and whether or not it was difficult to apply. If there were difficulties, what were they? Moreover, other issues such as using TSA in other situations rather than only writing lessons would be discussed.

● Based on the previous theme, other issues could be raised such as the students' perceptions of TSA. In other words, did the participants see TSA as a helpful and useful strategy to improve their writing and, accordingly, were they reluctant to use it?

The Arabic language (the students' L1) was used to help the interviewees express themselves as clear as possible. Then the interviews were summarized, the key issues were classified into categories to be presented and interpreted with reference to the data collected using the other methods in this study.

5.7.3 Observation

Observation is a direct method of data collection. It is a means of collecting live data about human behaviour in a certain context. "In this way, the researcher can look directly at what is taking place *in situ* rather than relying on second-hand accounts" (Cohen, Manion and Morrison, 2007: 396). In the case of applying an intervention, as in this study, observation may help in defining and understanding the subjects' behaviour beforehand and afterwards. Moreover, observation enables the researcher to compare what students do and what they say they do (Robson, 2002).

In this study, as a teacher-researcher, I started to observe students in both groups from the beginning of the semester. Immediately after finishing each session, I wrote down notes about behaviour that had occurred in that session, including the students' classroom interaction, questions asked, and their observed writing strategies.

Data collected by observation were used to supplement the other data obtained by other methods. This kind of data can also be used to interpret or expalin the results obtained by other methods of data collection, and therefore they were spread, where appropriate, throughout the data analysis and the discussion chapters.

5.8 Validity and reliability

As defined by Brown (1997, cited in Brown and Rodgers, 2002), validity is "the degree to which the results can be accurately interpreted and effectively generalized". This definition refers to two types of validity: internal and external validity. Internal validity is related to accuracy. If the findings or the

results explain the phenomena accurately then it can be said that the research is valid. On the other hand, external validity refers to the degree to which the results can be generalized to the wider population, cases or situations (Cohen, Manion and Morrison, 2007:136). Similarly, reliability is divided into two kinds: internal reliability concerns the consistency of the results if the measurement is repeated; and external reliability refers to the degree of consistency of the findings if the study is replicated (Brown and Rodgers, 2002). However, notions of validity and reliability should be considered according to the instruments used for data collection. In this study, as mentioned above, an experimental design, semi-structured interviews, and observation have been adopted as data collection methods, thus providing triangulation of data.

5.8.1 Validity and reliability in experimentation

In an experimental design the most important thing that maximizes validity is to control the factors (variables) rather than the independent variable. By controlling these variables a researcher can conclude that the outcomes of the experiment are due to the effects of the independent variable (the treatment). The factors that threaten validity in experimental designs have been identified and discussed by many researchers such as Campbell and Stanley (1963), Seliger and Shohamy (1989), Lewis-Beck (1993), and Cohen, Manion and Morrison (2007). The latter summarized these factors as follows:

● History: the effects of events other than the treatment which may appear between the pre- and post-tests and can mistakenly be attributed to differences in treatment. In order to minimize this factor in the current study, a pre-test post-test non-equivalent control group design has been adopted

where both groups were put under the same conditions during the experiment.

● Maturation: this factor is similar to the previous one; it refers to cognitive changes in the subjects. In spite of the importance of this factor in educational studies (Cohen, Manion and Morrison, 2007), it is more significant with young learners. In this study, however, it was not expected that this factor would have any effect due to the age of the subjects, and the design the study.

● Testing: the pre-test may influence the subjects and encourage them to work harder to gain higher scores in the post-test. In order to control for this factor, the experiment was conducted blind, and the students were not told whether they would be in the control group or in the treatment group.

● Selection: this refers to the differences that may appear among subjects or between the two groups. To account for this factor in this study, students were randomly assigned to the two groups.

● Hawthorne effect: this refers to the effect of being in an experiment, which may itself influence its outcome. In this study, as mentioned above, a blind design was applied, and moreover both groups were taught by the same teacher, which can be considered a new condition which is the same for all subjects in both groups.

5.8.2. Validity and reliability in the tests

5.8.2.1 Reliability

In this type of experimental design, pre- and post-tests are the main means by which a researcher can observe the effect of the treatment, and therefore

considering the validity and reliability of the tests is very important. For a test to be reliable it should "measure consistently, both in terms of the same student on different occasions and the same task across different raters" (Hyland, 2003a: 215). Here factors not related to the test itself may affect the scores; such as the general conditions of the test, the time, place, instructions, genre. Reliability also concerns the consistency of ratings. To achieve reliability, the present research adopted a direct method of testing writing based on the production of written texts (Hyland, 2003a). Furthermore, other procedures were applied in order to control for all expected variables as follows:

● Participants were tested in the same place, at the same time and under the same conditions.

● They were given only one topic to write about.

● Clear and accurate instructions were provided.

● Tests were rated by three English speaking experts. Each used a different method of scoring (holistic, analytic, and trait-based scoring).

5.8.2.2 Validity

The importance of validity in writing tests springs from a concern with the test itself. For the test to be valid it should test what it claims to test, and it should test what has been taught (Hyland, 2003a). Accordingly, in this study, the participants had been studying ESL writing for some years according to the process-based method. They were given tests similar to those which they had done before. They were given clear prompts and informed about the criteria according which the test would be rated (see Appendices 1-4). To avoid any

effect of the pre-test on the post-test, the topic used in the post-test was different from that in the pre-test, but the same genre was retained.

5.8.3 Validity and reliability in interviews

In qualitative research reliability and validity are interpreted in 'ways appropriate to the production of knowledge in interviews' (Kvale and Brinkmann, 2009: 245). Here, reliability and validity concern the interviewer, the interviewee and the process of interviewing. The interviewer should be skilled and know how to carry out the interviews smoothly, have a good background in the topic, maintain good relationship with the respondents in order to minimize the threat of bias, and know how to record and analyse the data. The interviewees should be interviewed in an appropriate place and given the opportunity to express themselves and elaborate on their points, but they should be prevented from rambling. The interview itself, however, should be guided by the questions and, as mentioned above, the wording of the questions should be appropriate, not threatening and not likely to lead to certain answers.

In the present study all of these issues were taken into account. The treatment group was divided into three levels (low, medium, and high) based on their scores and activities. Then six students, two from each level, were randomly selected to be interviewed by the researcher himself who established a good relationship with the interviewees. All interviews were carried out in a calm atmosphere in a comfortable room in the Faculty of Arts at a suitable time. Each interview lasted about 20 minutes. In general, the whole situation was good, since the respondents were familiar with the topic and the interviewer.

5.9 Ethical issues

At the beginning, I held a meeting with the Dean of the Faculty and the head of the Department of English. I gave them the research supervisor's letter and explained to them the aim of the study, and the procedures which I intended to carry out during this study. I assured them that there would be no negative effects on the participants, since there would be no change in the course syllabus or materials except for the intervention (the TSA technique) which would probably to help them to improve their performance.

As mentioned previously, another meeting was held with the third year students where I introduced myself and explained to them how and why the study would be conducted. In addition to the consent forms that were delivered to them, I explained to them in Arabic that this study would not cause any harm to them and also that every one of them had the right to withdraw at any time. Moreover, I assured them that the data would be handled by me and the research supervisor and would not be used by anyone else. At the end of the meeting, the students were highly satisfied and motivated to participate.

Chapter 6 : Data Analysis

6.1 Introduction

As mentioned previously this study adopted both quantitative and qualitative methods of research. A quasi-experimental design was employed to quantitatively investigate the impact of teaching TSA on the ESL writing of Libyan university students. The research participants were randomly assigned to two groups: a treatment group and a control group. Both groups were pre-tested. This test had two aims: to see to what extent those students were able to produce coherent pieces of writing that satisfied native reader expectations; and to ensure that both groups were similar in terms of level of writing skills.

Following the pre-test, the treatment group was explicitly taught how to apply TSA as a technique to improve their writing. Four sessions were devoted to teaching the key concepts of TSA and skills in analysing texts. After one semester (12 weeks), both groups were post-tested to investigate the impact of the teaching of TSA on the treatment group. The students' essays were scored by three English speaking raters, each applying a different approach to scoring (see section 5.6.1.5). Moreover these essays were analysed according to TSA by the researcher and with the help of some other PhD students.

Qualitative classroom observation and semi-structured interviews were used to support, explain, and interpret the results of the analysis of quantitative data. As a teacher-researcher, I observed both groups during the study semester. Students' conceptions, perspectives, behaviour and interaction were a good source of information that helped in interpreting their written

performance. At the end of the semester, retrospective interviews were conducted with some students from the treatment group.

Data collected by using the quantitative and qualitative methods are presented and analysed in this chapter. Statistical tests were carried out in order to investigate if there was any significant difference between the treatment group and the control group. The analysis of quantitative and qualitative data is presented in three sections:

Section 6.2 presents and analyses the raw data obtained from students when there was no effect of the intervention. This type of data consists of: (a) the pre-test scores of the control and treatment groups obtained by the three methods of scoring; (b) the topical structure analysis of the pre-test essays of the two groups; and (c) the relevant data collected from observation and the interviews. The process of analysis is as follows:

● The pre-test scores of the control and treatment groups were analysed and compared in order to get an initial idea about the general level of scores and their distribution. This entailed separate descriptive analyses of the scores obtained from each of the three scoring approaches. Independent-samples T-tests and Mann-Whitney U tests for trait-based scores were conducted to compare the mean scores of the two groups.

● The topical structure of the pre-test essays of both groups were analysed and compared in order to see what types of topical progression students preferred to use and if the two groups were similar in this respect. Again independent-samples T-tests were used to assess the significance of differences between the two groups.

● Examples of the qualitative data are presented where appropriate to justify, support or interpret what appears in the quantitative results.

Section 6.3 presents and analyses the raw data obtained from students after the intervention (TSA). This type of data consists of: (a) the post-test scores of the control and treatment groups obtained by the three methods of scoring; (b) the topical structure analysis of the post-test essays of both groups; and (c) the relevant qualitative data collected by observation and interview. The process of analysis is as follows:

● Analysing and comparing the post-test scores of the control and treatment groups. This involved conducting Independent-samples T-tests and Mann-Whitney U tests for trait-based scores to investigate if the post-test scores of the two groups were significantly different.

● Analysing and comparing the topical structure of the post-test essays of both groups. This comparison is intended to show if the study groups were similar in terms of the topical progressions preferred after the treatment group's exposure to the intervention. The Independent-samples T-test is used to carry out this comparison.

● Examples of the qualitative data are presented where appropriate to justify, support or interpret what appears in the quantitative results.

Section 6.4 is devoted to verifying the results gained from the previous analysis. In this section, the pre- and post-test results of the two groups are compared. The process of analysis is as follows:

● Describing the pre- and post-test results of the control group showing their frequencies and percentage; then comparing them by using Paired-sample T-tests and Wilcoxon Signed Rank Test for trait-based scores to find out if the pre- and post-test scores were significantly different.

● Analysing the topical structure of the pre- and post-test essays of the control group and comparing them. Paired-sample T-tests were used to see if there is a significant difference in the topical progressions between the pre and post-test essays.

● Analysing the pre- and post-test scores of the treatment group by using Paired-samples T-tests and the Wilcoxon Signed Rank Test to check if there were any significant differences between the pre- and post-test scores.

● Analysing the topical structure of the pre- and post-test essays of the treatment group and comparing them. Paired-sample T-tests were used to see if there is a significant difference in the topical progressions between the pre and post-test essays.

The mixed approach to data analysis presented in these three sections is intended to produce results obtained from different angles; each one of them supports the other. The procedures of the process of analysis are summarized in the following table 6.1:

Table 6-1 Summary of control and treatment groups data analysis

	Group	Tests	Type of scores	Statistical Test
1	Control and Treatment Groups	Pre-test	Trait-based	Mann-Whitney Test
			Analytic (total)	Independent-samples T-test
			Analytic (coherence)	
			Holistic	
			TSA	
2	Control and Treatment Groups	post tests	Trait-based	Mann-Whitney Test
			Analytic (total)	Independent-samples T-test
			Analytic (coherence)	
			Holistic	
			TSA	
3	Control Group	Pre and post tests	Trait-based	Wilcoxon Signed Rank Test
	Treatment Group		Analytic (total)	Paired-samples T-tests
			Analytic (coherence)	
			Holistic	
			TSA	

6.2 Students' previous experience: pre-test analysis

The pre-test essays written by the participants in both groups can be considered as examples which reflect their writing performance and their experience of writing in English before the intervention. In this section, the data obtained from the pre-testing of the control and the treatment groups is be presented and analysed. The data analysis in this section is presented in three subsections: the first presents the parametric data obtained by the analytic and holistic methods of scoring. A descriptive analysis is given and a comparison of the scores is conducted to gain a general idea about the participants' level of writing and the distribution of their scores. Then a comparison between the two groups is conducted to find out if they were significantly different. To test the significance of any differences between the two groups, an independent-samples T-test is used. Since the groups are

independent and the type of data is parametric, the independent-samples t-test is the most appropriate statistical test here (Cohen, Manion and Morrison, 2007; Larson-Hall, 2010). The null hypothesis is that 'there was no significant difference between the means of the pre-test results of the control and treatment groups.' The level of significance chosen is 0.05, which is the value generally used in the social sciences.

The second sub-section is devoted to the nonparametric data obtained by the trait-based method of scoring. After a descriptive analysis of the grades of both groups, a statistical test is conducted to find out if there is any significant difference between the two groups. In this case, the Mann-Whitney U test is adopted. This test is used to test for differences between two independent groups when the type of data is non-parametric. It is an alternative to the t-test. It does not compare the means of the two groups, as does the t-test, but instead compares their median scores. The Mann-Whitney U Test converts the scores to ranks and tests whether or not the ranks for the two groups are significantly different.

The third sub-section is devoted to the topical structure analysis of the pre-test essays. Descriptive and statistical t-test analyses are conducted to find out if the study groups are similar in terms of the participants' use of the types of topical progression (for more detail see section 6.1.3.1). Moreover, a sample of essay analysis is presented to show how TSA is operationalised in this study.

In addition to the quantitative data collected from the three types of scoring and the TSA of the pre-test essays, qualitative data obtained from the

researcher's observation and the retrospective interviews are also presented at the end of each relevant section. This is intended to give examples and present a clear picture of the participants' previous experience before the teaching of TSA to the treatment group.

6.2.1 Analysis of the analytic and holistic pre-test results.

As mentioned in Chapter 5, the participants' essays were rated by three English speaking teachers. Each one of them used a different approach to scoring. In this section the numerical data obtained from the holistic and analytic approaches to scoring are analysed. Following the assessment standards used in Libyan universities, the total scores are given out of 100. For the analytic scoring, the total score (100) is divided into three categories (see Appendix 2). The total score for the organization and coherence category is 20 and, taking into account the aim of this study, the scores for the other categories are not analysed. Table 6.2 shows the total pre-test holistic and analytic scores out of 100; and the scores in the coherence category of the study groups.

As shown in the table, participants in both groups received similar scores. The means, standard deviations, and minimum and maximum scores are all similar. This indicates that the general writing proficiency of both groups was approximately similar before the treatment group was taught and applied TSA. This similarity was presumed to be due to the random assignment of the participants to the control and treatment groups. On the other hand, this result also strengthens the reliability of the scoring, and suggests that the level of the participants in the study groups was not satisfactory according to the assessment standards in Libyan universities (excellent = 85-100; v.good = 75-

84; good = 65-74; pass = 50-64; and fail = below 50). The maximum scores of

the participants in both groups show that no individual received more than 65

(for more details see Appendix 5).

Table 6-2 A descriptive analysis of the holistic and analytic scores of both groups.

	Group	Analytic scoring/total	Analytic scoring / coherence	Holistic scoring
N	C	31	31	31
	T	32	32	32
Mean	C	54	10.9	52.39
	T	53.28	10.81	53.58
Mode	C	57	10	55
	T	50	12	50
Std. deviation	C	4.367	1.1061	4.402
	T	5.366	1.575	4.779
Minimum	C	43	9	40
	T	40	6	45
Maximum	C	65	13	59
	T	62	14	62

C = *control group.* T= *treatment group*

This descriptive analysis provides an initial idea about the two groups. The

results indicate that the groups were similar in terms of the students' writing

performance. However, this conclusion cannot be confirmed unless it is tested

statistically. An independent-samples t-test was conducted to find out if the

difference between the two groups was insignificant as hypothesised. Table

6.3 shows the comparison between the means and standard deviations of the

scores of both groups. The difference between the means of the two groups is

very small. In the analytic total scores the difference is 0.72 (1.35%); in the

coherence category it is 0.09 (0.8%); and in the holistic scores it is 2.45

(4.7%). The Independent-Samples t-test compared the mean score of the

control group to that of the treatment group, and no significant difference was found. The magnitude of the difference in the means (eta squared) was very small and the p-value was greater than the threshold value of 0.05, indicating that there was no significant difference between the means of the control and treatment groups. Therefore both groups were similar in writing proficiency before the treatment group were exposed to TSA.

Table 6-3 T-test results of the pre-test scores.

Type of Scoring	Analytic scoring/total		Analytic scoring/ coherence		Holistic scoring	
	Mean	SD	Mean	SD	Mean	SD
Control group	54	4.367	10.9	1.106	52.93	4.402
Treatment group	53.28	5.366	10.81	1.575	55.41	5.429
Difference	0.72		0.09		2.48	
Percentage	1.35		0.8		4.7	
p-value	0.56		0.739		0 .314	
Eta squared	0.005		0.001		0.016	

6.2.2 Analysis of trait-based pre-test results

The main aim of using this method of scoring is to focus on only one aspect of writing performance, allowing the assessment of coherence in the participants' essays. In this section, the non-parametric data obtained from the trait-based method of scoring is presented and analysed. The scale of this trait consists of 8 points or features, labelled a–h (see Appendix 3). Each feature has five degrees from 1 (strongly disagree) to 5 (strongly agree). The rater had to choose only one rating degree for each point on the scale. The results for each point are presented in Table 6.4.

(a) *The beginning section is effective in introducing the reader to the subject*:

This feature is used to evaluate the writer's ability to introduce the main idea of his/her essay to the reader. Table 6.4 shows that most participants in the control (67.8%) and treatment groups (71.9%) were able to introduce the subject effectively to the reader. Very few students from both groups failed to accomplish this goal. Students at this level (3rd year) ought to be familiar with the importance of placing the topic sentence in the beginning of the paragraph.

Table 6-4 Summary of the pre-test trait-based results

Features / Degrees		A	B	C	D	E	f	G	H	total
1 strongly disagree	C	0	0	0	0	1	0	1	0	**2**
	T	0	0	0	0	1	0	0	0	**0**
2 disagree	C	3	4	3	0	6	8	8	7	**39**
	T	3	4	2	2	2	6	11	4	**34**
3 undecided	C	7	10	11	13	5	3	12	8	**69**
	T	6	9	4	14	13	9	13	9	**84**
4 agree	C	14	15	14	17	14	16	10	12	**112**
	T	20	18	16	16	15	17	7	17	**126**
5 strongly agree	C	7	2	3	1	5	4	0	4	**26**
	T	3	1	3	0	1	0	1	2	**11**
Total	C	31	31	31	31	31	31	31	31	**248**
	T	32	32	32	32	32	32	32	32	**256**

C = *control group.* T= *treatment group*

(b) *The ideas in the essay are all very relevant to the topic*:

This point focuses on the relatedness of the subtopics (sentence topics) to the discourse topic (main topic) so as to make the text globally coherent. The results show that 17 (54.9%) participants from the control group and 19

(59.4%) from the treatment group succeeded in writing sentences relevant to the topic. These results indicate that about half of each group were unable to relate the sentence topics to the main topic, thus making their essays less coherent.

(c) *The ideas in the essay are well-related one to another*:

Assessment of this feature examines whether or not the subtopics (sentence topics) were related to each other. In other words, it traces the local coherence which could be realized by using the three types of topical progressions, PP, SP, and EPP. As shown in Table 6.4, 17 participants (54.9%) from the control group and 19 (59.4%) from the treatment group were able to relate the ideas to each other. It is obvious that both groups were similar regarding this feature.

(d) *Ideas mentioned are elaborated*:

This feature mainly focuses on the way participants develop and clarify their ideas by adding further information to those previously mentioned. It evaluates the topical progressions that make ideas more elaborate and clear. The results for the control group indicate that only 1 participant (3.2%) was rated with the highest degree and 17 (54.8%) were rated lower than that. The rest (41.9%) were not clear. Similarly, in the treatment group no one received the highest rating (5 strongly agree), 16 (50%) got the second highest (4 agree), and the rest were either unclear (43%) or completely failed (6.3%). Generally speaking, these results suggest that about half of the students in both study groups were not able to elaborate on or add more information to

their ideas. Instead they tended to present an idea and then repeat it without expanding on it.

(e) *The writer's overall point of view is clear*:

In terms of clarity, this point is used to evaluate the writer's consideration of the reader's expectations. The reader views a text as coherent when it conveys a clear sense of overall purpose. The results reveal that on the part of the control group, 12 participants (38.7%) failed to meet this objective. However, 19 participants (61.3%) succeeded in making their overall point of view clear. On the other hand, 3 participants from the treatment group (9.4%) failed to meet this objective. while 16 participants (50%) succeeded in making their overall point of view clear. For the rest (40.6) the ratings were unclear. Although there was a marginal difference between the two groups, it was not expected that this difference would be significant.

(f) *The division of paragraphs is justifiable in terms of content relevance*:

This feature concerns the student's ability to stick to only one idea in every paragraph. The results show that 11 participants in the control group (35.5%) failed to develop only one idea in each paragraph, while 20 participants (64.5%) succeeded in this. In the treatment group, however, 6 participants (18.8%) failed to develop only one idea in each paragraph, in addition to nine participants (28.1%) who were rated unclear whereas 17 participants (53.1%) were able to succeed. The groups are therefore considered similar in terms of this feature. Although third-year students had already been taught that each paragraph should develop only one idea, it seems that about the third of the

students started new paragraphs haphazardly, making the texts less coherent.

(g) *Transition between paragraphs is smooth*:

In order to give a free-flowing sense to the text as a whole, transitions between paragraphs need to be smooth. It appears from Table 6.4 that only 10 participants (32.3%) in the control group were, to some extent, able to fulfil this objective, while 9 participants (29%) failed and for12 (38.7%) this feature was not clear. The same can be said about the treatment group where 8 participants (25%) succeeded, 11(34.4%) failed and for 13 (40.6%) it was not clear in this respect. This result suggests that the majority of the participants were unable to proceed smoothly from one idea to another and thus make their texts coherent. This could be attributed partly to misunderstandings about the concepts of coherence and unity.

(h) *The ending gives the reader a definite sense of closure*:

The final paragraph of the essay should inform the reader that the discourse is about to reach its end. This could be achieved by using EPP to refer back to the main idea which was presented at the beginning of the essay. 16 participants from the control group succeeded in announcing to the reader that they were coming to a close. The rest, however, either failed completely (8 = 22.6%) or their conclusions were not appropriate (7 = 25.8%). Participants in the treatment group scored similar results: 19 (59.4%) were able to end their essays appropriately; 4 (12.5%) failed, and for 9 (28.1%) it was not clear.

Having presented the coherence trait results feature by feature, It is clear that most participants in both groups were rated with the fourth degree for most features. The frequency of the forth degree (4 agree) is 112 and 126 for the control and treatment groups respectively, whereas the third degree comes the second in terms of frequency of 69 and 84. This indicates that both groups were similar, and in terms of coherence their general level was average before the interventional programme. This finding corresponds to those obtained by the analytic and holistic scoring methods.

6.2.2.1 Mann-Whitney U test analysis of the trait-based scores

To confirm the similarity between the two groups, more statistical tests needed to be conducted. As a non-parametric alternative to the t-test (Cohen, Manion and Morrison, 2007), the Mann-Whitney U Test is used to test for differences between two independent groups. As mentioned above, the trait-based scores were ordinal (non-parametric) and therefore the best technique for the analysis of this type of data is the Mann-Whitney U Test. Table 6.5 shows a comparison between the results for the control and treatment groups feature by feature.

The test revealed no significant differences between the scores of the control and treatment groups for any of the features, as the probability values (p) are greater 0.05. In other words, no statistically significant difference was found in the scores of the control and treatment groups.

Table 6-5 Mann-Whitney U Test analysis of the pre-test trait-based results.

Features	Group	N	Mean rank	Z	P	R
A	C	31	32.97	- 0.453	**0.561**	0.06
	T	32	31.06			
B	C	31	31.88	-0.151	**0.880**	0.02
	T	32	32.31			
C	C	31	31.19	-0.373	**0.709**	0.05
	T	32	32.78			
D	C	31	33.97	-0.951	**0.342**	0.1
	T	32	30.09			
E	C	31	33.63	-0.742	**0.458**	0.01
	T	32	30.42			
F	C	31	34.05	-0.953	**0.340**	0.1
	T	32	30.02			
G	C	31	33.06	-0.481	**0.631**	0.06
	T	32	30.97			
H	C	31	30.97	-0.470	**0.638**	0.06
	T	32	33.00			

6.2.2.2 Calculating traits of coherence

After analysing the feature scores separately, it was considered useful to analyse the sums of these scores on the coherence scale in order to compare the two groups to show the extent to which the participants produced coherent essays in the pre-test. For every participant the ratings on the coherence scale were calculated to give an overall level of coherence. For instance, if a participant got the rating degree number 1 (strongly disagree) in all eight features then his/her total score would be 8 (1 x 8 features). Thus the lowest score should be 8 whereas the highest would be 40 (5 x 8). Table 6.6 shows the comparison of the total results for coherence scored by the control and treatment groups in the pre-test essays. In the control group the lowest score was 19 out of 40, whereas the highest was 36, the mean was 27.9, and the mode was 29. The treatment group recorded similar results. The lowest score

was 18, the highest was 38, the mean was 27.5, and the mode was 24. Most participants' scores were clearly above average (see raw data in Appendix 5), and the results presented in Table 6.6 indicate that the two groups were similar and the overall level of coherence in their writing was not satisfactory. An independent-samples t-test was conducted, and no significant difference was found between the scores of the two groups. The t-test analysis results gave a probability value of 0.726 which was greater than the threshold value of 0.05 with only a small effect size (eta squared = 0.002). Thus this result indicates that there was no evidence that the means of the two tests differed. In terms of coherence, these results reflect the similarity of the writing proficiency of the participants in the two groups before the treatment group was taught TSA.

Table 6-6 T-test result of the coherence trait

Group	N	Mean	SD	Mode	Minimum	Maximum	P-value	Eta squared
Control	31	27.9	4.67	29	19	36		
Treatment	32	27.50	4.4	24	17	36	0.726	0.002

The pre-test scores of the two groups obtained using the three types of scoring (analytic, holistic and trait-based scoring) have been presented and analysed in the form of percentages and frequencies; and then tested by using t-test and Mann-Whitney U tests in order to investigate whether or not there was any significant difference between the two groups. All results indicate that there was no statistically significant difference between the control group and the treatment group. These results suggest that the two groups were similar and no evidence were found to reject the null hypothesis. Thus students in both groups were similar in their writing proficiency at the

beginning of the study semester. More specifically, in terms of coherence, students in both groups were in the same level. Given their age, stage (3rd year) and major subject (English), this level seems unsatisfactory.

6.2.3 Topical structure analysis of the pre-test essays

6.2.3.1 Procedure

As mentioned in the literature review in chapters 2, 3 and 4, TSA is considered as an appropriate method for assessing and analysing coherence in writing. In this section the pre-test essays of the study groups are submitted to TSA in order to find out (a) if the two groups were similar in terms of the topical progressions used; (b) what the preferred types of topical progressions were; and (c) to give more information about the students' previous experience in relation to coherence in writing.

The topical structure analysis of the participants' essays was based mainly on Lautamatti's (1987) TSA following Schneider and Connor's (1990) guidelines. Schneider and Connor (1990: 427) formalized the following guidelines for identifying t-units and coding the three types of topic progressions:

Figure 6.1: Coding guidelines for topical structure analysis (Schneider and Connor (1990: 427)

T-Units (T)
1. Any independent clause and all its required modifiers.
2. Any non-independent clause punctuated as a sentence (as indicated by end punctuation).
3. Any imperative.
Parallel Progression (P)
1. Any sentence topic that exactly repeats, is a pronominal form, or is a synonym of the immediately preceding sentence topic.
2. Any sentence topic that is a singular or plural form of the immediately

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preceding sentence topic.

3. Any sentence topic that is an affirmative or negative form of the immediately preceding sentence topic (e.g., artists, no artists).

4. Any sentence topic that has the same head noun as the immediately preceding sentence topic (e.g., the ideas of scientists, the ideas of artists; the contributions made by scientists, the contributions made by artists).

Sequential Progression (S)

1. Any sentence topic that is different from the immediately preceding sentence topic, that is, not (1)-(4), or P. [for the purpose of this study unrelated sequential t-units are excluded because they do not contribute to coherence]

2. Any sentence topic in which there is a qualifier that so limits or further specifies an NP that it refers to a different referent (e.g., a nation; a very small, multi-racial nation, referring to two different nations).

3. Any sentence topic that is a derivation of an immediately preceding sentence topic (science, scientists).

4. Any sentence topic that is related to the immediately preceding sentence topic by a part-whole relationship (e.g., these groups, housewives, children, old people).

5. Any sentence topic that repeats a part but not all of an immediately preceding sentence topic (e.g., science and art, science, art).

Extended Parallel Progression (Ex)

Any sentence topic that is interrupted by at least one sequential topic before it returns to a previous sentence topic.

In the topical structure analysis of the pre and post-test essays of the two groups I adhered as closely as possible to Schneider and Connor's coding guidelines, by following these steps:

● every essay was read carefully to make sense of what it was about, i.e. to know its discourse topic.

● every essay was divided into t-units.

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● identifying the topics of each t-unit and underlining them.

● determining the topical progressions of t-unit topics.

● charting the topical progressions of topics for a visual representation of the types of progression employed in the essay.

● the frequency of each type of progression was computed for each essay and expressed as a percentage of the total number of t-units. Then these percentages were averaged across the essays of each group.

● T-test analysis was conducted to compare the pre-test essays of the two groups.

6.2.3.2 Analysis of essays

The topical structure analysis of the pre-test essays of the control group revealed that the participants' essays contained 619 t-units ranging from 12 to 23 per essay. On the other hand, the number of new topics was 222. This means that an average of 2.8 t-units was used to develop each new topic. As shown in Appendix 5, the percentages of topical progressions indicate that the participants in this group had relied heavily on parallel progressions (33.68%) whereas extended parallel progressions was the second most preferred type (23.14%) and sequential progressions were used least often in the essays (11.47). Similarly, the treatment group participants' essays contained 669 t-units ranging from 13 to 28 per an essay. In terms of new topics, the treatment group essays contained 230 new topics, which represents an average of 2.9 t-units per new topic. Again this group preferred the parallel progression (32.84%), whereas the extended parallel progression occupied

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second place (30.35) and the lowest proportion were sequential progressions (13.10%).

It is clear that the two groups were similar. However, in order to find out if the two groups were significantly different, an independent-samples t-test was conducted. The results of the t-test of the occurrence of PP and SP showed no significant difference between the two groups whereas there was a slight difference in the percentage of EPP (see Table 6.7). It seems that the treatment group used more EPP than the control group.

Table 6-7 T-test analysis of the pre-test essays of the two groups

Group	T-units		PP Percentage		SP Percentage		EPP percentage	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Control	19.97	4.159	33.68	15.46	11.47	7.12	23.14	10.83
Treatment	20.91	3.89	32.84	13.82	13.10	6.25	30.35	10.28
Difference	0.94		0.84		1.63		7.21	
Percent	4.7		2.56		14.2		31.16	
P-value			0.821		0.350		0.009	

To show how TSA was operationalized in this study, an example is given below of an analysis of a pre-test essay written by a student from the control group. The t-units were numbered (slashes are used to separate t-units), whereas the topical subjects of each t-unit are underlined. All of these elements were plotted on the graph shown in Figure 6.2 for a visual representation of the types of progressions used in the essay. In the diagram, the t-unit number appears to the left and the topic number appears to the right. Topical depth refers to the different topics introduced in every sentence. The arrows refer to the direction of the progression.

Essay A3

Television
(1) Firstly I will write about <u>television</u> in general way as the greatest discovery ever made by man,/**(2)** and as necessary thing we consider <u>it</u> as the main part of our house./

(3) <u>Television</u> is a piece of electronic equipment with a screen on which you can watch programmes with moving pictures and sounds./ **(4)** <u>Television</u> like almost everything else is not inherently bad or good;/**(5)** <u>it</u> can be good or bad.

(6) There is no doubt that <u>people</u> are more aware of the world around them than they were./**(7)** If you talk to a person from a rural area <u>you</u> will be astonished to hear him talking about such subjects as occupation of Iraq, the peace talk between Pales tines and Israel./

(8) <u>Many negative</u> aspects is in technology. /**(9)** <u>Television</u> is double-edged weapon that should be used carefully, used intelligently. /**(10)** <u>It</u> is used mindlessly./

(11) From psychologist side , <u>it</u> has helped in many ways to educate people and to provide a window on the world,/ **(12)** but I think that <u>the closeness</u> that television offers is not always a positive thing./ **(13)** <u>It</u> sometimes makes it difficult for people to distinguish between enemies and friends./

(14) <u>The major responsibly</u> is upon all parents to check what their children should watch and what they shouldn't./ **(15)** <u>They</u> should know to choose a good channel that good to develop our skills and enjoy our life in the best way.

Figure 6.2:The topical structure analysis of Essay A3.

T-Unit N0.	Topical Depth			Topic No.
1	Television			1
2	It			1
3	Television			1
4	Television			1
5	it			1
6	people			2
7	you			3
8	many negative aspects			4
9	Television			1
10	It			1
11	it			1
12	the closeness			5
13	It			5
14	the major responsibly			6
15	They			7
T-units	**Topics**	**PP**	**SP**	**EPP**
15	7	6 = 40%	2 = 13%	1 = 6.7%

It is obvious that the main topic (discourse topic) of this essay is 'the importance of television'. This can be understood from the title and the first

sentence. In this case 'television' or any of its semantic equivalents occupy the highest level of topical depth. This can be seen in the first five t-units (1-5) where the same theme or topic is repeated, representing parallel progression. 'Television' is then labelled as Topic 1. This topic is repeated in t-units 9-11; therefore they have the same topical depth and fall under the same line. There are also consecutive t-units that utilize PP. The gap between t-units 1-5 and 9-11 is occupied by three other different topics (6, 7, and 8). PP proceeds directly in t-units 1-5 then extends over t-units 6-8 to proceed again in 9-11. This type of progression is coded as extended parallel progression (EPP). On the other hand, the topics of t-units 12 and 15 are derived from the comments (rhemes) of the preceding t-units,10 and 13 respectively. These are the only incidences of sequential progression (SP) in this essay. Another example of PP appears between t-units 12 and 13. The topic of 11, 'the closeness', is repeated in 12 by using the pronoun 'it'.

The visual representation of the types of progression employed in the text above shows clearly how the ideas were developed. Figure 6.2 shows that the discourse topic is developed in 15 t-units in which 7 new topics are introduced. 8 t-units are devoted to developing only one topic, 'television'; whereas the other 7 t-units are devoted to developing the other 6 new topics. This indicates that the writer's strategy was to develop the ideas by repeating the same topic utilizing PP. This is why it can be seen in this essay that the predominant progression is PP (40% of the t-units). This, however, could create a sense of redundancy. On the other hand, the low occurrence of SP (13%) indicates a low level of coherence as established by Schneider and Connor (1990). The student writer employed SP only twice. This means that

he/she did not prefer to develop individual topics by adding details to an idea, which is considered "a requirement for good prose" (Connor and Farmer, 1990: 130).

The diagram also shows that there are some new topics (e.g. 6,7,and 8) that were not developed appropriately. They have no relation to the preceding or the succeeding topics. This could create a coherence break and does not help the reader to follow the development of the main idea (discourse topic).

6.2.4 Analysing the qualitative data

It should be remembered that the primary data resource in this study was collected by using an experimental design. However, the results obtained by experimentation would not be able to provide answers to questions of why or how the two groups were similar or different before and after the intervention. For this reason semi-structured interviews and observation were chosen as secondary sources of data. The main aim here was to investigate the effect of teaching TSA on the students' written performance (research questions 1 and 2). It was also intended that more light could be shed on the way the student writers coped with TSA as a learning and revision strategy (research question 3). More details concerning the interviews, interview questions, and observation are given in sections 5.6.2 and 5.6.3.

In this section the data related to the students' previous experience are presented and analysed. That is intended to give a general idea about the students' writing performance before the intervention (TSA). The main themes which discussed here are the students' views about writing, their conceptions of coherence, and their consideration of the reader.

6.2.4.1 Students' previous experience

The first topic that was discussed with every interviewee was the difficulties he/she encountered when writing in English. This topic was chosen to be the first in order to let the respondents express themselves freely and to talk about writing in general so as to generate other topics which were closely related to the research questions. All respondents stated that they always felt anxious and reluctant when they were asked to write in English. In addition to problems related to linguistic features such as grammar and vocabulary, the organization of ideas was one of the problems that all respondents mentioned. One respondent (S6), for instance, stated that although she liked English, she preferred to practise anything but writing. This was because she "didn't know how to arrange ideas in an English style". Surprisingly, four respondents referred to this problem even in their L1 (Arabic). They said that they always had this problem when they wrote in Arabic; they did not know how to organize ideas so they spread them out haphazardly. One of these respondents (S2) clarified this point, saying: "No body taught me how to organize my ideas in Arabic. And now, in English, I don't focus on anything rather than grammar and spelling." It was obvious that many factors contributed to the anxiety of these students when they wrote in English. Probably one of these factors was the problem of how they should organize their writing. In order to investigate this point, respondents were asked about their conceptions and understanding of 'coherence' before they had been taught TSA.

6.2.4.2. Students' conception of coherence

As a teacher-researcher, I noticed that most students in both groups did not have clear ideas about the concept of coherence in writing. When they were asked, their answers were usually about the lexical meaning of this word or its equivalent in Arabic. In the interviews, all respondents agreed about their lack of a clear picture of the concept of coherence before they had been taught how to apply TSA. This corresponds with the findings of Lee (2002), whose subjects raised the same point. On the other hand, the interviewees admitted that teachers always instructed them to be coherent when they wrote but they did not know how to be coherent; furthermore they were unable to differentiate between coherence and unity (as discussed in Chapter 3). Respondent S4, for instance, explained this point as follows:

> "As a matter of fact the meaning of 'coherence' was not as clear as now. For me, it was similar to 'unity'. ... I mean, to write about the same topic and not about many topics at the same time. But now I realized that that was not correct" (translated from Arabic by the thesis author)

In other words students either did not know exactly what the concept of coherence meant or thought that it was a synonym of 'unity'. This was reflected in their pre-test essays where the most prominent type of progression was PP (see the previous section 6.1.3.2). The excessive use of this progression indicates that students were struggling to write about only one topic in realizing the unity in their essays; but this strategy drove them to redundancy.

Moreover, some respondents raised another important point related to coherence. They argued that, although their teachers always stressed the importance of coherence during writing lessons, they did not consider this

point when they assessed students' writing., because, for example, "grammar, vocabulary and spelling are the most important factors that make you deserve high marks" (S5) . Generally speaking, before the intervention, all respondents either misunderstood the concept of coherence in writing or did not know about the practical procedures necessary to make their texts coherent.

6.2.4.3. Considering the reader

One of the cultural components likely to cause different rhetorical styles in different societies is related to the ways in which people in different cultures attach varying degrees of responsibility to the writer and the reader in the act of communication. Hinds (1987) maintained that some languages, such as English, attach greater responsibility to the writer (writer-responsibility) while others, like Japanese and Arabic, attach greater responsibility to the reader (reader-responsibility). In writer responsible languages, it is the responsibility of the writer to communicate effectively by satisfying the reader's expectations; whereas in reader-responsible languages the reader is more responsible for effective communication.

With respect to this point, it seems that the interviewees were not aware of the importance of considering the reader's expectations when writing in English. As a matter of fact all interviewees stated that before attending this course they did not think about readers, let alone English speaking readers. One of the interviewees (S2) concluded: "I never thought about the person who is going to read my composition. I always write to be marked by the teacher." It is apparent that none of the interviewees were aware of the importance of satisfying the expectations of their presumed readers (English native

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speakers) who expect to read texts that are organized according to their conventions.

6.2.5 Summary

The pre-test results of the two groups obtained by the three types of scoring (analytic, holistic and trait-based scoring) have been presented and analysed in form of percentages and frequencies; then tested by the appropriate statistical tests in order to investigate whether there were any significant difference between the two groups. The results indicate that there was no statistically significant difference between the control group and treatment groups. This suggests that the two groups were similar and no evidence was found to reject the null hypothesis. Apparently the writing proficiency of the participants in both groups was similar. More specifically in terms of coherence, students in both groups were at the same level, but given their age, stage (3rd year) and major (English), this level seems unsatisfactory.

Moreover, the students' pre-test essays were analysed according to TSA procedures. The results of the two groups were compared and the pre-test essays were similar in terms of the usage of topical progressions. Results showed that PP was the most preferred type of progression, EPP the second most preferred, and SP was used least in the essays. This suggests that the pre-test essays of both groups were not locally coherent because the low percentages of SP led to the production of ideas which were not developed properly but repeated excessively, which is a pattern likely to lead to redundancy.

On the other hand, the general results of analysing the data collected by qualitative interviews and the researcher's observation reveal that before the teaching of TSA to the treatment group, students focused on linguistic features such as grammar, vocabulary and spelling. They also had no clear idea about the concept of coherence which is a crucial rhetorical convention expected by English-speaking readers. This could be attributed to the lack of concrete and practical instruction that would help them construct their conceptions about coherence. Apparently, students' concentration on linguistics and the sentential level was encouraged by their teachers' methods of assessment which were based on these aspects more than rhetorical features.

Accordingly, any improvements detected in the written performance of the participants in the treatment group after their learning and applying TSA could be attributed to this technique. To investigate the impact of teaching TSA on the treatment group, both groups were post-tested after one semester during which TSA was explicitly taught to the treatment group whereas the control group attended their traditional course.

6.3 Impact of TSA on students' writing: post-test analysis

This section investigates the effect of teaching TSA on the participants' writing performance in the treatment group. The post-test essays of both groups were analysed to find out if the two groups were still similar or changes had taken place after the treatment group had been taught TSA. Any such changes were determined by comparing the post-test results of both groups obtained by the same three methods of scoring. Then the post-test essays were analysed and compared according to TSA procedures. The null hypothesis was that 'there

was no significant difference between the means of the post-test results of the control and treatment groups.' The level of significance used was 0.05, the value usually used in the social sciences. Moreover, this section also investigates the participants' views, opinions, and new experiences they acquired after they had learned how to apply TSA

6.3.1 Analysis of the analytic and holistic post-test results.

In this section the numerical data obtained by the holistic and analytic approaches of scoring are analysed. Following the assessment standards used in Libyan universities, the total scores are out of 100. For the analytic scoring, the total score (100) is divided into three categories (see Appendix 2). The total score for organization and coherence category is 20, and the scores for other categories were not analysed. Table 6.8 shows the total post-test results for the holistic and analytic scores (out of 100); and the coherence category scoring of the study groups.

The descriptive statistics shown in Table 6.8 indicate that the participants in the treatment group recorded higher scores than their counterparts in the control group (for more details, see raw data in Appendix 6). The difference is obvious in the means, modes and standard deviations of the scores obtained by the analytic and holistic methods of scoring. As shown in Table 6.9, the difference between the means of the two groups seems high. In the analytic total scores the difference is 5.95 (10.88%); in the coherence category it is 1.53 (13.94%); and in the holistic scores it is 9.29 (17.37%). In order to check if these results indicate that the participants in the treatment group achieved significant progress which can be then attributed to the implementation of TSA, T-test analysis was carried out.

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Table 6-8 Descriptive analysis of the post-test results of the two groups.

	Group	Analytic scoring/total	Analytic scoring/ coherence	Holistic scoring
N	C	31	31	31
	T	32	32	32
Mean	C	54.68	10.97	53.68
	T	60.63	12.50	62.97
Mode	C	55	10	50
	T	55	12	65
Std. deviation	C	5.618	1.378	4.629
	T	8.530	1.666	7.373
Minimum	C	43	8	40
	T	40	8	45
Maximum	C	65	13	59
	T	77	15	77

An Independent-samples t-test was calculated comparing the mean scores of the control group and treatment group. A statistically significant difference was found between the post-testing analytic and holistic scores of the control group and their counterparts in the treatment group. The magnitudes of the differences in the means (eta squared) were large and the p-values far lower than the threshold value of 0.05. This means that, in general, the participants in the treatment group achieved considerable improvements after they had been taught TSA. Since both groups were exposed to the same instruction except that the treatment group was taught TSA, the progress achieved by the treatment group can be considered as an effect of the teaching of TSA.

Table 6-9 T-test analysis of the post-test results of both groups

Type of scoring	Analytic Scoring/total		Analytic scoring /coherence		Holistic scoring	
	Mean	SD	Mean	SD	Mean	SD
Control group	54.68	5.618	10.97	1.378	53.68	4.63
Treatment group	60.63	8.530	12.50	1.666	62.97	7.37
Difference	5.95		1.53		9.29	
Percentage	10.88		13.94		17.3	
p- value	**0.002**		**.000**		**.000**	
Eta squared	.14		.2		.35	

6.3.2 Analysis of trait-based post-test results

In section 6.2.2, the aims and components of the trait-based scale were presented; and the pre-test results were analysed. In this section the post-test results of each point on the scale are presented below followed by the total results for the whole scale. This is to find out if there is a significant difference between the two groups.

Table 6-10 summary of the post-test trait-based results.

features degrees		A	B	C	d	E	F	G	H	total
1strongly disagree	CG	0	0	0	0	1	1	0	1	**3**
	TG	0	0	0	0	0	0	0	0	**0**
2 disagree	CG	5	7	5	2	12	10	11	6	**58**
	TG	3	1	0	0	3	0	2	1	**10**
3 undecided	CG	15	11	8	12	4	3	6	9	**68**
	TG	13	7	5	5	8	10	9	4	**61**
4 agree	CG	9	11	15	16	12	15	13	13	**104**
	TG	9	15	20	21	17	18	14	19	**133**
5 strongly agree	CG	2	2	3	1	2	2	1	2	**15**
	TG	7	9	7	6	4	4	7	8	**52**
Total	CG	31	31	31	31	31	31	31	31	**248**
	TG	32	32	32	32	32	32	32	32	**256**

(a) *The beginning section is effective in introducing the reader to the subject*: This feature evaluates the writer's ability to introduce the main idea of his/her essays to the reader. Table 6.10 shows that 11 (35.5%) participants from the control group and 16 (50%) participants from the treatment group were able to introduce the subject effectively to the reader. Very few students from either groups failed to accomplish this goal. It seems that there is a slight difference between the two groups but it is not expected to be significant. As stated earlier, students at this level (3rd year) are familiar with the importance of stating the main idea of the essay in the beginning part.

(b) *The ideas in the essay are all very relevant to the topic*:

This point focuses on the relatedness of the subtopics (sentence topics) to the discourse topic (main topic) in making the text globally coherent. The results show that the two groups differed regarding this feature. 24 (75%) participants from the treatment group succeeded in writing sentences relevant to the main topic, whereas only 13 (42%) participants from the control group were rated with the fourth and fifth degrees (agree and strongly agree).

(c) *The ideas in the essay are well-related one to another*:

This feature is used to examine whether or not the subtopics (sentence topics) were related to each other. In other words, it traces the local coherence which can be realized by using the three types of topical progressions (PP, SP, and EPP). As shown in Table 6.10 most of the participants (27 = 84.4%) in the treatment group were rated with the fourth and the fifth degrees and none with the first and second degrees. The control group, however, were rated lower. Only 18 (58.1%) participants were able to

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relate the ideas to each other; whereas 13 (41.9%) participants were not clear, and five (16.1%) participants completely failed. Regarding this feature, it is apparent that the treatment group achieved more progress than the control group.

(d) *Ideas mentioned are elaborated*:

This feature mainly focuses on the way participants develop and clarify their ideas by adding more pieces of information to the previously mentioned ones. It is used to evaluate the topical progressions that make ideas elaborate and clear. The results for the treatment group indicate that 27 participants (84.4%) wrote well elaborated ideas; and only 5 participants (15.6%) were unclear. conversely, only sixteen (51.6%) participants from the control group were rated at the fourth degree (agree) and only one the fifth degree; whereas 12 (38.7%) were rated unclear, and two participants (6.3%) failed to elaborate their ideas. Concerning this feature the results show a remarkable difference in the achievements of the groups. While most of the treatment group were able to elaborate and expand on their ideas effectively, only about half of the control group succeeded in achieving this objective.

(e) *The writer's overall point of view is clear:*

In terms of clarity, this point is used to evaluate the writer's consideration of the reader's expectations. The reader views a text as coherent when it conveys a clear sense of overall purpose. The results reveal that, on the part of the treatment group, 21 participants (65.6%) succeeded in making their overall point of view clear. The rest (25%) were unclear and 3 participants (9.4%) failed to meet this objective. The results of the control group were not

similar. Only 14 participants (45.2%) succeeded to make their overall point of view clear; 4 (12.9) were unclear, and 13 participants (41.9%) failed completely.

(f) *The division of paragraphs is justifiable in terms of content relevance*:

This feature relates to the student's ability to stick to only one idea in every paragraph. The results show that, in the treatment group, 22 participants (68.8%) succeeded; and ten participants (31.3%) were not clear. It appears that the participants in the treatment group achieved progress in the post-test essays. They were more aware of the way they should start a new paragraph. This situation is different in the control group, where only 17 participants (54.9%) from this group were able to fulfil this feature, while 11 (35.5%) failed to develop only one idea in each paragraph, in addition to 3 participants (9.7%) who were unclear.

(g) *Transition between paragraphs is smooth*:

In order to give a free-flowing sense to the text as a whole, transitions between paragraphs need to be smooth. It appears from Table 6.10 that 21 participants (65.7%) from the treatment group were able to fulfil this objective, while 2 participants (6.3%) completely failed and 9 (28.1%) were not clear. In the control group, however, only 14 participants (45.1%) were able to fulfil the objective whereas 11 (35.5%) completely failed and 6 (19.4%) were not clear. These results show that the participants in the treatment group obtained higher ratings than their counterparts in the control group. This improvement was presumed to be attributed to the effect of the explicit teaching of TSA to this group.

(h) *The ending gives the reader a definite sense of closure*:

The final paragraph of an essay should inform the reader that the discourse is about to reach its end. This could be achieved by using EPP to refer to the main idea which was presented at the beginning of the essay. As shown in Table 6.10, the majority (27 = 84.4%) of the participants in the treatment group succeeded in announcing to the reader that they were coming to a close. Only one participant (3.1%) failed in this whereas 4 participants (12.5%) were unclear. The results for the control group were again different. About half of the group (15 = 48.4%) were rated with the fifth and the fourth degrees whereas 6 participants failed completely (22.6%) and 9 participants (29.4%) were not clear in their conclusions.

6.3.2.1 Mann-Whitney U test analysis of the trait-based scores

It has been mentioned that the raw data obtained using the trait-based method of scoring indicate that the treatment group recorded higher scores than the control group. It seems that the participants in the treatment group were now aware of the importance of coherence in their writing. However, in order to ensure that there was a significant difference between both groups, a statistical test needed to be conducted. As shown in the previous section (6.2.2.1), the most suitable test is the Mann-Whitney U test, and the results of all the comparisons for all features are shown in Table 6.11. The results indicate that the two groups significantly differed for all features, except that related to introducing the main idea of the essay in the beginning part.

Table 6-11 Mann-Whitney U Test analysis of the trait-based scores

Features	Group	N	Mean rank	Z	P	R
A	C	31	28.63	-1.528	0.127	.2
	T	32	35.27			
B	C	31	24.98	-3.153	0.002	0.4
	T	32	38.80			
C	C	31	26.66	-2.520	0.012	0.3
	T	32	37.17			
D	C	31	25.90	-2.949	0.003	0.4
	T	32	37.91			
E	C	31	26.97	-2.284	0.002	0.3
	T	32	36.88			
F	C	31	27.61	-2.037	0.042	0.3
	T	32	36.25			
G	C	31	26.08	-2.663	0.008	0.3
	T	32	37.73			
H	C	31	24.85	-3.293	0.001	0.4
	T	32	38.92			

6.3.2.2 Calculating traits of coherence

Having analysed the scores for the eight features separately, the following analysis sums the scores on the coherence scale in order to compare the two groups to show the extent to which the participants produced coherent essays in the post-test after the treatment group had been taught TSA for one semester. To determine the general level of coherence for each group, the ratings for every participant the on the coherence scale were calculated to give one value to represent his/her level of coherence (the same calculation as in the previous section: 6.2.2.2). Table 6.12 compares the total scores of coherence recorded by the control and the treatment groups in the post-test essays. The lowest score recorded in the control group was 18 out of 40 while the highest was 38, the mean was 26; and the mode was 28. The values in treatment group, however, were higher. The lowest was 22 while the highest

was 39; the mode was 32 and the mean was 31.1. Obviously the scores of most participants were above average (raw data tables are displayed in Appendix 6). The results presented in Table 6.12 indicate that the two groups were different, and in order to find out if the difference between the two groups was significant, an independent-samples t-test was conducted. The t-test analysis results gave a probability value of .0.001 which was much less than the threshold value of 0.05 with a small effect size (eta squared = .002). This result suggests that there was a statistically significant increase in the mean scores in the post testing of the treatment group regarding the coherence trait. These results provide evidence to reject the null hypothesis, and indicate a significant improvement in the treatment group. This improvement could be reasonably attributed to the teaching of TSA.

Table 6-12 T-test analysis of the coherence trait.

Group	N	Mean	SD	Mode	Minimum	Maximum	P-value	Eta squared
Control	31	26.26	5.47	28	18	38		
Treatment	32	31.1	4.20	32	22	39	**0.001**	0.002

6.3.3 Topical structure analysis of the post-test essays

Following the same procedures applied in section 6.2.3, the post-test essays written by the participants in both groups were analysed, by conducting a topical structure analysis, in order to show any changes in the post-test essays of the treatment group due to their knowledge of TSA which might lead them to get higher scores. This section thus looks for tangible or concrete factors which rendered the written products by the participants in the treatment group more coherent.

6.3.3.1 Analysis of essays

The topical structure analysis shows that the post-test essays of the two groups contained almost the same number of t-units but there were differences in the numbers of new topics. On average, the control group essays contained 7.4% more new topics than those of the treatment group. This suggests that the treatment group used more t-units per each new topic. In fact, the treatment group used an average of 2.14 t-units to develop a single new topic compared to the control group's 1.9 t-units. On the other hand, the percentages of PPs and SPs were higher in the treatment group essays whereas the percentages of EPPs were almost the same.

The results of an independent-samples t-test analysis (Table 6.13) indicate that there is a significant difference between the mean frequencies of PPs and SPs used by the two groups. The percentages of PPs and SPs were higher in the post-test essays of the treatment group than those of the control group, with percentage differences of 28.16% for PP and 40.67% for SP. However, there was no significant difference in EPPs between the two groups.

Table 6-13 T-test analysis of the post-test essays of CG and TG

Post-test / Group	T-units		PP percentage		SP percentage		EPP percentage	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Control	18.10	3.187	20.24	9.97	18.22	9.40	24.16	8.80
Treatment	18.03	3.277	25.94	8.64	25.63	10.56	24.08	10.30
Difference	0.07		5.7		7.41		0.08	
Percentage	0.39		28.16		40.67		0.33	
P-value			0 **.018**		0.**005**		0.**976**	

These results suggest that while the treatment group essays still contained similar number of topical progressions, the control group essays continued to rely on using more PPs and EPPs and fewer SPs.

To show how TSA was operationalised in this study, the following shows an analysis of a post-test essay written by a student from the treatment group. The t-units were numbered and separated by slashes, whereas the topical subject of each t-unit was underlined. All these elements were plotted on a graph shown in Figure 6.3 to give a visual representation of the types of progressions used in the essay. In the diagram, the t-unit number appears to the left and the topic number appears to the right. The topical depth refers to the different topics introduced in every sentence. The arrows refer to the direction of the progression.

Essay B11

My marriage
(1) I hope that <u>my marriage</u> will be successful./(2) <u>This</u> is the will of Allah, /(3) but I think a <u>successful marriage</u> is a result of good choice./(4) <u>Choosing</u> the husband is the first step to the happy marriage./(5) <u>Good choice</u>, according to me, means to marry the man who has some things similar to me./(6) <u>Some of these things</u> are age, level of education, and socioeconomic background./

(7) Firstly, <u>the age</u> of my husband should be the same as my age./(8) That is because <u>marriage</u> between two people who are different in age will not be successful./ (9) <u>They</u> may have different ideas, styles and way of looking to life./ (10) But if they are the same age <u>they</u> have the same ideas and thoughts./ (11) <u>Marriage</u> will be more successful if the wife and husband have the same style and view ./

(12) Secondly, <u>my marriage</u> will be more successful if my husband has a high level of education like my level./ (13) <u>Level of education</u> helps us to get work easily and have a good family./(14) <u>It</u> also helps us understand how life is going and how to grow our children./(15) <u>Low level</u> of education usually cannot make have good children and don't know how to solve their problems./
(16) Thirdly, <u>children</u> need enough money to grow in a nice environment and go to good school. / (17) Therefore <u>my children</u> should not grow in a poor family./ (18) <u>Our marriage</u> will not be successful if we cannot provide the essential things to us and our children./

(19) Finally, in order to have a successful marriage, <u>I and my</u> husband should be from the

same social society./ (20) <u>We</u> should have the same habits and religion and culture./(21) <u>Differences</u> in these things may lead to divorce /

(22) Thus, <u>marriage</u> is a great project which must be based on a good choice.

This essay is taken as example of the post-test essays written by the participants in the treatment group. The discourse topic could be easily elicited by a quick reading of the title and the whole text. It is 'how marriage can be successful'. Thus 'marriage' or any of its semantic equivalents (other nouns or pronouns) appear at the highest level of the topical depth. Therefore the writer repeated 'marriage' after every elaboration of any of the other sub-topics. For example, t-units 5-7 were used to develop 3 new sub-topics by employing SP. This is because each one of these sub-topics was derived from the comment (rheme) of the preceding one. When these subtopics were exhausted, the writer referred back to the main idea by repeating 'marriage' in t-unit 8, thus creating an EPP. Again the same thing was repeated from t-units 8 to 11 and 12 to 18. Similarly, in t-units 19-21, two sub-topics were developed by using SP and then to end the essay, the writer referred back again to the main topic by mentioning 'marriage' in t-unit 22, thus employing an EPP.

Figure 6.3 Topical structure analysis of Essay B11

T-Unit N0.	Topical Depth				Topic No.
	1	2	3	4	
1	My marriage				1
2		This(success)			2
3	Successful marriage				1
4		Choosing			3
5		Good choice			3
6			Some of these		4
7				Age	5
8	marriage				1
9		They			6
10		They			6
11	Marriage				1
12	My marriage				1
13		Level of education			7
14		it			7
15		Low level			8
16			Children		9
17			My children		10
18	Our marriage				1
19		I and my husband			11
20		We			11
21			Difference		12
22	Marriage				1

T-units	Topics	PP	SP	EPP
23	13	7 = 30.4%	9 = 39	5= 21.7

To sum up, in this essay the predominant progression is SP (9 = 39%) whereas the second most used type of progression is the PP (7 = 30%) which was used to emphasise topics such as in 13-15. The least used progression is the EPP (5 = 21.7). Such usage of the three types of progressions indicates that the writer was aware of the function of each type and was able to manipulate each appropriately in emphasising and elaborating on the individual ideas. This was done smoothly with almost no deviation from the main topic.

6.3.4 Analysis of qualitative data

The quantitative data analysis indicates that the treatment group achieved significant progress after they had been taught TSA. The participants in the

treatment group produced essays with higher levels of coherence. In order to understand what had happened and how the participants in the treatment group viewed and used TSA, 6 students from the treatment group were interviewed. The interview data relevant to this section are discussed below.

6.3.4.1 Students' awareness of coherence

In Section 6.2.5 it was mentioned that students were not able to articulate a clear concept of coherence before they had been taught TSA. Their rather vague conceptions of coherence, however, changed after they had learned and used TSA. In general all respondents were able to construct a clearer perspective on coherence.

> …now I understand, from the very beginning, that I have to arrange my ideas and sentences around the main topic and relate them to each other. Now I understand that it is not a matter of writing anything but it is something like a craft or drawing something nice …I mean there should be a harmony and smoothness. (S 5, translated from Arabic by the thesis author)

This idea was mentioned by all respondents in different ways. They all felt that their awareness of coherence and its importance had been raised. One of the respondents (S 3) stated that knowing the lexical meaning of 'coherence' and listening to the teachers' instructions "without any practical and tangible means did not help me to produce coherent text". She added that "TSA, as a technique, represented this practical and tangible means which helped me to understand the concept of coherence and consider it in all writing stages".

As a teacher-researcher, I observed that at the beginning of the semester, students in both groups were not interested in pair or group work. They were also not interested in seeking feedback from the peers. They preferred to ask the teacher about linguistic issues such as spelling, grammatical structures or

punctuation. Students were not familiar with the process approach; they did not manipulate writing strategies such as planning or clustering. This could be due to the influence of traditional approaches which focus on form. Moreover, when they started the study, students in both groups preferred to write their essays at home, which something that was not observed so much in the TG after they had practised TSA. Perhaps students in the TG felt more secure among their peers in the classroom and sought their feedback. They also sought feedback from the teacher. They would ask questions such as: 'where should I put this sentence, before this or after that'? 'Is this sentence relevant or not?' 'How do you see this diagram?' Whereas their counterparts in the CG still preferred to write their compositions at home so as to have more time to check grammar and other linguistic features and to choose the appropriate vocabulary.

I also noticed that students in the TG would use more paper and produce more drafts of their work. Some of them drew lines, circles, arrows and other shapes as part of their planning for writing and gathering ideas. All of these activities, which were rarely found in the CG, indicate that students were aware of the importance of producing well organized texts.

The positive changes in the students' conceptions of coherence had probably raised their awareness and made them produce better and more coherent texts that deserved higher marks in the post-test essays as shown in this and the next section. This awareness can be seen to be reflected in the post-test essays where the percentages of sequential progressions used increased whereas the percentage of parallel progressions decreased (see Chapter 4).

6.3.4.2 Considering the reader

It has been mentioned that, before the teaching of TSA, the students' main focus was on linguistic features whereas questions of the reader did not attract their attention. However, after the teaching of TSA and its underlying theory to the treatment group, the interviewees acknowledged that their attention had turned to the reader in considering rhetorical features such as coherence and topical development which would contribute to satisfying the reader's expectations. In other words, the prevalent feeling now was that rhetorical conventions were as important as linguistic features. For writers to be understood and appreciated by their readers, they should produce globally and locally coherent texts. This change in the students' understanding and awareness was reflected on their post-test essay scores and the TSA of the post-test essays. As shown in this chapter in sections 6.3.1-6.3.3, the treatment group recorded significant progress in the post-test essays whereas the control group did not. In terms of topical progressions, the treatment group employed more balance in the three types of progression, so that in the post-test essays the frequency of sequential progressions increased whereas that of PPs decreased. This indicates that the post-test essays were more coherent, as maintained by Schneider and Connor, 1990. Moreover, as teacher-researcher I noticed that most of the students in the treatment group had changed their writing strategies, following the teaching input. They became familiar with working in pairs and asking for feedback. They tended to ask their peers or the teacher about the comprehensibility of their writing. This might show the students' awareness of audience considerations (Leki, 1992). They also tended to spend more time on the planning and revising stages of

their essay writing. These changes in writing strategies were not observed in the control group in spite of their exposure to the same instruction and tasks..

From the experience I have gained as an EFL student and a teacher, I would argue that Libyan students usually do not like to show their writing to their colleagues to be read or assessed. This might be due to cultural factors, and therefore the changes been observed in the TG can be considered significant.

6.3.5 Summary

The post-test results of the two groups were compared using the appropriate statistical tests in order to find out if they were significantly different. The results indicated that there was a statistically significant difference between the control and treatment groups. However, when analysing the trait-based scoring features in separate, no significant difference was found in only one of the features (a), but this did not affect the general results relating to the scale of coherence which revealed a significant difference between the two groups.

To sum up the statistical results have provided sufficient evidence to conclude that the improvement achieved by the treatment group in their post-test essays was due to the explicit teaching of TSA.

With respect to the topical progressions used by the two groups in the post-test essays, the results indicate that the treatment group used higher percentage of PPs and SPs whereas the two groups were almost the same in the percentage of EPPs used. On the other hand the differences in the topical progressions used were significant in the control group: the EPP was the most prominent progression followed by PPs, and lastly SPs, while the situation was different on the part of the treatment group as mentioned previously.

Participants in the treatment group produced more coherent texts using more of the three types of topical progressions with no significant differences in the frequencies of each. This higher and balanced number of progressions enabled the post-test essays of this group to receive higher scores when they were rated by three English speaking raters. These findings are in line with those of Schneider and Connor's study (1990) which found that highly rated essays used a high proportion of sequential progressions and extended parallel progressions which helped in maintaining the essay's focus on its main discourse topic. The present findings are also comparable to those of Burneikait´e and Zabili´ut´e (2003), who reported that lower level writers over-used parallel progressions whilst writers at higher levels used a balance between parallel and extended parallel progressions.

In addition to the findings obtained from the quantitative data, the qualitative data analysis revealed that after the teaching of TSA to the treatment group, various changes occurred. Firstly, students' awareness of coherence and its importance was raised. Students became more aware that accuracy is not the only characteristic of good writing. Secondly, they became more aware of their audience. They realised that writing is a mode of communication between the writer and the reader, and therefore the reader needs a text that matches his/her expectations. Thirdly, all these kinds of awareness led the students to spend more time on the revising stage and led them to engage positively in pair work.

6.4 Comparison of the writing performance of the two groups

In sections 6.2 and 6.3 of this chapter the students' writing performance and experience were investigated. The results of this investigation revealed that

the participants in the study groups showed similar trends in writing performance and proficiency before TSA was introduced to the treatment group. After learning and applying TSA for twelve weeks, the treatment group showed significant improvements in terms of coherence. This progress is attributed to the effect of teaching TSA to the treatment group. In order to verify these results, two further investigations needed to be conducted. Firstly, the pre- and post-test results of the control group were compared to check whether or not this group had achieved any progress. Secondly, the pre- and post-test results of the treatment group were compared to determine any significant progress was made which can support the previous results.

This section is divided into two sub-sections. The first compares the pre- and post-test results of the control group and the topical structures used in their essays. The second sub-section then compares the pre- and post-test results of the treatment group and the topical structures in their essays. The qualitative data collected from the researcher's observation and interviews are cited where relevant.

6.4.1 Comparison of the pre- and post-test results of the CG

In this section the pre- and post-test results of the control group are compared following the same procedures applied in the previous sections 6.2 and 6.3 where the pre- post-test results respectively were presented. The descriptive statistics of these results can be found in Appendix 7.

6.4.1.1 Comparison of the analytic and holistic results

The pre- and post-test results of the control group were analysed in terms of frequencies and percentages. The descriptive analysis (see Appendix 7)

indicates that the pre-test and post-test scores of the control group were similar. As shown in Table 6.14, the differences between the pre- and post-test results were minimal. For the analytic results, the difference between the means of the pre and post-test results was 0.68 (1.26%); in the coherence category it was 0.07 (0.64%) while the difference between the means of the holistic scores was 0.75 (1.4%). Marginal improvements did occur in the post-test means, but were not statistically significant.

A paired-samples t-test was chosen to carry out this comparison, between the pre- and post-test results of the same group. The null hypothesis was that 'there was no significant difference between the means of the pre- and post-test results of the control group'. The level critical of significance used was again $p = 0.05$, and which is the value normally used in the social sconces.

No significant differences were found between the pre-test and post-test scores of the control group. The magnitudes of the differences in the means were small in the analytic results and moderate in the holistic results. As shown in Table 6.14, the values of p were greater than the threshold value of 0.05. This t-test result indicates that there was no significant difference between the means of the pre- and post-test scores obtained from the analytic and holistic scoring methods.

Table 6-14 T-test analysis of the pre and post-test results of the control group.

Type of scoring	Analytic scoring/total		Analytic scoring / coherence		Holistic scoring	
	Mean	SD	Mean	SD	Mean	SD
Pre-test	54	4.367	10.9	1.106	52.93	4.402
Post-test	54.68	5.618	10.97	1.378	53.68	4.629
Difference	0.68		0.07		0.75	
Percentage	1.26		0.64		1.4	
p- value	**0.524**		**0.823**			**0.069**
Eta squared	**0.0137**		**0.0017**		**.1062**	

6.4.1.2 Comparison of the trait-based results

In Section 6.2 the trait-based pre-test results of the control group were presented and analysed, while in Section 6.3, analysis of their post-test results was followed by a calculation of the results of all features on the scale. In this section the pre and post-test results for each point on the scale are analysed and compared followed by a comparison of the total results for the whole scale to determine out if the two sets of results significantly differ.

It was clear that most participants were rated with the fourth degree (agree) for all features (see Appendix 7). In the pre-test, the frequency of the third degree was 69, whereas the frequency of the fourth degree was 112 and the fifth degree 26. Likewise, in the post-test, the frequency of the third degree was 68, the fourth 104, and the fifth. This indicates that there might be a slight difference between the pre- and post-test results. In order to check if this difference is significant a statistical test needed to be conducted. In this sort of comparison where the data are non-parametric and the comparison is between sets of results for the same group, the Wilcoxon signed rank test is the most appropriate statistical test (Cohen, Manion and Morrison, 2007;

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Larson-Hall, 2010) As a non-parametric alternative to the paired-samples t-test, the Wilcoxon signed rank test is used with repeated measures and does not compare means but converts the scores to ranks which are compared in the two sets of measurements.

A Wilcoxon signed rank test was calculated comparing the pre- and post-test results for each feature. As shown in Table 6.15, the results reveal that the differences between the pre- and post-test results were significant ($p < 0.05$) for only two features: '*The beginning section is effective in introducing the reader to the subject*'; and 'the *writer's overall point of view is clear'*. In both features there are decreases in the post-test median scores compared to the pre-test. This result could be attributed to the students' shift of focus from one aspect of coherence to another while they were approaching the end of the semester, due to the lack of a practical and tangible technique.

Regarding the other features, the results indicate that there was no statistically significant difference between the pre- and post-test results. This suggests that the control group participants were not able to record significant progress regarding these features in their writing.

Table 6-15 Wilcoxon signed rank test of the CG pre- and post-test trait-based results.

Features	Group	N	Median	Z	P	R
A	pre	31	4.00	-2.827	0.005	0.42
	post	31	3.00			
B	pre	31	4.00	-.985	0.325	0.16
	post	31	3.00			
C	pre	31	4.00	-.164	0.325	.027
	post	31	4.00			
D	pre	31	4.00	-.655	0.513	0.11
	post	31	4.00			
E	pre	31	4.00	-2.283	0.022	0.40
	post	31	3.00			
F	pre	31	4.00	-1.213	0.225	0.197
	post	31	4.00			
G	pre	31	3.00	-.762	0.446	0.13
	post	31	3.00			
H	pre	31	4.00	-.500	0.617	0.079
	post	31	3.00			

However, in order to get a general idea of the level of coherence that the group achieved in the pre- and post-tests, the scores for the eight features were combined to form one score which indicated the level of the group. Tables 7-F and 7-G (in Appendix 7) show the descriptive statistics for the pre- and post-test scores. The lowest scores were 19 and 18 (out of 40) respectively while the highest were 36 and 38; the means were 27.9 and 26.25 and the standard deviations were 4.67 and 5.47 respectively. This initial analysis shows similarity between the pre- and post-test results. To confirm this conclusion a t-test was concluded.

A paired-samples t-test was used to compare the pre-test and post-test mean scores of the control group. The results reveal that the value of probability, p, was 0.104, which is greater than the threshold value of 0.05. Accordingly,

there is no significant difference between the mean scores regarding the coherence trait. In other words, the participants in the control group did not achieve any significant progress in coherence in the post-test essays.

Table 6-16 T-test result of the coherence trait / control group

	N	Mean	SD	Mode	Minimum	Maximum	P-value	Eta squared
Pre-test	31	27.9	4.671	29	19	36	**0.104**	0.0858
Post-test	31	26.26	5.470	28	18	38		

6.4.1.3 Comparison of the TS of the pre- and post-test essays of the CG

In Section 6.2.3.2, the pre-test essays of the control and the treatment groups were compared, and the results revealed that both groups used the same percentages of PPs and SPs while the percentage of EPPs was higher in the treatment group's essays. In Section 6.3.3.1, however, the comparison of the two groups indicated that the percentages of PPs and SPs were higher in the treatment group post-test essays than in the control group, whereas the percentages of EPPs were almost the same. In this section the TSA results for the pre- and post-test essays of the control group are compared following the same steps and procedures mentioned in Section 6.2.3.1 This comparison is intended to show if the control group retained the same pattern topical progressions that had been used in their pre-test essays.

As shown in Table 7-H in Appendix 7, the topical structure analysis of the pre- and post-test essays of the control group indicates that the participants' post-test essays contained fewer t-units but more new topics than the pre-test essays. In the pre-test essays, the ratio of t-units to new topics was 2.7

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whereas in the post-test the ratio was 1.9. This is why the percentages of SPs (18.22) in the post-test essays was higher than that in the pre-test, but this type still occupied third place in terms of occurrence. However, the percentage of PPs was reduced from 33.68 % in the pre-test to 20.24% in the post-test essays while the percentage of EPPs increased from 23.14% to 24.16%. Generally speaking, in spite of these slight changes in the frequencies of the three progressions, the group still relied on using PPs and EPPs whereas the SPs were used least. To check if these changes were significant or not a paired-samples t-test was conducted.

As shown in Table 6.17, the t-test analysis of the three types of progression reveals significant differences in the occurrence of PPs and SPs ($p < 0.05$). Control group participants used fewer PPs in their post-test essays whereas they increased their use of SPs. This was a positive change because it means that these student writers tended to produce more coherent texts in post-test essays using more SPs.

Table 6-17 T-test analysis of the topical progressions/ pre and post-test essays

Control Group	T-units		PP percentage		SP percentage		EPP percentage	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
pre-test	19.97	4.159	33.68	15.46	11.47	7.12	23.14	10.83
post-test	18.10	3.187	20.24	9.97	18.22	9.40	24.16	8.80
Difference	1.87		13.44		6.75		1.02	
Percent.	10.33		66.40		58.84		4.40	
P-value			0.000		0.006		0.648	

This improvement could be attributed to the new lessons, exercises and tasks provided in the traditional approach to teaching over three months. However, this slight improvement did not have much effect on general writing quality

which would have led to the post-test essays gaining higher scores from the raters. It seems that the group's failure to achieve higher scores could be attributed to the excessive use of EPPs (24.16%) and PPs (20.24%), whilst SPs still exhibited the lowest occurrence (18.22%).

6.4.2 Comparison of the pre- and post-test results of the TG

In this section the pre- and post-test results of the treatment group are compared following the same procedures applied in the previous sections. The results of the comparisons of the two groups indicate that the writing performance of the groups was similar before they started the program in which the treatment group was taught TSA. At the end of the programme, however, the treatment group had achieved significant progress which was reflected in the higher scores obtained for the post-test essays. In order to verify this conclusion the pre- and post-test scores obtained by the three methods of scoring are compared. The null hypothesis in this case states that 'there was no significant difference between the means of the pre- and post-test scores.' If the results of the comparison allow the rejection of this hypothesis and reveal significant improvement in the post-test scores, then this improvement can be attributed to the explicit teaching of TSA to this group.

6.4.2.1 Comparison of the analytic and holistic results

In this section the pre- and post-test scores of the treatment group which were obtained by the analytic and holistic methods of rating are presented and compared. As shown in the previous sections 6.2 and 6.3, the pre and post test results of the treatment group are presented in the form of descriptive

statistics (the raw data are shown in Tables 7-I – 7-L in Appendix 7); however, what is required now is a comparison between the pre- and post-test results.

The pre- and post-results of the treatment group were analysed in terms of frequencies and percentages. The descriptive analysis indicates that the post-test scores of the treatment group were higher. As shown in Table 6.18, the difference between the means of the pre- and post-test analytic results was 7.35 (13.79); in the coherence category the difference was 1.69 (15.6%); while the difference between the means of the holistic scores was 9.41 (17.56%). It is obvious that the treatment group had achieved a progress by the end of the semester.

In order to check if this progress was significant or not, a paired-samples t-test was used to compare between the pre and post-test results, the null hypothesis being that 'there was no significant difference between the written performances of the treatment group in relation to coherence before and after they were exposed to the teaching of TSA'. The level of significance chosen here was again $p < 0.05$, the value which often used in the social sciences. As shown in Table 6.18, the t-test analysis indicates that there was a statistically significant increase in the analytic (total scores and coherence category) and holistic scores from the pre-test to the post-test. The value of probability p was 0.001.This p value was much lower than the threshold value 0.05, and the eta- squared statistic indicates a large effect size. In other words, the participants in the treatment group achieved a significant improvement in their post-test essays. This improvement can be attributed to the effect of teaching TSA to this group.

Table 6-18 T-test analysi of the pre and post-test reesults of the treatment group.

Type of scoring	Analytic scoring/total		Analytic scoring /coherence		Holistic scoring	
	Mean	SD	Mean	SD	Mean	SD
Pre-test	53.28	5.366	10.81	1.575	55.41	5.429
Post-test	60.63	8.530	12.50	1.666	62.97	7.373
Difference	7.35		1.69		7.56	
Percentage	13.79		15.6		13.64	
p- value	0.001		0.001		0 .001	
Eta squared	0.48		0.42		0.70	

6.4.2.2 Comparison of the trait-based results

The treatment group's raw data and the descriptive analysis of the results obtained by the trait-based method of scoring have been presented in Sections 6.2 and 6.3. (see also relevant tables in Appendix 7). In this section the pre- and post-test results of each point on the scale were compared followed by a comparison of the overall results for the whole scale in order to find out if the two sets of results significantly differ.

The initial comparison reveals that most participants were rated at the fourth and the fifth degrees (agree and strongly agree respectively) in both sets of tests. However, the frequency of these two degrees was higher in the post-test (Table 7-M, Appendix 7).This implies that the essays which were written at the end of the semester were more coherent than the pre-test essays.

Table 6-19 Wilcoxon signed rank test of the pre and post-test trait-based results

Features	Test	N	Median	Z	P	R
A	Pre	32	4	-.457	0.626	0.052
	Post	32	3.50			
B	Pre	32	4	-2.610	0.009	0.6
	Post	32	4			
C	Pre	32	4	-2.952	0.003	0.58
	Post	32	4			
D	Pre	32	3.50	-3.380	0.001	0.6
	Post	32	4			
E	Pre	32	3.50	-1.403	0.161	0.2
	Post	32	4			
F	Pre	32	4	-2.737	0.006	0.6
	post	32	4			
G	Pre	32	3	-3.349	0.001	0.5
	post	32	4			
H	Pre	32	4	-2.556	0.011	0.4
	post	32	4			

To verify this conclusion, a Wilcoxon signed rank test was conducted comparing the pre- and post-test results for each feature. As shown in Table 6.19, the results reveal that the difference was significant ($p < 0.05$) between the pre- and post-test results of six features while only two features did not significantly differ. These two features are 'a' '*The beginning section is effective in introducing the reader to the subject*'; and 'e' '*The writer's overall point of view is clear*'. For both features there is only a slight difference between the post-test and pre-test median scores. This suggests that, regarding these two features, the pre- and post-test essays are similar.

However, in order to develop a general idea about the overall level of coherence that the group achieved in the pre- and post-tests, the scores for the eight features were calculated to form one overall score which indicates the level of the group. Tables 7-N and 7-O in Appendix 7 show the descriptive

statistics of the pre- and post-test results, were the lowest scores were 17 and 22 (out of 40) respectively while the highest were 36 and 39; the means were 27.5 and 31.9 and the standard deviations were 4.406 and 4.207 respectively. This initial analysis indicates that the level of coherence is higher in the post-test essays. However, confirming this conclusion entails conducting a t-test.

Table 6-20 T-test analysis of the coherence trait for the treatment group.

Group	N	Mean	SD	Mode	Minimum	Maximum	P-value	Eta squared
Pre-test	32	27.5	4.406	24	17	36	**0.001**	0.351
Post-test	32	31.09	4.207	32	22	39		

A paired-samples t-test was conducted to compare the pre-test mean score of the treatment group to that of the post-test in this group. The results reveal that the probability value p was 0.001.This value is considerably lower than the threshold value of 0.05. Accordingly, there is a significant difference between the mean scores of the pre- and post-test regarding the coherence trait. The mean increase in coherence scores was 3.59; and the eta squared statistic (0.351) indicates a large effect size. This means, that the participants in the treatment group achieved significant progress in coherence in the post-test essays.

6.4.2.3 Comparison of the TS of the pre- and post- test essays.

As shown in Table 6.21, there was also a slight decrease in the number of t-units used, from 669 in the pre-test essays to 577 post-test. However, this decrease in t-units was not reflected in the number of new topics which was higher in the post-test. An average of 2.1 t-units was used to develop each new topic. In terms of topical progressions, a significant change appears in the post-test essays. In the pre-test essays, the percentages of PPs (32.84%)

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and EPPs (30.35%) decreased to 25.94%, and 24.08% respectively in the post-test essays. On the other hand, the percentage of SPs increased from 13.10% in the pre-test essays to 25.63% post-test. These changes led to a better balance number of the three types of topical progression. Thus, in spite of the relative decrease in the number of new topics, these new topics were developed by using a more balanced pattern of topical progression types (PP, SP, and EPP). This means that, in the post-test essays, the participants not only chose to string ideas more closely together by repeating key words and phrases, but they added more information to the ideas by taking the rheme as the theme of the next sentence; and were also able to relate them back to the discourse topic. This strategy could lead to the post-test essays of this group being more coherent and gaining higher scores.

Table 6-21 T-test analysis of topical progressions/ pre and post-test essays

Treatment group test	T-units		PP percentage		SP percentage		EPP percentage	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
pre-test	20.91	3.89	*32.84*	13.82	*13.10*	6.25	*30.35*	10.28
post-test	18.03	3.277	*25.94*	8.64	*25.63*	10.56	*24.08*	10.30
Difference	2.88		6.9		12.53		6.27	
Percent	15.97		26.60		95.65		26.04	
P-value			**0.018**		**0.000**		**0.018**	

In order to determine the significance of the differences between the topical progressions used in the pre- and post-test essays, a paired-samples t-test was conducted with the pre- and post-test percentages.

The results reveal a significant difference ($P < 0.05$) as seen in Table 6.21. The probability value, p, was 0.018 for PPs and EPPs, while the difference between the percentages of SPs was more significant (p =.000).These

changes could be attributed to the explicit teaching of TSA to the treatment group. Students in this group became aware of the importance of using the three types of progression in order to connect the ideas to each other and at the same time to the main topic of the essay.

6.4.2.4 Analysis of the qualitative data

This section presents qualitative data related to the way the participants in the treatment group coped with TSA, and their reactions to and perceptions of it. The main objective of this section is to understand the participants' impressions and their difficulties in learning and applying TSA as a new strategy.

6.4.2.4.1 Executing TSA

Although the treatment group students were able to understand the theoretical background of TSA which was briefly explained to them, they needed a relatively long period of time to learn to employ this strategy in order to improve their written products. After four sessions during which TSA had been explicitly introduced, the students gradually started to use TSA. However, they were not confident in using it until the final six sessions. This was due to difficulties in identifying discourse topics, topical subjects, or the types of progression.

Some students encountered difficulties in identifying the discourse topic, especially when a text lacked a title. This was because they tended not to read the text as a whole but as separate sentences. Accordingly they needed to change their strategy of reading and to practise reading the text as a whole and in order to spot the main idea that linked all of the sentences together.

When writing, these students were not able to stick to only one main idea (discourse topic) and develop it by adding more related sup-topics; therefore their texts were not globally coherent. The interviewees stressed this point. In general, they agreed that at the beginning of the course it was difficult for them to identify the discourse topic of the texts they read and consequently they sometimes deviated from the main topic when they were writing. One of the interviewees (S 6) summarized this point, stating:

> "I was not familiar to be asked about the main topic of what I usually write as long as the grammar and spelling were accurate. Therefore it was difficult for me to know the discourse topic of the passages I read. …and when I write I have also to write the sentences that are related to the main topic. But after some lessons and different practices I think I can now tackle this matter." (translated from Arabic by the thesis author)

Apparently, this phenomenon could be seen in the students' pre-test essays where subtopics (sentence topics) were developed by excessive use of PPs whereas the discourse topics were ignored.

Identifying the topical subject of each sentence was another difficulty that was encountered at the beginning of the course. Although students were able to understand and underline the topic and the comment of each sentence, some of them became confused when they were asked to underline topical subjects. This is because a topical subject does not always correspond to the grammatical subject and it does not always appear in the very beginning at the sentence. As explained by interviewee S4, "in some complex sentences it is difficult to differentiate between the grammatical subject and the topical subject". However, although this problem was encountered when students read model texts, it happened less when they wrote their own essays where

they usually used simple sentences in which the grammatical and topical subjects coincided.

Identifying the types of topical progressions was another difficulty that faced some students in the treatment group. Although the majority of the participants were able to identify the three different types of progression after a few weeks, some students found it difficult to be sure whether a progression was parallel or sequential, especially when the topic of the following sentence was not lexically identical to the topic of the preceding one. For example, if two succeeding sentences contained the same semantic (synonym or any equivalent) topical subjects but not the same noun, these students would consider the topic of the second sentence as a new topic and accordingly the progression would be mistakenly identified as sequential. Fortunately, by the end of the course the picture became clearer for them and the problem was solved. Only a few students still needed more time and exercises to understand how to apply TSA.

To sum up, the interviewees' responses and the researcher's observation indicate that students became able to handle TSA when they wrote their essays. Probably, more time and practice would be helpful in developing their skills.

6.4.2.4.2 Timing of the use of TSA

It has been mentioned earlier that this study hypothesizes that teaching TSA to ESL students will raise their awareness of coherence and help them improve their written performance. The results of the pre- and post-test data analysis, the topical structure analysis of the students' essays, and the

responses of the interviewees have confirmed this hypothesis. The question therefore arises of when student writers use TSA. They could use it as a revision strategy, as Connor (1996) suggested, or might employ it during all their writing. The answers to such questions may contribute to a better understanding of the impact of teaching TSA, not only on the written product but also on the writing process.

Generally speaking, the responses of most interviewees reveal that in spite of executing TSA in the revising stage in terms of using diagrams, the student-writers were aware that TSA was a conscious consideration when they wrote. To put it another way, TSA was available to them during the pre-writing phases, such as planning, and clustering; and in the drafting and revising stages. This was especially true when the students worked in pairs. Some points or ideas were excluded, modified, or elaborated upon in order to correspond with TSA procedures. One respondent (S1) referred to this point, saying that: "the three types of progressions of ideas and their relationship to the main topic are always in my mind and think about them when I start writing". Another respondent (S3) added that she tended to exclude irrelevant sentences from the very beginning and arrange them according to TSA procedures. However, this was not always the case. One interviewee (S6), for instance, stated that she preferred to "employ TSA at the revising stage and don't think about it from the beginning." She added "I do not need to interrupt the flow of my thoughts by thinking about how to arrange my sentences."

Moreover, as a teacher-researcher I observed that students in the treatment group had changed some of their writing strategies by the time they were

approaching the end of the course. They spent more time in planning and revising. Moreover, some of them shifted from linear writing process to recursive process where they went backwards and forwards considering rhetorical features in addition to linguistic ones. Furthermore, contrary to their counterparts in the control group, the participants in the treatment group used more than one piece of paper at a time to use for drawing brain maps and diagrams, writing notes and outlines, and clustering ideas. All of these strategies were an indication that these students were starting use TSA in order to improve their writing.

6.4.2.4.3 Student's perceptions of TSA

One of the questions which was asked to the interviewees at the end of the semester was 'Do you think that TSA helps you?' This question was intended to investigate the students' feelings towards using TSA, and if they saw TSA a helpful and useful strategy to improve their writing and accordingly were not reluctant to use it. Most of the interviewees' responses conveyed positive attitudes towards using TSA in and outside the classroom. One respondent (S3) stated that TSA had enabled her to learn that "the quality of any written text is not only latent in its grammatical accuracy or vocabulary variety but in its overall organization as well. This makes me more happy and confidence". Similarly another interviewee (S5) referred to the usefulness of TSA, saying: "Now I realized that there is another dimension which I have to consider in my writing … it is coherence." When interviewees were asked 'in what way TSA was useful' most of their answers revealed that TSA enabled them to know how to develop ideas correctly and how to locate any deviating ideas in order to eliminate or reconnect them to the main topic. Furthermore, some

interviewees stated that they were now more confident than before. One interviewee (S2) said that: "It [TSA] has encouraged me to approach writing". Another (S3) commented that she "became more satisfied and secure in the writing lesson".

6.4.3 Summary

This final section of the chapter presents a comparison between the pre and post-test writing performance of each group separately. The general conclusion of this comparison indicates that at the end of the study semester the treatment group had achieved significant progress whereas the control group had not. The statistical analysis of the control group results obtained by the three methods of scoring indicates that there was no statistically significant difference between the pre- and post-testing results. The topical structure analysis of their pre- and post-test essays shows some changes: the percentage of PPs significantly increased but for SPs decreased and the frequency of EPPs remained similar. However, in spite of these changes, the post-test essays still contained many PPs and EPPs and fewer of SPs. This means that these student writers kept repeating the same topic by different means and when adding a new topic they did not connect it to the previous topics or to the discourse topic, so that they then needed to go back to the previously mentioned topics by using EPPs. This strategy produced incoherent tests and accordingly they received low scores.

Conversely, the treatment group had achieved remarkable progress by the end of the study semester. The statistical comparison of results obtained by the three methods of scoring indicates that there is a statistically significant difference between the pre and post-tests scores which are significantly

higher. In other words the writing quality of this group had improved by the end of the semester during which the students learned and applied TSA. The effect of manipulating TSA can be seen in the results of the topical structure analysis of these essays. The students used more balanced patterns of topical progressions, so that there were no significant differences between the three types of progressions in the post-test essays. This suggests that after the treatment group participants had been explicitly taught TSA, they were able to develop their ideas and connect them to each other by using SPs and at the same time to the discourse topic by using EPPs. In other words they were relatively more able to produce locally and globally coherent texts.

Finally, the analysis of the qualitative data reveals that, in spite of some expected difficulties in executing TSA, students were able to handle it well. At the end of the study semester most of the students were able to use TSA effectively, whereas a few of them needed more time to manipulate it successfully. Most of the participants in the treatment group had positive attitudes towards TSA.

6.5 General summary

The data obtained from the pre- and post-testing of the control and treatment groups have been classified according to the analytic, holistic and trait-based methods of scoring, then analysed and presented in the form of descriptive analysis. Statistical analyses were then carried out to investigate if there were significant differences between the two groups. Additionally the essays written by both groups were analysed according to TSA procedures and compared. The results have been presented in this chapter accompanied by the analysis of the qualitative data. The general findings are summarized as follows:

● No statistically significant difference was found between the two groups in their pre-test results. This means that before the intervention of teaching TSA both groups were similar in terms of their written performance. The topical structure analysis of the pre-test essays reveals that both groups were very similar in terms of the usage of topical progressions. The PP was the most preferred progression, the EPP was the second most preferred, and SPs were used least in the essays. This suggests that the pre-test essays of neither group were locally coherent, because a low percentage of SPs leads to ideas not being developed properly but repeated excessively which is likely to lead to redundancy. The qualitative data suggest that teachers' focus on linguistic features and the students' lack of a clear understanding of coherence are important reasons for this low performance.

● Significant differences were found between the two groups in their post-test results. The treatment group achieved remarkable progress. With respect to topical structure, the comparison of the post-test essays of the two groups indicated that the treatment group used higher percentages of PPs and SPs whereas the two groups used almost the same proportion of EPPs. On the other hand the significant differences were found in the proportion of topical progression types used by the control group: EPPs were the most prominent, followed by PPs and then SPs, whereas the treatment group used a more balanced pattern of the three types. Moreover, the qualitative data indicated that participants in the treatment group changed some of their writing strategies, felt more confident and aware of coherence and sought feedback from the teacher and peers.

● No significant difference was found between the pre and post test results of the control group. This is also an indication that, in terms of coherence, the control group did not record any improvement.

● Significant differences were found between the pre- and post test results of the treatment group. The students' post-test essays were more coherent, showing that they had achieved a significant improvement due to the teaching of TSA. On the other hand students showed positive attitudes towards using TSA and the difficulties they faced were not serious.

To sum up, these results provide clear evidence that the improvement which was achieved by the treatment group in their post-test essays was due to the explicit teaching of TSA. These findings are discussed in detail in the next chapter.

Table 6-22 Summary of results for the two groups

	Group	Test	Type of scores	Results
1	Control and Treatment Groups	Pre-	Trait-based	No significant difference
			Analytic (total)	
			Analytic (coherence)	
			Holistic	
2	Control and Treatment Groups	Post-	Trait-based	Significant difference
			Analytic (total)	
			Analytic (coherence)	
			Holistic	
3	Control Group	Pre- and post-	Trait-based	No significant differences
			Analytic (total)	
			Analytic (coherence	
			Holistic	
	Treatment Group	Pre- and post-	Trait-based	Significant differences
			Analytic	
			Analytic (coherence)	
			Holistic	

Chapter 7 : Discussion

7.1 Introduction

The current study investigates the impact of the teaching of TSA on the written performance of third year Libyan students whose major subject is English. The students' native language is Arabic whereas English is a foreign language. The relevant literature does not provide a clear picture of the effect of teaching TSA to EFL students especially for those who study English in their own countries and who are taught by non-native English-speaking teachers. The findings of this study are discussed below with reference to previous studies in order to reach a general conclusion which could allow recommendations to be made for similar contexts.

As mentioned in previous chapters, the theoretical framework adopted for this study is Lautamatti's (1987) TSA model. Accordingly, the three types of topical progressions and the discourse and sentence topics as defined by Lautamatti were explicitly taught to the treatment group for one semester. TSA was also used in the textual analysis of the pre- and post-test essays of the study participants.

To investigate the effect of teaching TSA on Libyan EFL students' written performance, 63 students participated in this study. All of them were in their third year in the Department of English, Faculty of Arts, Baniwaleed, Libya. The participants were randomly assigned to control and treatment groups. Students in the treatment group were taught TSA in the first four sessions and continued to practise it for the whole semester. Pre- and post-tests were conducted in order to determine the impact of the intervention on the treatment group. Retrospective interviews were carried out with six students

from the treatment group who reflected on their usage of TSA. Moreover, the teacher-researcher recorded his observations of the students' behaviour in both groups. The previous chapter have presented the analysis of data obtained by the different methods used in this study.

The results of the analysis have indicated that the impact of teaching TSA on students in the treatment group was significant. This impact was reflected in the students' written performance, their awareness of coherence, and the writing process they used. After one semester, the post-test scores of the participants in the treatment group were noticeably higher than those of their counterparts in the control group.

The topical structure analysis of essays by the two groups revealed that the post-test essays of the treatment group contained a higher percentage of sequential progressions, which was an indication of a higher level of coherence in these essays. Moreover, the treatment group used a mere balanced pattern of topical progressions.

All of these results, moreover, were supported by other findings obtained from the retrospective interviews and the teacher-researcher's observation. In the following sections all of the main findings are discussed with reference to the findings of previous relevant studies which were described in the literature review chapters.

7.2. Discussion of the students' conception of coherence

The analysis of the post-test essays showed that there was a significant improvement on the part of the treatment group compared to both their pre-test results and the pre- and post-test results of the control group. In

particular, the treatment group used mere SPs and PPs in their post-test essays. This indicates that the participants in the treatment group were positively affected by the teaching of TSA and used it to produce written texts with higher levels of coherence. In order to understand this progress, it is necessary to consider the students' situation and their experience before the beginning of the semester. The students' pre-test writing performance can be presumed to be a good source of information, reflecting their competence in general and their conception of coherence in particular. The outcome of the investigation of the pre-test performance of the control and treatment groups is discussed next.

● The general writing quality of the study groups was not satisfactory according to the assessment standards used in Libyan universities. The total scores obtained from the holistic and analytic methods of scoring showed that both groups were similar in their writing proficiency, and the students groups recorded relatively low scores. No student received a score higher than 65 (good), whereas the means were 54 and 52.93 for analytic and holistic scores respectively. The low level of writing quality among these students could be attributed to factors related to the lack of knowledge or misuse of linguistic aspects such as grammar and vocabulary as well as ignorance of rhetorical features such as cohesion and coherence. However, since the students' major subject was English and they had studied English as a specialist subject for six years before they had joined the university, it is likely that the weaknesses in their writing are related to the lack of mastery of rhetorical features. Studies conducted previously on Arab EFL learners for example Asiri, 1996; Halimah, 2001; El- Aswad, 2002 have indicated that Arab EFL

students' problems are not primarily due to their lack of linguistic skills, but rather concern the use of rhetorical conventions. It seems that the results of the current study support the general conclusions of these previous studies.

The trait-based pre-test results of the two groups can show to what extent the students' essays were well organized and coherent. About 50% of the participants failed to be rated as achieving six (out of 8) features in their essays. These features are 'b'(relevance to the main topic), 'c' (relatedness), 'd' elaborated ideas, 'e'(clear ideas), 'g' smooth transition, 'h' (ending). More specifically, about half of the students were unable to render all of the ideas cited relevant to the main topic in order to create globally coherent texts, and they neither were able to relate sentence topics to each other in order to make their essays locally coherent. Moreover, students failed to elaborate on their ideas to make them clear enough to the reader. However, most of the students succeeded in introducing the subject to the reader, and they also succeeded in maintaining unity in paragraphs. This suggests that these students were concerned most with linguistic aspects rather than organization and coherence, and the only rhetorical features that they considered were to write clear and specific topic sentences and making sure that each paragraph was unified. Presumably these two features had been stressed by their teachers more than others. However, although these two features are very important, they are not sufficient to create coherence in a text.

● Coherence can appear to be an abstract feature which is difficult to teach and to learn (Connor and Johns,1990). As a consequence of their vague conceptions of coherence, the participants in both groups recorded relatively low pre-test scores. This finding and the interview findings suggest that

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coherence had not been defined appropriately or taught explicitly to the participants in the study. The students' lack of a clear and practical definition of coherence led them to be unable to differentiate between 'coherence' and 'unity', and this phenomenon was reflected in the excessive use of PPs and the low percentage of SPs in the pre-test essays of both groups. The preference for using a high percentage of PPs suggests that these students were struggling to stick to the sub-topic, repeating it excessively without elaborating upon it and thinking that writing about only one topic in the essay would be sufficient to make their texts well organized. On the other hand, students' avoidance of the use of SPs suggests that they tended to focus on unity while avoiding any topic development which might negatively affect this unity. These findings reflect those of previous research by Schneider and Connor (1990); and Burneikait´e and Zabiliut´e (2003) wherein the less-skilled writers over-used PPs and neglected SPs.

The interview findings and the teacher-researcher's observations provided information about the probable reasons for the students' pre-test performance. It was obvious that the students had not been provided with concrete and practical strategies to help them to develop a clear conception of coherence which would in turn allow them to produce properly coherent texts. It seems that their teachers' main focus had been on the sentential level of writing and the main linguistic features such as grammar, spelling and vocabulary. As found by Lee (2009), this approach often seems to prevail in teachers' instruction, feedback and assessment. Consequently, the students' concentration was focused on linguistic features rather than the discoursive ones. On the other hand, interference from the students' L1 (Arabic) could be

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another factor which might have contributed to the low level of coherence in their pre-test essays. It was observed in this study that some students in both groups preferred to write in Arabic and then to translate into English. Khalil (1989) discussed the sources of redundancy in ESL Arab student writing and concluded that it "is a manifestation of an Arabic 'oral' style strategy that is sometimes employed by Arabic writers as a means of persuasion and emphasis." Other similar studies which have investigated the ESL writing of Arab students confirm that ESL Arab students' writing performance is usually affected by the interference of their L1 at different stages of the writing process (Al-Jubouri 1984; Kharma, 1986; El-Aswad 2002).

7.3. Discussion of the changes found after applying TSA

7.3.1 Research question 1

Does teaching TSA to Libyan university students have any effect on the quality of their writing?

As mentioned in Chapter 6, the progress achieved by the participants in the treatment group in their post-test essays was remarkable compared with their performance in pre-test essays and the pre- and post-test results of the control group. The students' improvement was recorded in their general scores, ratings of local and global coherence, and the writing processes used. This progress was attributed to the explicit instruction of TSA to the treatment group.

With respect to their scores, the participants in the treatment group received higher scores for their post-test essays. As shown in Chapter 6, tables 6.18 and 6.20, the percentage differences between the pre- and post-test scores were 13.8% for analytic scoring, 15.6% for coherence, 13.64 for holistic

scoring, and 13% for trait-based scoring. These scores are a good indication of the improvement that occurred in the quality of these students' writing. This finding supports those of other previous studies which have emphasised the importance of teaching coherence to EFL students in order to improve their writing (Lee, 2002a, 2002b). These findings also indicate that the raters, who were English native speakers and could be said to represent the presumed reader, found the essays written by TG students were more coherent and satisfied their expectations, therefore deserving higher scores.

7.3.2 Research question 2

What kind of differences can be observed between students with TSA instruction and those without TSA instruction?

In order to know in what senses the coherence of the post-test essays was increased so that they deserved higher scores, the results using the trait-based scale to rate the pre- and post-test essays can be considered. As mentioned in Chapter 6, the trait-based scale consists of eight features, each of which represents an aspect of coherence as proposed by Meyer (1985) and modified by Chiang (1999). In six of the features out of eight, the participants in the treatment group achieved improvement. These features are *b, c, d, f, g,* and *h.* Regarding feature *b (The ideas in the essay are all very relevant to the topic***)** which measures the unity and global coherence of the text, the percentage of participants who succeeded in achieving this feature in their pre-test essays was 59.4%. In the post-test essays, however, this percentage increased to reach 75%. Probably, these results could be partly attributed to the students' awareness of the importance of coherence after they had learned about TSA, which represents a tangible strategy to help them to consider unity and global coherence in their essays. So conversely,

the achievements of the control group regarding this feature decreased in the post-test essay from 54.9% to 42%. The difference between the pre- and post-test results was not, however, statistically significant, which means that the group maintained the same rating in this respect. In other words, about half of the group deviated from the main discourse topic by writing sentences which were not related to it. This could be attributed to the students' lack of any concrete technique that could help them stick to the main point.

Similarly, the treatment group achieved a significant improvement in the feature *c (The ideas in the essay are well-related one to another)* which measures local coherence. In the post-test essays, 84.4% of the participants were rated as being able to relate their ideas to each other, creating locally coherent essays. This suggests that these students were aware of the importance of this characteristic and, at the same time, maintaining relevance to the discourse topic and thus forming a cluster of related ideas to satisfy their readers' expectations. This skill was reflected in their use of a balanced pattern of PPs, SPs, and EPPs. By employing PP, the students could to repeat key words and phrases in consecutive sentences and when they wanted to elaborate upon and extend these ideas they could use SPs to add new sup-topics. Consequently, the feature *d (Ideas mentioned are elaborated)* which measures the addition of new sup-topics or elaborations was rated significantly higher in the post-test essays of the treatment group. 84.4 % of these participants wrote well elaborated ideas, whereas the corresponding percentage in the pre-test essays was 50%. However, in order to avoid deviating from the discourse topic, which could result from the overuse of

SPs, the students used EPPs from time to time to refer back to the previous ideas and connect them to new sup-topics.

This strategy, however, could have not been effective if the participants had not been able to plot the topical progressions in their essays using diagrams in order to see how their texts were physically structured. This is one of the merits of TSA. It provides student writers with a concrete technique that helps them to assess their texts and revise them successfully. It enables students to go beyond the sentential level in considering the text as a whole. Moreover, it is evident that the visual representation of the text structure had another positive impact on the students' writing performance. The retrospective interview results and the researcher's observation revealed that, when students learned how to chart the topical progressions used in their texts, they became more confident and motivated in their writing. Presumably, the graphical representation of the text structure enabled students to diagnose their own weaknesses and to carry out appropriate rectifications in order to meet the readers' expectations. As a consequence, the students' confidence was raised and their motivation was stimulated.

That the readers' expectations were effectively taken into consideration is reflected in ratings for other features of coherence after the students had learned how to employ TSA. The percentages of students who succeeded in achieving other features significantly increased such as *f (The division of paragraphs is justifiable in terms of content relevance)*; *g (Transition between paragraphs is smooth)*; *and h (The ending gives the reader a definite sense of closure*). This suggests that the students were aware of the importance of these features since they are preferred by readers, and also that they were

aware that employing the three types of topical progression appropriately helped them to achieve this goal, especially when they looked at graphic representation of their texts.

7.3.3 Research question 3

Does using TSA raise students' awareness of coherence?

Furthermore it seems that employing TSA had an impact not only on the students' post-test essays. Its impact extended to the students' performance in the classroom and the writing process that they used, and it seems likely that this will persist with these students in the future. As mentioned in Chapter 6, the interview results and the researcher's observation indicate that, in terms of writing process, some participants in the treatment group tended to shift from a linear process of writing to a recursive one. Those students tended to move back and forth in their writing in considering the thematic development of their ideas. They would start with pre-writing activities such as planning and outlining, then move to composing and revising. At any of these stages the students would add or delete any structures that could negatively affect the topical progression of the ideas. Consequently they would need to move back to carry out these changes. However, not all participants followed this technique due to their unfamiliarity with such strategies. Therefore more time may be needed to become familiar enough with the different writing strategies and TSA in particular.

In terms of classroom interaction, as mentioned in Chapter 6, some participants consulted their peers in order to get their feedback about the comprehensibility of what they had written. Although many students in both groups tended to work alone and did not like to work in groups or pairs or to

ask for feedback from peers, by the end of the semester these types of interaction had emerged among some of the students in the treatment group. With respect to the teacher's feedback, many students asked the teacher not only about linguistic features but also about overall clarity and comprehensibility. This shift in the students' behaviour, which was not clearly noted in the control group, suggests that the participants in the treatment group were aware that the quality of their writing was partially dependent on its comprehensibility to the reader and the latter's interaction with the text.

7.4. The students' perceptions and handling of TSA

7.4.1 Research question 4

How do Libyan university students perceive TSA? Do they find it helpful and motivating to improve their writing coherence?

As mentioned in Chapter 6, the retrospective interview data revealed that the subjects exhibited positive attitudes towards the learning of TSA. In spite of the difficulties which were encountered at the beginning of the semester, most students at the end were satisfied with using TSA when they wrote.

The qualitative data obtained from the interviews indicated that most participants in the treatment group viewed TSA as a helpful strategy that assisted them in producing well organized and coherent essays. Students felt that learning and applying TSA had made them more aware of coherence and its importance in their writing. They also recognized that TSA was a strategy that enabled them to depend more on themselves in assessing their essays. They considered TSA to be a self-assessment tool that focused on the rhetorical aspects of their written products. These aspects, and mainly the question of coherence, would not have been so prominent if the students had

not learned and applied TSA. These results are comparable to those reported in Connor and Farmer (1990), where ESL students at the intermediate and advanced levels had positive attitudes towards learning TSA.

7.4.2 Research question 5

When applying TSA, what kind of difficulties do students encounter?

In spite of their positive attitudes towards TSA, the students referred to some common difficulties they encountered while applying this strategy. Developing a specific discourse topic and sticking to it were not easy tasks for some students. Before they had been taught TSA, the students used to choose a broad topic and write anything related to it without a clear focus and logical arrangement. It seems also that they were not able to differentiate between coherence and unity, as discussed in Chapter 3. This also suggests that students tended to consider linguistic features at the expense of rhetorical ones in the absence of any tangible technique that could help them to pay attention to the importance of the latter. It seems that students who encounter this difficulty need the opportunity to read and analyse more authentic texts and more time to practise TSA. This would help them during the writing process in which more time needs to be devoted to revision in order to read the text analytically as a whole, relating its discourse topic to sub-topics and spotting any irrelevant or unconnected ideas.

Identifying the topical subject in every sentence is another difficulty that faced some students. As defined by Lautamatti (1987) and Connor and Farmer (1990), the topical subject of a sentence or clause is the noun or noun phrase that usually expresses the topic of the sentence, which is in turn related to the discourse topic. It often, but not always, coincides with the grammatical

subject. However, identifying the topical subject in compound and complex sentences is sometimes problematic for some students. This type of sentence might contain several clauses with different subjects, so some students find it difficult to decide which one of these subjects is the topical subject that both tells the reader what the sentence is about and is related to the discourse topic. The failure to identify the appropriate topical subject could negatively affect the topical structure analysis of the whole text, producing mistakes in its visual representation and leading to an incoherent text.

The difficulty of locating the topical subject which faced some students was also identified in Chiu's (2004) research. In her case study, which was conducted with only one participant, the topical subjects of some sentences sometimes could not be located. However, this problem was easily overcome because the student worked closely with the researcher and would ask for her help when necessary. In the current study the teacher-researcher could not work so closely with every student in a group of 32 or give everyone such immediate feedback. However, to solve this problem, students could read their texts more than once, especially at the revising stage, focusing on the main topic of the text and finding potential relationships between the sub-topics and the discourse topic in order to determine the exact topical subject of each sentence. This helps students in regarding writing as a recursive process, making them more responsible for their writing instead of relying on their teacher's feedback. This skill can be developed by giving students the opportunity to be exposed to authentic texts and to practise TSA on them.

With respect to the three types of topical progression, students in the treatment group reported some difficulties in identifying sequential

progression (SP). It seems that this type of progression can be confusing. Therefore further investigation is needed in order to identify accurately. As mentioned in Chapter 4, the comment of a preceding sentence becomes in SP the sentence topic of the following one. Following the coding guidelines proposed by Schneider and Connor (1990) and adopted in this study (see Figure 6.5), the proportion of SPs recorder may be inflated. According to the guidelines, an SP includes any sentence topic that is different from the immediately preceding sentence topic, but this may include even irrelevant or unrelated sentences. Therefore in this study the students were reminded that what counts as an SP is any sentence topic that is different from the immediately preceding sentence but directly or indirectly related to it. This is because unrelated sentence topics do not contribute to coherence. On the other hand, because TSA considers the semantic relationships between sentences, it is sometimes difficult for EFL students to differentiate between SPs and PPs. A PP is usually a repetition of, or may involve a synonym of, the preceding topic. But if it is difficult for a student to recognise this semantic relationship, he/she would consider this sort of progression as an SP because it introduces a new topic, which in fact it is not.

Generally speaking, all of these difficulties might be overcome by giving students the opportunity to read and analyse more authentic texts. This may help them practise TSA in order to raise their awareness and sense of how English texts are organized.

In summary, the findings of this study are in agreement with the previous relevant studies mentioned in the literature reviews chapters which stress the importance of teaching coherence explicitly, and suggest that the teaching of

TSA as a manageable and easy strategy. The results demonstrate that it is feasible to teach TSA in the EFL writing classroom and that it is a strategy that can help students focus on rhetorical features and produce more coherent essays.

Chapter 8 : Conclusion and Pedagogical Implications

8.1 Research conclusion

The findings of this study suggest that the explicit teaching of TSA to third year Libyan university students had a positive impact on their writing performance. The students' texts showed higher levels of both global and local coherence as rated by English speaking teachers. This is also confirmed by the results of the topical structure analysis of the students' essays. The percentage of each type of topical progression used increased. Equally importantly, students used more balanced patterns of the three types of the topical progressions (PP, EP, and EPP). This is an indication of the students' awareness of the importance of developing ideas smoothly in a way that allows them to link ideas to each other and to the discourse topic.

With respect to the writing process used, when the students had become familiar with implementing TSA, some of them shifted to a mere recursive process of writing. This enabled them to move backwards and forwards to improve their texts, changing, deleting or adding words, phrases or sentences in order to satisfy the reader's expectations. They tended to spend more time on each writing stage, thinking about the most suitable way to organize their ideas. Moreover, it appears that applying TSA encourages students to seek feedback from their peers and the teacher. It could be concluded that, by following this strategy, student writers considered their peers and teacher as their assumed readers. Considering the reader could be the implicit impact of TSA on these students. They tended to think beyond the sentence level and the linguistic aspects of language to take account of rhetoric aspects and

writing conventions while they were applying TSA procedures. This in turn led them to meet their readers' expectations.

Implementing TSA, however, was accompanied by some problems which might have been completely overcome if the students had been able to practise using TSA for a longer period of time. Three months was not sufficient for some students to be able to incorporate this technique appropriately into their practice. Problems such as identifying discourse topics, topical subjects and types of progression were the main difficulties that faced the participants. Therefore, it appears that more time is needed for students to be exposed to this technique and to practise it properly.

However, in spite of such problems, most students were satisfied with implementing TSA both in and out of the classroom. They acknowledged that it helped them widen their attention to consider the text as a whole rather than fragments or sentences. This suggests that TSA could, to some extent, contribute to minimizing student anxiety and consequently empower and motivate them.

In contrast to the treatment group, the control group, who were exposed to the traditional programme, failed to make any significant improvement in their writing. Although this group was taught according to the process-based writing approach which is supposed to implicitly consider coherence, the lack of clear and tangible instructions about how coherence is to be achieved led students to continue to focus on the linguistic aspects of language, and they failed to move beyond the sentential level.

The present findings suggest that the teaching of coherence by using TSA provided various benefits for the students in the treatment group. They could use TSA as a framework for the organization of their texts, and they could also use it as tool for diagnosing coherence. It helped them visualise the organization of their texts using diagrams. It also helped them to become involved in negotiation with their peers and/or teacher, getting the appropriate feedback to produce mere well organized and coherent essays.

8.2 Pedagogical implications of the study

In the ESL/EFL classroom, the teaching of TSA can benefit course book designers, teachers and learners in various ways. Course books could offer a variety of activities designed to familiarize students with the concepts of TSA, such as focusing on the main idea (discourse topic), and identifying themes and rhemes in each t-unit and relating them to the main topic as well as identifying types of progression. To engage students' interest writing activities, exercises should be designed in such a way that students become involved in pair or group work, and peer revision and discussion. These kinds of activities stimulate students to consider the audience and help them think about writing as a social event which involves interaction between the reader and the text. In order to raise students' awareness of coherence, each writing lesson should contain samples of professional writing in different genres for students to read. These readings should be followed by class discussion not only about the content but also about rhetorical features and topic development. This could lead at the end to the application of TSA on the passages in order to be used as models.

In addition to course book activities, teachers can use TSA as a practical strategy to be taught to their students to raise their awareness of coherence. This, in turn, would give teachers the opportunity to shift their focus from teaching linguistic features only to paying attention to coherence. They can provide students with in-class activities that encourage them to engage in pair and group work. The findings of this study referred to the students' reluctance to work in groups or pairs because they tended to focus only on linguistic aspects and do not think about their readers. However, employing TSA could allow them to develop a feel for the reader; in this case their peers and the teacher. Accordingly, activities that would lead to students' involvement in group or pair discussion or work are required. A teacher may give students jumbled sentences to read and then re-arrange, guided by TSA procedures. This activity could include providing students with a complete essay in the form of jumbled paragraphs, and students would be asked to read these paragraphs, identify their main topics and reorder them following TSA procedures in order to produce a well-organized and coherent essay. Another activity could involve discussion about an incoherent paragraph, after which students would be asked to apply TSA to it to detect its breaks in coherence in order to re-write it coherently, while the teacher would monitor the activity and provide immediate feedback.

The teacher's feedback is very important as emphasised by many studies. However, EFL teachers usually focus on linguistic aspects and ignore rhetorical ones. If TSA was adopted by teachers and reinforced by the content of writing course books, teachers could use it when assessing students' writing. In other words they could use TSA as a tool to diagnose coherence

and accordingly provide students with clear and concrete feedback that would show them their strengths and weaknesses.

Students, also reap benefits from learning TSA. They can use it as a self-assessment technique by which they spot any weaknesses in their essays. TSA can be used by students as a peer assessment tool with which to project their audience and think about how the reader perceives, interacts with and comprehends their writing. Raising student's awareness of coherence by employing TSA can help them use it in and outside the classroom. They would also likely to transfer their experiences to their L1 (Arabic).

All in all, if TSA was adopted by course book designers, implemented by teachers and practised by students, considerable flavour could be added to EFL classrooms in which learning would be more active. Teachers who are not English native speakers and students could also be encouraged to view writing as a social event that entails more of a focus on rhetoric in considering potential audiences.

8.3 Limitations of the study

In spite of the positive impact of the teaching of TSA to ESL Libyan students, there are still some limitations of this study that must be pointed out. Firstly, this study was limited to the implementation of TSA with texts in expository genres, which are usually preferred in academic contexts. Thus TSA has not been tested with other writing genres. Secondly, teaching TSA to EFL student writers cannot solve all of the writing problems that such students encounter. Coherence, a broad concept, has many different aspects which cannot be

taught by using TSA only. Other techniques to enhance EFL students' performance would also be required.

Equally importantly, it appears that three months of teaching and practising TSA are not enough for students to master this technique perfectly. More time is probably needed for students to become more competent and confident in using TSA.

8.4 Suggestions for further study

The current study opens up interesting questions for future research focusing on TSA and its impact on ESL/EFL students. For example, further studies are needed to investigate the feasibility of teaching TSA accompanied by instruction in other aspects of coherence such as the use of cohesive devices and metadiscourse. On the other hand, since reading and writing are interrelated skills, it is possible that teaching TSA to ESL/EFL students can help them to develop their reading comprehension skills too. This might help such students become aware of the importance of rhetorical features of English in general and coherence in particular.

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Appendix 1: *Per and post-test prompts*

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Pre-test

You will have two hours to write on the following topic.

Write about three pages (300 words) .

Your essay will be judged on clarity, grammatical accuracy, topic development and organization

● Through the years new inventions have changed the way we live. Think

about one invention that has had an impact on the way you live. How has this

invention changed your life.

Post-test

You will have two hours to write on the following topic.

Write about three pages (300 words) .

Your essay will be judged on clarity, grammatical accuracy, topic development

and organization

● In order to have a successful marriage, is it important to marry some one

with whom you have many things in common, such as level of education,

interests, and socioeconomic background?

Appendix 2: **Analytic Scoring Rubric**[*]

Mark	**Format and content 40 marks**	Score
31-40	Fulfills task fully; correct convention for the assignment task; features of chosen genre mostly adhered to; good ideas/good use of relevant information; substantial concept use; properly developed ideas; good sense of audience	
21-30	Fulfills task quite well although details may be underdeveloped or partly irrelevant; correct genre selected; most features of chosen genre adhered to; satisfactory ideas with some development; quite good use of relevant information; some concept use; quite good sense of audience	
11-20	Generally adequate but some inappropriate, inaccurate, or irrelevant data; an acceptable convention for the assignment task; some features of chosen genre adhered to; limited ideas/moderate use of relevant information; little concept use; barely adequate development of ideas; poor sense of audience	
1-10	Clearly inadequate fulfilment of task; possibly incorrect genre for the assignment; chosen genre not adhered to; omission of key information; serious irrelevance or inaccuracy; very limited ideas/ignores relevant information; no concept use; inadequate development of ideas; poor or no sense of audience	
Mark	**Organization and coherence 20 marks**	
16-20	Message followed with ease; well organized and thorough development through introduction, body, and conclusion; relevant and convincing supporting details; logical progression of content contributes to fluency; unified paragraphs; effective use of transitions and reference	
11-15		

	Message mostly followed with ease; satisfactorily organized and developed through introduction, body and conclusion; relevant supporting details; mostly logical progression of content; moderate to good fluency; unified paragraphs; possible slight over- or under-use of transitions but correctly used; mostly correct references
6-10	Message followed but with some difficulty; some pattern of organization - an introduction, body, and conclusion evident but poorly done; some supporting details; progression of content inconsistent or repetitious; lack of focus in some paragraphs; over- or under-use of transitions with some incorrect use; incorrect use of reference
1-5	Message difficult to follow; little evidence of organization introduction and conclusion may be missing; few or no supporting details; no obvious progression of content; improper paragraphing; no or incorrect use of transitions; lack of reference contributes to comprehension difficulty
Mark	**Sentence construction and vocabulary 40marks**
31-40	Effective use of a wide variety of correct sentences; variety of sentence length; effective use of transitions; no significant errors in agreement, tense, number, person, articles, pronouns and prepositions; effective use of a wide variety of lexical items; word form mastery; effective choice of idiom; correct register.
21-30	Effective use of a variety of correct sentences; some variety of length; use of transitions with only slight errors; no serious recurring errors in agreement, tense, number, person, articles, pronouns and prepositions; almost no sentence fragments or run-ons; variety of lexical items with some problems but not causing comprehension difficulties; good control of word form; mostly effective idioms; correct register
11-20	A limited variety of mostly correct sentences; little variety of sentence length; improper use of or missing transitions; recurring grammar errors are intrusive; sentence fragments or run-ons evident; a limited variety of lexical items occasionally causing comprehension problems; moderate word form control; occasional inappropriate choice of idiom; perhaps incorrect register

1-10	A limited variety of sentences requiring considerable effort to understand; correctness only on simple short sentences; improper use of or missing transitions; many grammar errors and comprehension problems; frequent incomplete or run-on sentences; a limited variety of lexical items; poor word forms; inappropriate idioms; incorrect register	
Total/ 100		

*Hyland,K.,2003. Second Language Writing. Cambridge: Cambridge University Press (pp 243,244)

Appendix 3: Trait-based Scoring scale*

Please circle the number that reflects the degree to which you agree with the statement about the essay.

5. strongly agree	4. agree	3. undecided	2. disagree	1. strongly disagree	
5	4	3	2	1	(a)The beginning section is effective in introducing the reader to the subject.
5	4	3	2	1	(b) The ideas in the essay are all very relevant to the topic.
5	4	3	2	1	(c) The ideas in the essay are well-related one to another.
5	4	3	2	1	(d) Ideas mentioned are elaborated.
5	4	3	2	1	(e) The writer's overall point of view is clear.
5	4	3	2	1	(f)The division of paragraphs is justifiable in terms of content relevance.
5	4	3	2	1	(g) Transition between paragraphs is smooth.
5	4	3	2	1	(h) The ending gives the reader a definite sense of closure.

Chiang, Steve Y., 1999, Assessing Grammatical and Textual Features in L2 Writing Samples: The Case of French as a Foreign Language. The Modern Language Journal, 83 (2):pp. 219-232.

Appendix 4: Holistic Scoring Rubric*

Score	Characteristics
85-100	The main idea is stated clearly and the essay is well organized and coherent. Excellent choice of vocabulary and very few grammatical errors. Good spelling and punctuation
75-84	The main idea is fairly clear and the essay is moderately well organized and relatively coherent. The vocabulary is good and only minor grammar errors. A few spelling and punctuation errors.
65-74	The main idea is indicated but not clearly. The essay is not very well organized and is somewhat lacking in coherence. Vocabulary is average. There are some major and minor grammatical errors together with a number of spelling and punctuation mistakes.
50-64	The main idea is hard to identify or unrelated to the development. The essay is poorly organized and relatively incoherent. The use of vocabulary is weak and grammatical errors appear frequently. There are also frequent spelling and punctuation errors.
0-49	The main idea is missing and the essay is poorly organized and generally incoherent. The use of vocabulary is very weak and grammatical errors appear very frequently. There are many spelling and punctuation errors.

Hyland,K.,2003. Second Language Writing. Cambridge: Cambridge University Press(p228)

Appendix 5: Students' performance before using TSA

Table 5-A Pre-test total results of the analytic scoring of the study groups

Control group			Treatment group		
scores	Frequency	Percent	scores	Frequency	Percent
43	1	3.2	40	1	3.1
46	1	3.2	43	1	3.1
48	1	3.2	46	1	3.1
50	3	9.7	47	2	6.3
51	1	3.2	49	1	3.1
52	5	16.1	50	6	18.8
53	3	9.7	52	2	6.3
54	1	3.2	53	1	3.1
55	2	6.5	54	2	6.3
56	2	6.5	55	2	6.3
57	7	22.6	56	4	12.5
58	1	3.2	57	1	3.1
59	1	3.2	58	3	9.4
60	1	3.2	59	1	3.1
65	1	3.2	60	2	6.3
			62	2	6.3
total	31	100.0		32	100.0

Table 5-B Pre-test scores of coherence category of the study groups

Control group			Treatment group		
scores	Frequency	Percent	scores	Frequency	Percent
9	2	6.5	6	1	3.1
10	12	38.7	8	1	3.1
11	6	19.4	9	3	9.4
12	9	29.0	10	8	25.0
13	2	6.5	11	6	18.8
			12	11	34.4
			13	1	3.1
			14	1	3.1
total	31	100.0		32	100.0

Table 5-C Pre-test results of holistic scoring of the study groups

Control group			Treatment group		
scores	Frequency	Percent	scores	Frequency	Percent
40	1	3.2	45	1	3.1
41	1	3.2	49	1	3.1
49	3	9.7	50	7	21.9
50	6	19.4	51	2	6.3
51	2	6.5	53	3	9.4
52	2	6.5	55	6	18.8
53	3	9.7	60	8	25.0
55	8	25.8	63	1	3.1
58	4	12.9	65	3	9.4
59	1	3.2			
total	31	100.0		32	100.0

Table 5-D pre-test coherence scale scores of the study groups

Control group			Treatment group		
Scores	Frequency	Percent	scores	Frequency	Percent
19	3	9.7	18	3	9.7
22	1	3.2	19	2	6.5
23	2	6.5	20	1	3.2
24	2	6.5	21	1	3.2
25	3	9.7	22	2	6.5
26	1	3.2	23	1	3.2
28	1	3.2	24	2	6.5
29	4	12.9	25	1	3.2
30	4	12.9	26	3	9.7
31	3	9.7	27	1	3.2
32	1	3.2	28	4	12.9
33	4	12.9	29	1	3.2
34	1	3.2	31	4	12.9
36	1	3.2	32	3	9.7
			37	1	3.2
			38	1	3.2
Total	31	100.0	Total	31	100.0

Table 5-E Topical progressions and their percentages of the control and treatment groups / pre-test essays

Pre-test	T. units	New topics	PP	%	SP	%	EPP	%
Control group	619	222	210	33.68	72	11.47	144	23.14
Treatment group	669	230	225	32.84	84	13.10	202	30.35

Figure 5-A The topical progressions used by CG and TG in the pre-test

essays
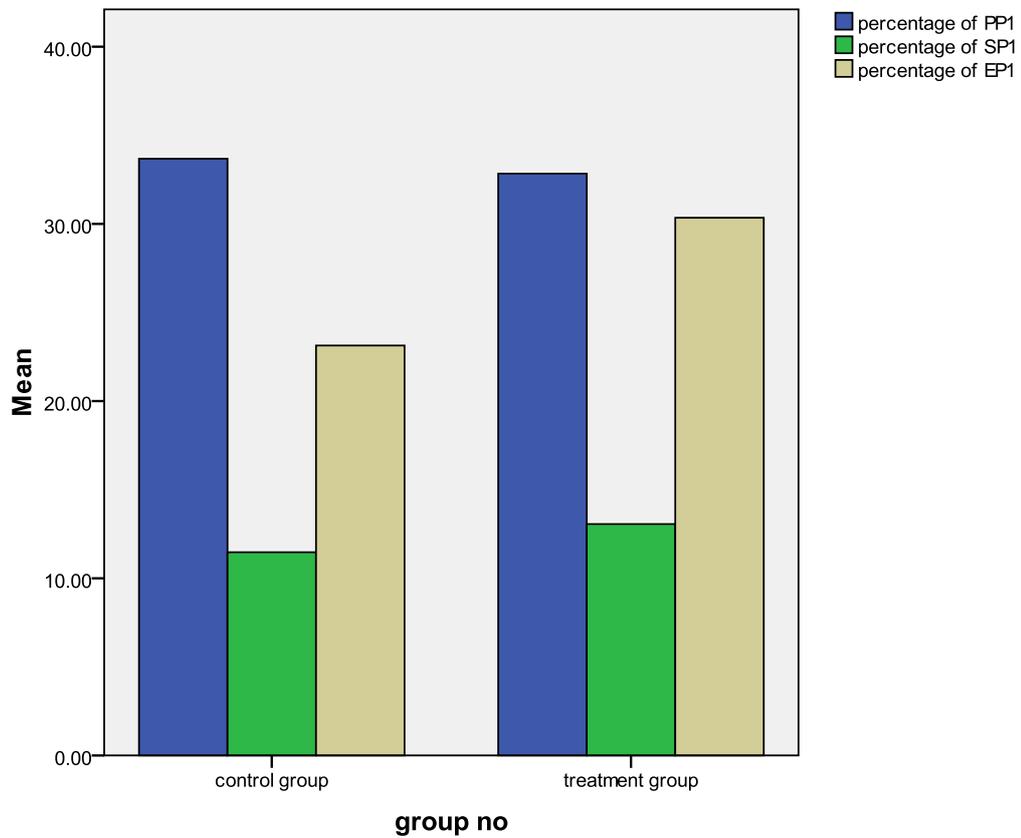
Appendix 6: Students' performance After TSA

Table 6-A Post-test total results of the analytic scoring of the study groups

	Control group		Treatment group		
scores	Frequency	Percent	scores	Frequency	Percent
43	1	3.2	40	1	3.1
44	1	3.2	41	1	3.1
46	1	3.2	52	1	3.1
49	1	3.2	53	1	3.1
50	2	6.5	55	3	9.4
51	2	6.5	56	3	9.4
52	2	6.5	57	2	6.3
53	3	9.7	58	1	3.1
54	1	3.2	59	3	9.4
55	4	12.9	60	1	3.1
56	2	6.5	61	2	6.3
57	4	12.9	63	2	6.3
58	2	6.5	64	2	6.3
60	1	3.2	65	2	6.3
61	1	3.2	68	2	6.3
64	2	6.5	69	1	3.1
69	1	3.2	74	1	3.1
			75	2	6.3
			77	1	3.1
total	31	100.0		32	100.0

Table 6-B Post-test scores of coherence category of the study groups

Control group			Treatment group		
scores	Frequency	Percent	scores	Frequency	Percent
8	1	3.2	8	1	3.1
9	2	6.5	10	1	3.1
10	10	32.3	11	6	18.8
11	8	25.8	12	10	31.3
12	5	16.1	13	6	18.8
13	4	12.9	14	2	6.3
14	1	3.2	15	6	18.8
total	31	100.0		32	100.0

Table 6-C Post-test results of holistic scoring of the study groups

Control group			Treatment group		
scores	Frequency	Percent	scores	Frequency	Percent
40	1	3.2	45	2	6.3
47	1	3.2	53	1	3.1
50	9	29.0	55	2	6.3
52	2	6.5	58	1	3.1
53	1	3.2	60	5	15.6
54	2	6.5	62	3	9.4
55	5	16.1	63	1	3.1
56	1	3.2	64	1	3.1
57	1	3.2	65	9	28.1
58	3	7.9	67	1	3.1
59	1	3.2	70	3	9.4
60	3	7.9	75	1	3.1
61	1	3.2	77	2	6.3
Total	31	100.0		32	100.0

Table 6-D Post-test results of the whole scale of coherence

Control group			Treatment group		
score	Frequency	percentage	score	Frequency	percentage
18	3	9.7	22	1	3.1
19.	2	6.5	25	2	6.3
20	1	3.2	26.	1	3.1
22	1	3.2	27	3	9.4
23	2	6.5	28	3	9.4
24	1	3.2	29	2	6.3
25	2	6.5	30	3	9.4
26.	1	3.2	32	4	12.5
27.	3	9.7	33	4	12.5
28	1	3.2	34	4	12.5
29	4	12.9	35	1	3.1
31	1	3.2	37	1	3.1
32	4	12.9	38	1	3.1
37.	3	9.7	39	2	6.3
38	1	3.2			
	1	3.2			
Total	31	100.0		32	100.0

Table 6-E Topical progressions and their percentages of CG and TG/ pre and post-test essays

Post-test	T. units	New topics	PP	%	SP	%	EPP	%
Control group	561	289	113	20.24	102	18.22	136	24.16
Treatment group	577	269	150	25.94	150	25.63	141	24.08

Figure 6-A The topical progressions used by CG and TG in the post-test
essays
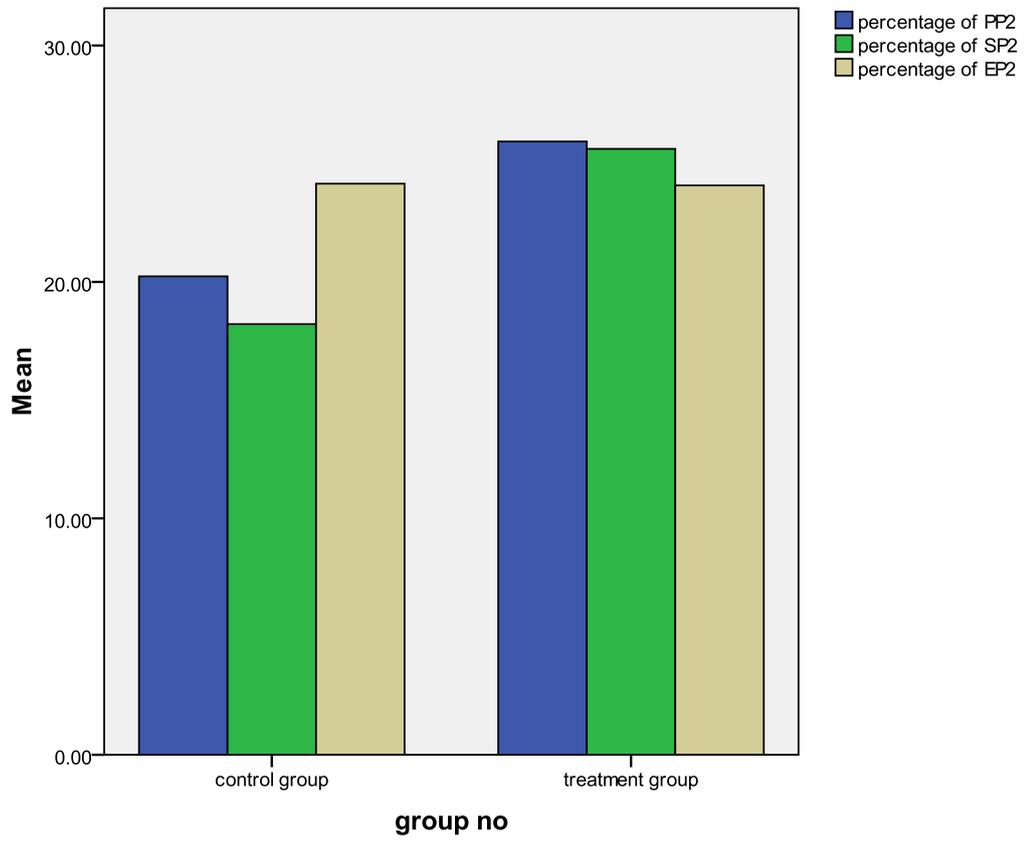
Appendix 7: Comparing the performance of each group

Table 7-A Pre and post -test total results of the analytic scoring of CG .

Pre-test			Post -test		
scores	Frequency	Percent	scores	Frequency	Percent
43	1	3.2	43	1	3.2
46	1	3.2	44	1	3.2
48	1	3.2	46	1	3.2
50	3	9.7	49	1	3.2
51	1	3.2	50	2	6.5
52	5	16.1	51	2	6.5
53	3	9.7	52	2	6.5
54	1	3.2	53	3	9.7
55	2	6.5	54	1	3.2
56	2	6.5	55	4	12.9
57	7	22.6	56	2	6.5
58	1	3.2	57	4	12.9
59	1	3.2	58	2	6.5
60	1	3.2	60	1	3.2
65	1	3.2	61	1	3.2
			64	2	6.5
			69	1	3.2
total	31	100.0	total	31	100.0

Table 7-B Pre and post-test scores of coherence category of CG.

Pre-test			Post-test		
scores	Frequency	Percent	scores	Frequency	Percent
9	2	6.5	8	1	3.2
10	12	38.7	9	2	6.5
11	6	19.4	10	10	32.3
12	9	29.0	11	8	25.8
13	2	6.5	12	5	16.1
			13	4	12.9
			14	1	3.2
total	31	100.0	total	31	100.0

Table 7-C Pre and post-test results of holistic scoring of CG

Pre-test			Post-test		
scores	Frequency	Percent	scores	Frequency	Percent
40	1	3.2	40	1	3.2
41	1	3.2	47	1	3.2
49	3	9.7	50	9	29.0
50	6	19.4	52	2	6.5
51	2	6.5	53	1	3.2
52	2	6.5	54	2	6.5
53	3	9.7	55	5	16.1
55	8	25.8	56	1	3.2
58	4	12.9	57	1	3.2
59	1	3.2	58	3	7.9
			59	1	3.2
			60	3	7.9
			61	1	3.2
total	31	100.0		31	100.0

Table 7-D Comparison between the pre and post test results of the 3 methods of scoring.

	test	Analytic Scoring/total	Analytic scoring /coherence	Holistic scoring
Mean	Pre	54	10.9	52.39
	post	54.68	10.97	53.68
Mode	pre	57	10	55
	post	55	10	50
Std. Deviation	pre	4.367	1.1061	4.402
	post	5.618	1.378	4.629
Minimum	pre	43	9	40
	post	43	8	40
Maximum	pre	65	13	59
	post	69	14	61

Table 7-E the trait-based results of CG

features / degrees		a	b	c	d	e	f	G	h	total
1strongly disagree	pre	0	0	0	0	1	0	1	0	2
	post	0	0	0	0	1	1	0	1	3
2 disagree	pre	3	4	3	0	6	8	8	7	39
	post	5	7	5	2	12	10	11	6	58
3 undecided	pre	7	10	11	13	5	3	12	8	69
	post	15	11	8	12	4	3	6	9	68
4 agree	pre	14	15	14	17	14	16	10	12	112
	post	9	11	15	16	12	15	13	13	104
5 strongly agree	pre	7	2	3	1	5	4	0	4	26
	post	2	2	3	1	2	2	1	2	15
Total	pre	31	31	31	31	31	31	31	31	248
	post	31	31	31	31	31	31	31	31	248

Table 7-F. pre and post-test coherence scale (CG)

		Pre-test coherence scale	post-test coherence scale
N	Valid	31	31
	Missing	0	0
Mean		27.9032	26.2581
Median		29.0000	26.0000
Mode		29.00[a]	28.00[a]
Std. Deviation		4.67158	5.47094
Minimum		19.00	18.00
Maximum		36.00	38.00

Table 7-G Coherence scale results (CG)

Pre-test			Post-test		
scores	frequency	percentage	Scores	frequency	percentage
19	3	9.7	18	3	9.7
22	1	3.2	19	2	6.5
23	2	6.5	20	1	3.2
24	2	6.5	21	1	3.2
25	3	9.7	22	2	6.5
26	1	3.2	23	1	3.2
28	1	3.2	24	2	6.5
29	4	12.9	25	1	3.2
30	4	12.9	26	3	9.7
31.	3	9.7	27	1	3.2
32.	1	3.2	28	4	12.9
33.	4	12.9	29	1	3.2
34.	1	3.2	31	4	12.9
36	1	3.2	32	3	9.7
			37	1	3.2
			38	1	3.2
Total	31	100.0		31	100.0

Table 7-H Topical progressions and their percentages of CG/ pre and post-test essays

Control group	T. units	New topics	PP	%	SP	%	EPP	%
Pre-test	619	222	210	33.68	72	11.47	144	23.14
Post-test	561	289	113	20.24	102	18.22	136	24.16

The treatment group (TG)

Table 7-I Pre-and post-test scores of the analytic scoring of TG

Pre-test			Post-test		
scores	Frequency	Percent	scores	Frequency	Percent
40	1	3.1	40	1	3.1
43	1	3.1	41	1	3.1
46	1	3.1	52	1	3.1
47	2	6.3	53	1	3.1
49	1	3.1	55	3	9.4
50	6	18.8	56	3	9.4
52	2	6.3	57	2	6.3
53	1	3.1	58	1	3.1
54	2	6.3	59	3	9.4
55	2	6.3	60	1	3.1
56	4	12.5	61	2	6.3
57	1	3.1	63	2	6.3
58	3	9.4	64	2	6.3
59	1	3.1	65	2	6.3
60	2	6.3	68	2	6.3
62	2	6.3	69	1	3.1
			74	1	3.1
			75	2	6.3
			77	1	3.1
total	32	100.0		32	100.0

Table 7-J Pre and post-test scores of coherence category of the TG

	Pre-test			Post-test	
scores	Frequency	Percent	scores	Frequency	Percent
6	1	3.1	8	1	3.1
8	1	3.1	10	1	3.1
9	3	9.4	11	6	18.8
10	8	25.0	12	10	31.3
11	6	18.8	13	6	18.8
12	11	34.4	14	2	6.3
13	1	3.1	15	6	18.8
14	1	3.1			
total	32	100.0		32	100.0

Table 7-K Pre and post-test scores of holistic scoring of TG

	Pre-test			Post-test	
scores	Frequency	Percent	scores	Frequency	Percent
45	1	3.1	45	2	6.3
49	1	3.1	53	1	3.1
50	7	21.9	55	2	6.3
51	2	6.3	58	1	3.1
53	3	9.4	60	5	15.6
55	6	18.8	62	3	9.4
60	8	25.0	63	1	3.1
63	1	3.1	64	1	3.1
65	3	9.4	65	9	28.1
			67	1	3.1
			70	3	9.4
			75	1	3.1
			77	2	6.3
total	32	100.0		32	100.0

Table 7-L Comparison between the pre and post test results / TG

	test	Analytic Scoring/total	Analytic scoring /coherence	Holistic scoring
Mean	pre	53.28	10.81	53.56
	post	60.63	12.50	62.97
Mode	pre	50	12	50
	post	55	12	65
Std. Deviation	pre	5.366	1.575	4.779
	post	8.530	1.666	7.373
Minimum	pre	40	6	45
	post	40	8	45
Maximum	pre	62	14	62
	post	77	15	77

Table 7-M Pre and post test results of the trait-based scoring / TG

features / degrees	test	a	b	C	d	e	f	g	h	total	%
1 strongly disagree	pre	0	0	0	0	1	0	0	0	1	0.39
	post	0	0	0	0	0	0	0	0	0	00
2 disagree	pre	3	4	2	2	2	6	11	4	34	13.28
	post	3	1	0	0	3	0	2	1	10	3.9
3 undecided	pre	6	9	11	14	13	9	13	9	84	32.8
	post	13	7	5	5	8	10	9	4	61	23.8
4 agree	pre	20	18	16	16	15	17	7	17	126	49.2
	post	9	15	20	21	17	18	14	19	133	51.95
5 strongly agree	pre	3	1	3	0	1	0	1	2	11	4.29
	post	7	9	7	6	4	4	7	8	52	20.31
Total	pre	32	32	32	32	32	32	32	32	256	100
	post	32	32	32	32	32	32	32	32	256	100

Table 7-N TG coherence scale descriptive data

		Pre-test coherence scale	Post-test coherence scale
N	Valid	32	32
	Missing	0	0
Mean		27.5000	31.0938
Mode		24.00	32.00[a]
Std. Deviation		4.40674	4.20721
Minimum		17.00	22.00
Maximum		36.00	39.00
Sum		880.00	995.00

a. Multiple modes exist. The smallest value is shown

Table 7-O Coherence scale results

Pre-test			Post-test		
Score	Frequency	Percent	score	Frequency	Percent
17	1	3.1	22	1	3.1
18	1	3.1	25	2	6.3
19	1	3.1	26	1	3.1
23	1	3.1	27	3	9.4
24	5	15.6	28	3	9.4
26	2	6.3	29	2	6.3
27	3	9.4	30	3	9.4
28	3	9.4	32	4	12.5
29	3	9.4	33	4	12.5
30	4	12.5	34	4	12.5
31	3	9.4	35	1	3.1
32	2	6.3	37	1	3.1
33	2	6.3	38	1	3.1
36	1	3.1	39	2	6.3
Total	32	100.0		32	100.0

Table7-Q Pre and post-test topical progressions and their percentages of TG

Treatment group	T. units	New topics	PP	%	SP	%	EPP	%
Pre-test	669	230	225	32.84	84	13.10	202	30.35
Post-test	577	269	150	25.94	150	25.63	141	24.08

Appendix 8: Teaching TSA1

Lesson Plan

Lesson 1   **Introduction**   **Date 24/02/2009**

Objectives:

defining TSA.

By the end of this lesson students should learn the general concepts and terminology related to TSA.

Procedure:

●This session is devoted to introducing the theoretical background and the underlying assumption of TSA to let students in the treatment group constitute a clear conception of coherence. Students are instructed that English readers expect to read coherent texts. A coherent paragraph should contain sentences that are logically arranged and that flow smoothly.

●The next step is presenting the concepts that are related to TSA. Students would need these concepts when analysing texts. They are taught the meanings of 'discourse topic, t-unit, sentence topic (theme), and comment (rheme). After presenting each concept, followed by some examples, students are given in-class tasks to carry out separately or with peers. The teacher-researcher is ready for providing hints or any clarification. At the end of the session some sentences are given to students and short paragraphs are given as homework.

Activities

Examples on blackboard

Pair work: Hand-out 1

Notes:

Lesson 2   **Topical Progressions**   **Date: 25/02/2009**

Objectives: By the end of this lesson students should be able to identify the three types of progression (PP, SP, and EPP)

Procedure:

In this session few minutes should be spent for quick revision in order to check if all students still remember what they learned in the last session. Then the lesson moves to another step where the topical progressions are introduced. Each topical progression is defined clearly, and its function is explained by using simple examples. Following this, some short paragraphs which mostly contain PP are given to students to identify PP. To let students learn this progression practically, they are asked to write short paragraphs that mainly contain PP. When they finish, they are informed that in spite of the importance of using PP to reinforce an idea in the reader's mind, the overuse of this progression can become tiresome and may lead a sense of redundancy. Accordingly another type of progression should be used. Similarly, SP and EPP are presented to students following the same steps. At the end of the session students are asked to analyse three short paragraphs and write two paragraphs at home.

Activities

  BB

  Hand-out 2

Notes

Lesson 3   **Practising TSA 1**   **Date: 26/02/2009**

Objectives: By the end of this lesson should be able to use TSA and chart their analysis on diagrams.

As usual the session begins with a quick revision followed by checking students' homework. Students are asked to revise each other's homework at the same time I observe and help them when necessary. The rest of the session is devoted to analysing simple expository paragraphs. This task is intended to be carried out in groups, but I realised that most students do not prefer group work. They work in pairs. For homework, students are asked to analyse two expository paragraphs.

Activities

Pair work, peer revision

Hand-out 3

Notes:

Lesson 4 **Practising TSA 2** **Date: 01/03/2009**

Objectives: 1- general revision. Students should be able to use TSA as a tool to evaluate their own writing.

Procedure

Before asking students to write their own paragraphs, a quick revision is essential. Then students' homework is checked and the common errors are discussed. In the next hour of the session, students are instructed to write one paragraph following the same procedures they have learned. Each student has to choose a topic specify his/her discourse topic (the main idea). Then they have to write keeping in mind the three types of progressions and their functions. To assess coherence, a student needs to mark the paragraph into t-units by using numbers and slashes; underline each sentence topic, and identify the progressions. Each student is given a pre-prepared diagram where he/she would chart the topical progression.   The visual appearance of the paragraph would help students to detect any overuse or lack of any type of progressions. It would probably help them identify any deviant ideas or any interruption of the flow of ideas. By this evaluation students would be ready to amend the given paragraph by carrying out any changes could contribute to make it coherent.

Activities

Hand-out 4

Notes

Appendix9: Teaching TSA2

Hand-outs

Hand-out 1   **Introduction**

T-unit

A T-unit can be:

1. Any independent clause and all its required modifiers.

2. Any non-independent clause punctuated as a sentence (as indicated by end punctuation).

3. Any imperative.

● **Task**: Read the following paragraph and then mark it into T-units by using numbers and slashes:

The battles of Marathon and Tours are examples of how war has often determined the development of Western civilization. The basis of Western civilization was probably decided at the Battle of Marathon about 2,500 years ago. In this battle, a small number of Greek soldiers led by a famous Greek general defeated 100,000 invading Persians under the Persian king. Because the Greeks won, Greek ideas about many subjects matured and became the foundation of Western society. Whereas Marathon laid the basis of Western civilization, its structure remained the same as a result of the Battle of Tours in A.D. 732. Before this battle, Muslim armies had taken control of a large number of countries, but they were stopped by a group of soldiers led by Charles Martel in France. If the Muslims had won at Tours, Islam might have become the major religion of Western society.

Rooks, George, 1998. Paragraph Power: communicating ideas through paragraphs,24-25.

Topic (theme) and comment (rheme)

Sentence topic (sub-topic) is the main idea of the t-unit. It is what the t-unit is about; it states something known or supposed to be clear in a certain context. Comment, on the other hand, is what is being said about the topic. It is a piece of new information.

Examples:

The <u>government</u> decided to cut tax.

►Now read the following sentences and identify the topic and comment of each one.

- Many improvements are needed at this school.

- My hometown is a wonderful place.

- Driving a car can be hazardous.

● **Task**: Sometimes topics can be found in other places rather than the beginning especially in the following type of sentences:

When dummy subjects, such as *it* and *there*, are used as in:

There seems to be <u>no one</u> here.

It is <u>Mary</u> who bought that car.

When introductory phrases, such as I believe, I think, they suggested that…, are used as in:

The committee suggested that schools should be provided with more computers.

•**Task**: Now read the following sentences and underline their topics.

- *It seems as if her work would never be finished.*

- *Although Bob and Alice were unfair and cruel parents, their daughter still took care of them.*

● **Task**: Re-read the paragraph above carefully then:

(a) Find out the main idea (discourse topic) of the paragraph,

(b) Identify the t-units by using numbers and slashes.

(c) underline the topic of each t-unit.

Hand-out 2   Topical progressions

1- Parallel progression (PP)
   Definition: Topics in successive sentence (or t-units) are identical or synonyms.
   Function: it is used to reinforce the idea by repeating the topic adding more
   information to it.
   Example:
   *New-born infants are completely helpless. They can do nothing to ensure their own
   survival. They are different from young animals.*

   Task: Now write a short paragraph similar to the example and then identify the
   sentence topic of each T-unit and the PP.

2- Sequential progression (SP)
   Definition: Topics in successive sentences (t-units) are different but derived from
   comments of previous sentences (t-units).
   Function: it is used for elaborating ideas and expanding the depth of the text by
   introducing and developing new topics.

   Example:
   *Mary saw a policeman in the street. He was trying to help some children. The
   children were going to school*.

   Task: Now write a short paragraph similar to the example and then identify the
   sentence topic of each T-unit and the SP.

3- Extended parallel progression (EPP)
   Definition: is a parallel progression which is temporarily interrupted with a sequential
   progression.
   Function: it is used to refer back to an idea mentioned previously.
   Example:
   *Body language varies from culture to culture. To say yes, American nod their heads
   up and down. Japanese and Italian use the same nod to say no. Body language is an
   important skill for international mangers.*

   Task: Now write a short paragraph similar to the example and then identify the
   sentence topic of each T-unit and the EPP.

Hand-out 3   Practising TSA 1

Read the following paragraphs carefully then:

(a) Find out the main idea (discourse topic) of the paragraph,

(b) Identify the t-units by using numbers and slashes

(c) Underline the topic of each t-unit

(d) Chart the topical progression on the diagram below each paragraph.

> 1- *California is the most wonderful place to visit because of its variety of weather and its beautiful nature. Visitors to California can find any weather they like. They can find cool temperatures in the summer; also they can find warm weather in the winter. They can find places that are difficult for humans to live in the summer because they are so hot. Or they can find places closed in the winter because of the snow. On the other hand, visitors can find the nature they like. They can find high mountains and low valleys. Visitors can find a huge forest, a dead desert, and a beautiful coast. So California is the most wonderful place to visit because of its weather and nature.*

> *Paragraph Power George M. Rooks (11)*

The discourse topic is (……………………………………………………………………)

T-Unit N0.	Topical Depth	Topic No.
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

2-Microwave ovens have changed the role of the modern woman. No longer does a housewife stand over a hot stove cooking pots of stew. Today she works at a career, manages her family, and prepares satisfying meals in minutes. The microwave oven has given her freedom from her traditional role.

Cerniglia et al,1990, Improving Coherence by Using Computer-Assisted Instruction.

T-Unit N0.	Topical Depth	Topic No.
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

<u>Hand-out 4</u>   <u>Practising TSA2</u>

Write two paragraphs following these steps:

1- Choose a topic that controls your paragraph.
2- Be sure that each T-unit has a sentence topic which somehow related to the main topic.
3- Use PP to reinforce the idea for the reader.
4- Use SP to elaborate your ideas, develop individual topics, and add details to an idea.
5- Use EPP to remind the reader of important topic and to relate them to the main topic. EPP is used also to provide closure when is used at the end of the text.
6- When you finish, mark your paragraph into T-units by using numbers and slashes, underline t sentence topics, identify the three types of progressions, and chart them on diagrams.
7- Look at the diagram and check how your ideas are arranged and detect any deviation from the main topic.

Appendix 10: Semi- structured Interview

Students' writing experience

1- You have been studying English and practising writing for some years, what do you think about writing lessons, homework, and activities?
2- What kind of difficulties did you encountered (if any)?
3- When you write, what are the most important features you usually focused on?
4- What kind of feedback did your teachers usually provide?
5- Before this semester, did you think about the person to whom you write?
6- Before this semester, did you have any idea about 'coherence'?
7- When you revise your writing, what are the things that you used to consider?
8- What are the main benefits (if any) of the course you have just finished?
9- Can you tell me how to plan and write your essays?

Topical Structure Analysis

1- You have been using TSA for several weeks, can you tell me if it has been helpful or not? If yes, how?
2- Is using TSA difficult? What kind of difficulties?
3- You have learned three types of topical progressions, which one of them do you think you use more than the others? Why?
4- Which one of the topical progressions is easy to identify?
5- When do use TSA, before you start writing, while you write or when you finish?
6- Do you think you will use TSA in future?