



**The Impact of Using Flipped Classroom Instruction on the Writing
Performance of Twelfth Grade Female Emirati Students in the
Applied Technology High School (ATHS)**

تأثير استخدام قلب طريقة التدريس على الأداء الكتابي
لطالبات الصف الثاني عشر في التكنولوجيا التطبيقية
في أبوظبي

By

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the Degree of Master of Education in Teaching English to Speakers
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Dissertation Release Form

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The Impact of Using a Flipped Classroom Instruction on the Writing Performance of Twelfth Grade Female Emirati Students in the Applied Technology High School (ATHS)

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Dedication

I dedicate this dissertation to the soul of my father who took pride in all my accomplishments. I dedicate it to my mother, whose endeavor and sacrifice enabled me to pursue my education and whose continuous support has always been the source of my strength. I also dedicate it to my husband who inspired me with his continuous encouragement and without whom I couldn't have overcome the many obstacles I faced. I dedicate it to my sister who supported me by easing my fears and finally I dedicate it to my two jewels, Christia and Alexia for whom I want to set a good example of education and lifelong learning.

Signature

Mireille Farah

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TABLE OF CONTENTS

Section	Title	Page
	Dissertation Release Form	ii
	Dedication	iii
	Acknowledgments	iv
	Table of Contents	v-vii
	A List of Abbreviations Used	viii
	A List of Tables	viii
	A List of Figures	ix
	A List of Appendices	ix
	Abstract in the English Language	x
	Abstract in the Arabic Language	xi
1.	Introduction	1
1.1	Back ground and Need for the Study	1
1.2	Statement of the Problem	2
1.3	Purpose and Research Questions of the Study	3
1.4	Significance of the Study	3
1.5	Definition of Terms	4-5
2.	Review of Related Literature: Introduction	6
2.1	Research on Second Language Learning and Writing	6
2.1.1	Theories of Cognitive Learning, Explicit Teaching and The Role of Noticing	7
2.1.2	Research on the Use of Technology in Writing	8-9
2.2	Blended Learning, Constructivism and Independent Learning	10-13

2.3	Research in the Flipped Classroom Instruction (FCI) Educational Practice	13
2.3.1	Brief History of FCI	13
2.3.2	Principles of the FCI, Active Learning and Differentiation	14-15
2.3.3	Past Studies related to Using FCI as a Model of Instruction	16-17
3	Research Methodology: Introduction	18
3.1	Participants in the Study	19
3.2	Hypotheses of the Study: Research Questions	20
3.3	Research Design	20
3.4	Research Instruments	21
3.4.1	The Writing Pretest and Posttest	21
3.4.2	Questionnaires	21
3.4.3	Evaluation Instrument: Writing Rubric	22
3.5	Test Administration	22
3.5.1	Test Validity	23
3.5.2	Test Reliability	23
3.6	Procedures of the Study	23-26
3.7	Implementation of the Program	26
3.7.1	Validity and Reliability of the Program	26-28
3.7.2	Learning Material	28
3.8	Ethical Issues	29
3.9	Data Collection	29
3.9.1	Pretest and Posttest	29
3.9.2	Questionnaire	30
4.	Findings and Discussion	31
4.1	Findings of the Study	31

4.1.1	Findings Related to Question One	31-32
4.1.2	Findings Related to Question Two	33-37
4.1.3	Findings Related to Question Three	38-39
4.1.4	Summary of Findings	39
4.2	Discussion	39-42
5.	Implications, Limitations, Recommendations and Conclusion	43
5.1	Implications of the Study	43
5.2	Limitations of the study	43-44
5.3	Recommendations	45
5.3.1	Recommendations to the Applied Technology High School	45
5.3.2	Recommendations for Further Research	45-46
5.4	Conclusion	46-48
	References	49-55
	Appendices	56-

A LIST OF ABBREVIATIONS USED

ATHS	Applied Technology High School
BL	Blended Learning
CALL	Computer Assisted Language Learning
ES	Engineering Sciences
ESL	English as a Second Language
FCI	Flipped Classroom Instruction
F2F	Face to Face
IELTS	International English Language Testing System
L2	Second Language
SPSS	Statistical Package for Social Sciences
STEM	Science, Technology, Engineering and Mathematics
VLE	Virtual Learning Environments
ZPD	Zone of Proximal Development

A LIST OF TABLES

Table 1	<i>Means and Standard Deviation of the Pre and Posttest Scores of the Experimental (1) and Control (2) Groups</i>
Table 2	<i>Independent Sample T-test Results and Analysis of Variables</i>
Table 3	<i>Results of the Paired Sample t-test for Correlation between the Variables on the Experimental Group</i>
Table 4	<i>Results of the Paired Sample t-test for Correlation between the Variables on the Controlled Group</i>

A LIST OF FIGURES

Figure 1	The Flipped Rotational Model of Blended Learning.
Figure 2	Comparison of Traditional Classroom and Flipped Classroom
Figure 3	A List of IELTS Program Objectives
Figure 4	Students' Perceptions of the Flipped Classroom Instruction

A LIST OF APPENDICES

Appendix A	Information Sheet and Consent Form
Appendix B	Writing Pretest/ Post-test
Appendix C	Questionnaire A: Students' Attitudes towards Flipped Instruction
Appendix D	IELTS Writing Task 1 Rubric
Appendix E	IELTS Writing Task 2 Rubric
Appendix F	The Flipped Classroom Instruction Sample videos and lessons/ activities.
Appendix G	Names of Teachers

ABSTRACT**The Impact of Using Flipped Classroom Instruction on the Writing Performance of Twelfth Grade Female Emirati students in the Applied Technology High School (ATHS)****By****Mireille Farah****Supervisor****Dr. John McKenny**

The aim of the present study is to examine the impact of using a Flipped Classroom Instructional Method on the writing performance of twelfth grade Emirati female students at the Applied Technology High School (ATHS) in Abu Dhabi, United Arab Emirates (UAE). The main objective of the research study is to measure whether there are any significant differences in the writing attainment of students who learn through the flipped classroom instruction method and those who learn “traditionally”. The research also sought to identify female students’ perception of the Flipped Instruction in an ESL writing setting.

For this purpose, a fifteen-week teaching program was designed to cover the main IELTS Tasks 1 and 2 writing objectives. The program consisted of instructional videos and differentiated class tasks that were used with only one group of students while the other group studied the teaching material in a similarly learner-centered class. Both groups completed a pretest and post-test to answer the inquiry of the current study. The test scores were computed on *SPSS*. Findings revealed statistically significant differences between the mean scores in favor of the students in the experimental group. Furthermore, the results showed that this improvement in the writing performance is largely attributable to the Flipped Instruction method of teaching. Students’ attitudes towards the Flipped Instruction proved to be equally favorable.

تأثير استخدام قلب طريقة التدريس على الأداء الكتابي لطلاب الصف الثاني عشر في التكنولوجيا التطبيقية في أبوظبي

إعداد: ميراي فرح

مشرف الرسالة: جون ماكينى

تهدف الدراسة الحالية إلى استقصاء أثر استعمال طريقة قلب التدريس على المهارات الكتابية لطلاب الصف الثاني عشر في مدرسة التكنولوجيا التطبيقية في أبو ظبي في الإمارات العربية المتحدة.

الهدف الرئيس هو التدقيق في وجود فروقات ذات دلالة إحصائية مهمة في التعبير الكتابي بين أداء الطلاب اللاتي تعلمن باستخدام قلب طريقة التدريس وبين أداء الطالبات اللاتي تعلمن الكتابة باستخدام الطريقة التقليدية وتسعى هذه الدراسة أيضاً إلى استبيان آراء الطالبات بطريقة التعليم الجديدة في صفوف الكتابة باللغة الإنجليزية باعتبارها لغة ثانية. لهذا الهدف، تم تصميم برنامج تعليمي ونفذ مدة (15) أسبوعاً لتدريس التعبير الكتابي في القسم الأول والثاني من امتحان *IELTS* / *1*.

تألف البرنامج من مجموعة أفلام تعليمية وقد طبق البرنامج على مجموعة واحدة من الطالبات بينما تعلمت المجموعة الثانية داخل الصف مع التركيز على فاعلية نشاط المتعلم وقد أكملت المجموعتان الامتحانين: الامتحان السابق للبرنامج ثم الامتحان النهائي بعد التطبيق، للإجابة عن سؤال البحث في نهاية الدراسة. تم جمع البيانات وتحليلها من خلال برنامج إحصائي إلكتروني *SPSS* وقد أظهرت النتائج أن طريقة قلب التدريس تعتبر أداة تعليمية ذات تأثير إيجابي على مستوى أداء الطالبات الكتابي في امتحان *IELTS* / *1* ، كما أظهرت نتائج استبيان آراء الطالبات بأن استخدام هذا الأسلوب الحديث من دمج طرائق التدريس وقلب التدريس مرحب به عند طالبات الصف الثاني عشر .

Chapter One

1. Introduction

1.1 Back ground and Need for the Study

Teaching in the rapidly changing, information economy era of the 21st century has proven to be a great challenge to educators in general. Namely, it requires capability in the field of technology and probably implies with it a major shift in the teaching and learning classroom practices. Education in the present can the least be compared to education in the past with its approach, aims and objectives. Students in the current times learn more by doing and by being involved than by listening to the teacher passively. Therefore, in order to attend to the needs of students who learn differently, teachers need to consider adjusting their pedagogical approach and creating better learning environments that allow for all the different needs to be met.

Arguably, writing is considered by many teachers to be one of the hardest skills to teach to students that learn English as a Second Language (ESL). According to Nunan (1999, p.271), it is a skill that even most native speakers can never master because it requires the production of a long, coherent and fluent piece of writing. In order to produce a relatively “good” piece of writing, a writer needs to have good lexical and grammatical resources and acknowledge the importance of content, organization, coherence and cohesion in paragraphs. How to facilitate this acquisition and help learners improve writing skills still presents a major challenge to language teachers, but technology seems to present positive implications that are potentially beneficial for the learners’ writing skills.

Today’s Arab learners are mostly technologically adept but many are intimidated by academic writing. The reason behind this seems to be largely related to the fact that they are not readers traditionally and they are mostly second language learners. Originally, Arabs are known to be aural and oral communicators whose heritage was based upon reciting poetry and telling stories with little emphasis on writing them. As a result, Arab learners of English find the writing skill particularly challenging, and one main factor is related to the fact that English composition differs from the structure, organization and style of Arabic composition writing.

In the school where the researcher is conducting the study, pressure mounted for better students’ results within a short period of time on the International English Language Testing System (IELTS) and with fewer English lessons offered to graduating twelfth graders, there was a need to find an alternative solution to maximize the learning time in class. In addition, because it is difficult to decrease the size of the class and the ratios of learners to teacher, there was less chance for personal attention to students’ needs and differentiating instruction. Therefore, to increase the probability of lower achievers reaching

higher band scores on the IELTS test within a shorter period of time, an alternative teaching methodology was needed. The group of students referred to meet four times a week for a period of 40 minutes in total for each lesson. This means that the face-to-face time is limited to 160 minutes per week only; this is a short instructional period that cannot help students improve their scores by at least a band score, namely if the goal is to cover the four skills of Listening, Speaking, Reading and Writing.

The Flipped Classroom Instruction (FCI) implies a paradigm shift in the teaching methodology as it is assumed to lead to more productive learning outcomes and allows class time to be utilized for practical learning instead of focusing on the didactic approach. In a normal student-centered classroom, students learn the theoretical concepts inside the class borders and apply them at home through assigned homework activities, increasing the chances of the students giving up if the task seems too hard for them. The FCI, on the other hand, has the potential of allowing differentiated learning as it transforms the educational experience. Learning is more individualized and personalized through the FCI. As a result, more student engagement is enabled and the chances of motivating students of different proficiency levels increase. This educational transformation is viewed as an opportunity to allow students to give direction to their learning, building on their strengths and interests and making use of the face-to-face instructional time (Bergmann& Sams, 2014).

1.2 Statement of the problem

The challenges that second language learners face in their last year of school and upon entering universities are enormous, specifically when the language of instruction is not their first language. The writing skill, in particular, represents a main concern for many undergraduate students who are expected to complete reports and longer research essays as part of their admission process or university studies. In a survey given to English Language teachers at the ATHS, there appeared to be a general consensus that the majority of students lack in the skills needed to develop a creative piece of writing. The fact is that these twelfth grade students have a limited range of vocabulary, their sentence structures are weak, their understanding of cohesion and coherence is not up to the expectations, and their learning environment is not inductive to interest in writing. Therefore, the probability of scoring high on a standardized test such as the IELTS seems to be very low, which would reflect negatively on their university acceptances and causes great anxiety to language learners. This study serves as an attempt to showcase the potential positive effects of changing teaching methodologies in developing learners' writing abilities. Accordingly, investigating the FCI approach in English writing classes is important to find, if possible, procedures for future remedial teaching and implementation to improve the writing performance of ESL students.

1.3 Purpose and Research Questions of the study

As discussed earlier, Emirati ESL high school students confront many writing challenges in the usual one-size-fits-all learning environment (Pearson, 2013). With the abundance of information and educational technology platforms, changing the methods of teaching is appropriate since online learning allows more individualized and modeled learning. The adoption of the Flipped Classroom Instruction as part of Blended Learning is found to transform the learning experience and move it from inside the classroom borders to almost anywhere while allowing the learner freedom in relation to time and content. It is believed to empower students with the motivation and skills needed to enrich their learning. The FCI does not aim at replacing existing student-centered methods. It, however, attempts to provide language teachers with a new approach to teaching English writing in ESL classrooms to better engage students and foster more learners' autonomy.

The present study aims at answering the following research questions:

1. Does Flipped Classroom Instruction contribute to improving students' scores on an English writing proficiency test?
2. Are there any significant differences between the writing attainment of students who received the FCI and that of students who received in-class instruction?
3. What is the attitude of Emirati female twelfth graders at ATHS towards the FCI?

1.4 Significance of the study

This study follows a quantitative method to examine the effect of flipping classroom instruction on students' writing achievement. Its significance lies in meeting two goals: (1) to encourage the use of the flipped instruction in English language classes as a possible method of addressing the writing difficulties that ESL learners face and (2) to provide a teaching method that could enhance students' motivation and autonomy and address individual needs.

The key factor behind this research study is related to the increased need of transforming the educational approach in a highly technological environment, and to equip students with better writing abilities in a limited period of time. In addition, the study may possibly constitute a call for other researchers to exploit the teaching method in other areas of language learning. Finally, the blended flipped approach might be potentially more motivating and promising for today's learners.

Definition of terms

Asynchronous Learning/ Synchronous Learning: Asynchronous learning takes place while the teacher and learner are not present at the same time. In contrast, synchronous learning occurs when the teacher

and learner meet together at the same time whether online, through the phone or video conferencing or face-to-face (Nicolson et al., 2011).

Blended Learning: Blended Learning is an innovative learning form that mixes instructional modalities and methods through combining online and face-to-face interaction (Bonk & Graham, 2006, p. 4).

Coherence: Coherence means the degree to which a certain set of sentences is related in a text or the way they “hang together” rather than being unrelated structures (McCarthy, 1991, p. 26).

Cohesion: Cohesion refers to the way sentences and ideas are connected. It implies the links that are created in a written text (Thornbury, 2006, p.32; McCarthy, 1991, p.25).

Constructivism: This is a theory of learning that views learners at the center of their learning where they actively “construct” their knowledge instead of passively receiving information (Thornbury, 2006, p.50).

Deductive Learning: This type of learning occurs when a rule is presented and then learners practice applying it (Thornbury, 2006, p.61).

Differentiated Instruction: This is a teaching approach that tailors the content, level, and pace of instruction to accommodate for students’ different learning abilities (Slavin, 2012, p.259).

Explicit/ Direct Instruction: Direct Instruction is a teaching approach where the teacher structures the information and directly transmits it to students to reach a learning objective. This explicit instruction allows students to transfer learnt skills onto new, similar situations (Slavin, 2012, p. 184,107; Orlich et.al, 2013, p.28).

Individualized Learning: Also known as One-to-One teaching situations. It is a programmed instruction designed to target individual learners’ needs in many forms. It is promising through computer-based instruction or tutorial programs (Slavin, 2012, p.272).

Inductive Learning: Also known as discovery learning, inductive learning is famous for applying the direct method and consciousness-raising approach (Thornbury, 2006, p.102).

Task Based Language Teaching: TBLT is teaching that is based entirely on tasks. It usually follows a *procedural syllabus* (Prabhu, 1987 in Ellis, 2004) where learners perform a set of tasks that are sequenced according to their differentiated difficulty level (Ellis, 2004, p.351).

Virtual Learning Environments: Known as VLEs, they are online learning environments that include many tools and resources that are used to help with teaching and to facilitate learning (Nicolson et al., 2011).

Chapter Two

2. Review of Related Literature

Introduction

The following review of the related literature serves to provide the reader with a clearer understanding of the Flipped Instruction Rotation Model of Blended Learning and its impact on the teaching of writing skills. It investigates past empirical research in the field of improving the writing of ESL learners in a technology rich instructional environment. It aims to provide a broader insight into the relation between the Flipped Classroom Instruction (FCI) educational practices and the learners' language acquisition through the Task-Based Language Teaching Approach. Further discussions of active learning, class engagement and independent learning are also presented through studies that have been conducted over the past years of this century.

2.1 Research on Second Language Learning and Writing

One of the most difficult tasks that a language learner faces is probably writing. In reality, few people fully master the skill of writing. Yet, writing is essential for academic success and it constitutes a requirement for many university majors and future professions. While the rules of spoken discourse are improved through conversing and oral communication with others, the rules that dominate written discourse are learned by instruction and practice (Richards, 1990, p.100-101). This may account for the difficulty language learners have in writing well. The difficulties are related to the linguistic and rhetorical level in terms of accuracy and fluency. By Linguistic level is meant the *syntax* or *Grammatical Range* and *vocabulary* or *Lexical Resource* employed in the written response. *Syntax* includes the sentence structures in addition to clause types, and *vocabulary* encompasses phrases and use of cohesive devices among others. At the Rhetorical level of the task achievement, language learners are faced with decisions they have to make about the purpose, content and organization of their thoughts and ideas into a coherent written text. Through observations of teachers and learners in a writing class, Carey (1986) in Richards (1990) reports that the students struggled to cope with challenging ideas and the specific argumentative writing style. It was just normal that in such situations, the learners resorted to the "expert" help. In fact, it seems that the presence of the instructor during the writing process is of great importance to guide learners to the right ways of writing responses in the target language. In class, the instructors attend to the learners' needs when creating a piece of written discourse and are able to monitor their progress in writing by correcting errors, which is not realistically achieved when the instructor spends class time on

theoretical explanation of how to be involved in the writing process and assigns students the task to complete at home where they cannot rely on the instructor's guidance. Under the supervision of the instructor in class, learners would then feel more confident and comfortable about their writing, consciously identifying and noticing their strengths and weaknesses, taking charge of their learning and therefore they construct the language learning by doing.

Research in SLA has shown that direct instruction is needed at times to enable students to "notice" the language variations. The following section examines theories of direct instruction, explicit teaching, noticing and constructivism and links them to how they can be incorporated into a Flipped Classroom model of instruction in an English Writing Class.

2.1.1 Theories of Cognitive Learning, Explicit Teaching and the Role of Noticing

Technology has held great promises in education with the widespread increase of "Virtual Learning Environments" (VLEs) or what is known as online learning materials. This kind of influence falls into the programmed, direct instruction theory of learning which assumes a "teacher-led" instruction. Although it has been criticized for encouraging rote memorization, research indicates that direct instruction enhances students' cognitive and metacognitive skills. This approach allows time for learners to transfer their knowledge, organize it and construct it (Orlich et al., 2013, p.29; Bransford 2000, p.58). Learners need time to learn with understanding. Due to this, drawing connections between key concepts necessitates enough time to build knowledge. Therefore, time is a very important factor in applying new skills and probing information. According to Bransford (2000, p. 58), on learning and transfer, "the complex cognitive activity of information integration requires time." This cognitive school of thought proposes that learners engage in active learning and problem solving; they are responsible for their learning which they construct by applying the skills learnt at their pace, using their learning strategies. Therefore, there is a large emphasis on prior knowledge, through which learners can construct and use memorization-learning strategies. Following studies in second language acquisition and cognitive psychology, when learners' attention to form is triggered, language learning is better enabled. Schmidt (1995) proposes the "Noticing Hypothesis", which claims that noticing is essential and sufficient to convert input to "intake for learning". Consciousness-raising, input enhancement (Rutherford, 1985 & Smith, 1991) and comprehensible input (Krashen, 1985) are all terms that refer to teachers' deliberate attempts to raise awareness to language features with a view to promote better L2 knowledge (Izumi & Bigelow, 2000). This conscious knowledge is afterwards brought into concrete life when learners consciously recognize some of their linguistic problems and share their learning with others in a cooperative learning environment "where all participate, including the teacher" (Kohn 2006 in Orlich

et.al, 2013, p.33). Features of cooperative learning include positive interdependence on members in small groups and on Face-to-Face interaction, enhancing active learning, learners' responsibility and differing learning styles. Cooperative learning is useful in English Language learning classes (McCafferty, Jacobs, & Iddings, 2006 in Orlich et al., 2013, p.262) in that it serves the learners' diversity.

Drawing on theories of direct instruction, it is important for learners to use scaffolding, demonstrations and illustrations to reinforce their learning. Swain (1995) and Schmidt (1995) propose the Noticing Hypothesis as leading learners to identify what they relatively know or do not know. The pattern referred to in this context is the PPP-“Present-Practice-Produce” or RER-“Rule-Example-Rule” which is useful for the Flipped Classroom Instruction Approach. The FCI engages learners with videos that present the rules, provides examples and practice and allows time for learners to be more productive in class. When different senses are engaged, there is a higher probability of retention of information. According to Slavin (2012, p.192), visual representations appeal to different senses and are thus kept in the “long-term memory more readily than information that is only heard”. This “noticing” thus better stimulates the language learning process.

2.1.2 Research on the Use of Technology in Writing

Language learning has always been characterized by the advent of new methods and approaches and the consequent disappearance of others. Although various methods have differing fundamental aims, but they all aspire to enable sufficient acquisition of the target language. The reality for learners today is one that is driven by technology.

Technology has a powerful role in the life of the twenty-first century learners who can no longer rely on classroom-based instruction for their leaning, but expect everything to be made available for them online or in a click of a button. The use of computer technology for learning enhancement dates back to the 1960s, and has increased in use and form ever since. Despite the view that some researchers have that technology wastes time and money, others see its potential in influencing learners' achievement if used appropriately (Bransford et al. 2000, p.206).

Miyazoe & Anderson (2010) examined the effectiveness of different online activities in an EFL setting in a university in Tokyo. The forums, blogs and wikis proved mostly beneficial in language education, particularly in improving writing styles although the results did not show significant differences of learning outcomes.

A similar study investigating the impact of Web 2.0 technology on the English writing of students majoring in English in the first year at a university in Taiwan suggests that integrating Facebook in the teaching of English writing skills enhances students' interest and motivation. Students in the study by

Shih (2011) adopted cooperative learning and improved their English writing skill. The learning environment became more student-centered where learners shared their knowledge and interacted with their peers.

Another study on two writing groups of ESL majors in a university in Taiwan examined the effect of classroom blogging on students' writing performance. The duration of the study was eighteen weeks during which the experimental group used blogging extensively while the control group used paper-based forms of responses. All learning material was presented on the blog and students were asked to collaborate by handing in assignments and participating in online discussions on the blog. The results of the study by Lin et al. (2011) indicated little difference in students' overall performance on the writing test for both groups while stressing on the time and effort needed to design and maintain the blog.

Abu Shunnar (2012) investigated the impact of using computers on tenth grade writing performance in a technical high school in Abu Dhabi. The findings of the study encourage the use of computers in teaching writing in the English Language to enhance the quality of written text.

The pedagogical influence of using computers as a medium of educational technology in a Computer Assisted Language Learning (CALL) Program for writing and communication is explored in the study conducted on a group of ESL and EFL students at universities in Hong Kong, Taiwan and the US taking academic writing courses. In this study, Warschauer (1996) advances that students had positive attitudes towards using computers in writing despite gender differences, typing speed and personal computer access. Students were highly motivated because of the use of computers and felt empowered to learn the language.

2.2 Blended Learning, Constructivism and Independent Learning

Blended Learning (BL) is a term that has been in use in the field of language learning for the past twenty years. It is used to describe learning that combines online learning and face-to-face (F2F) interaction between learners and instructors. To begin with, it is essential to draw a difference between BL and online learning. Online Learning or e-learning also means distance learning, which necessitates internet connectivity and Information and Communication Technology Skills. Garrison and Anderson (2003) advocate blended learning as a powerful asynchronous teaching strategy. Drawing on the work of Whitelock and Jelfs (2003), Oliver and Trigwell (2005) define BL as “the integrated combination of traditional learning with web-based online approaches”. Online learning material can be delivered through educational technology tools involving synchronous and asynchronous mediums. Virtual Learning Environments may be Synchronous tools or what Alonso et al (2005) call “Live Learning”. They involve instant messaging, video conferencing or discussions boards where learners collaborate, asking for and

sharing information, but are not quite autonomous in their learning. Asynchronous tools however require more autonomy from learners who actively seek their learning. In BL, synchronous and asynchronous tools may be combined or used separately depending on the designer's choice.

An interesting discussion of BL is the one describing it as a combination of methodologies including the constructivist, behaviorist and cognitivist. In this definition, elements of the Present-Practice-Produce (PPP) and Task-Based Language Teaching (TBLT) approaches are found to fit in a BL instructional program (Sharma, 2010; Oliver & Trigwell, 2005). In a knowledge-based, technology driven society, learners are no longer considered the passive recipients of information. Instead, they are more potentially enabled to progress, be more actively engaged, motivated, autonomous and independent. Learner autonomy is a term widely used to describe independent, lifelong learning, which is an essential skill in the current, modern lifestyle.

One of the earliest scholars to advocate learner autonomy, Henry Holec was the pioneer of self-directed learning. Holec (1981) defines learner autonomy as the "ability to take charge of one's own learning". Holec (1981) and Little (1995 and 2000) in Green (2000) note that this ability is not innate; it must be acquired either through "natural" means or through formal, systematic and deliberate learning. The notion of learner autonomy was introduced by the CRAPEL, the Centre de Recherches et d'Applications Pédagogiques en Langues at the university of Nancy in France in the 1970s to refer to individualized and lifelong learning. Drawing on Nunan (1999) and Zohrabi (2011), language learning is viewed as learner-centered where learners are helped "to gain linguistic and communicative skills in order to carry out real-world tasks". A large body of research indicates that through BL, learners are more reachable and instructors are able to address the different individual's learning needs. BL allows more individualization and differentiation of instruction as the learning is more personalized, thus improving the adeptness of language learners. Learner autonomy is promoted through BL where learning is "genuinely in the hands of the learner" (Smith, 2008).

Different from distance learning, BL is currently viewed by many teachers as offering the better path of the two: online learning and traditional, face-to-face interaction with the teacher. Class interaction and face-to-face dialogue is augmented and the online learning environment that the teacher creates gives learners more time to "take in new ideas" (Garrison and Kanuka, 2004). Teachers predesign their learning communities and environments, which are positively related to quality learning, increasing the connection between the class and home learning environments. Learners are ready for class and are more actively involved and responsible of their learning.

While many educators agree that the BL approach maximizes the efficiency of the learning experience and enriches the traditional, face-to-face instruction with an online factor, for Oliver, M. & Trigwell, K.

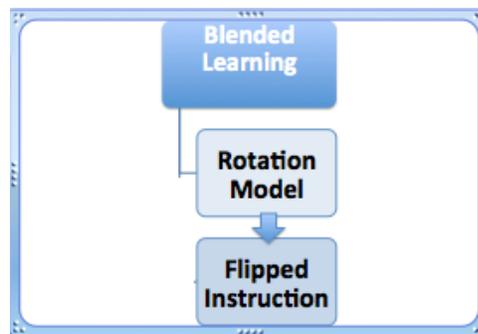
(2005), the term “Blended Learning” should be either abandoned or reconceived as it implies different pedagogies and practices that lead to confusion about what it refers to in reality.

In November 2011, BL was redefined and four main models were identified:

1. The Rotation Model
2. The Flex Model
3. The Self-Blend Model
4. The Enriched Virtual Model

The Rotation Model in particular is one educational practice under which the Flipped Instruction can be categorized and which has been gaining ground in the field of high school education, particularly in Science, Technical, Engineering and Mathematics (STEM) courses (See Figure 1 Below).

Figure 1. The Flipped Rotational Model of Blended Learning.



In a Rotational Flipped Instruction Model, learners come to class knowing exactly what to do when they are given work to complete. This pre-existing knowledge enables them to complete the classwork, which may be collaborative, individual or online to check for learning and understanding. This allows more differentiation and personalization in the learning: the instructor has the freedom to assign work to individual learners to complete either by themselves or in groups depending on their abilities, fostering more active involvement and independence in learning. In the Flipped Instruction Rotation Model, learners are more focused and responsible of their learning. They have greater opportunities to draw connections between the learning they did at their own pace before coming to class and class activities that reinforce their learning.

As put forward by the Christensen Institute (2012, p.9), BL is best defined from a student’s perspective as a “formal educational program in which a student learns- at least in part- through online delivery of instruction and content, with some element of student control over time, place, path and/or pace.” Also known as the “Hybrid Learning”, BL offers the best of the two practices: (1) remote online learning that may take place at the learner’s choice of location, time and pace along with the (2) traditional learning in a “brick and mortar school”. Garrison and Kanuka (2004) propose that BL facilitates a “community of

inquiry” which involves independent learners cognitively and socially under the presence of the teacher, who manages, focuses and facilitates the learning experiences.

[...A blended learning context can provide the independence and increased control essential to developing critical thinking. Along with the increased control that a blended learning context encourages is a scaffolded acceptance of responsibility for constructing meaning and understanding.]

Through this innovative combination, the BL provides opportunities for learners to take more charge of their learning by scaffolding their learning. Ideally, the BL approach seems to bring about a shift in the overall educational experience in which technology rich material informs the class activities and the outside class activities. Teachers situate the content of the students’ learning outside the classroom border so that they are more deeply engaged with content inside the classroom (Baker 2000; Collins et al. 2001; Gannod et al. 2008; Lage et al. 2000; Strayer 2009).

Adas & Bakir (2013) conducted a quasi-experimental research on two groups of Arab students enrolled in an English Language Program in Palestine in the academic year 2009-2010. They evaluated students’ performances after using a blended learning approach. Online instruction was made available for students on MOODLE on a weekly basis and students wrote posts about a paragraph using error analysis. Every week, the researchers uploaded model responses. Results of the study show that the number of failing students decreased in the experimental group using online material and that exposure to the online material led to an effective use of the language writing abilities. Similar findings are reported in Liu’s research (2013) on the writing of EFL university students whose results were more prolific and whose motivation and autonomy were improved because of the BL.

2.3 Research in the Flipped Classroom Instruction (FCI) Educational Practice

2.3.1 Brief History of FCI

In the past, initial steps of the learning process through direct instruction involved going over notes in a book before class, but due to the advent and availability of technological tools for today’s learners, the “Digital Natives”, as Prensky (2001) calls them, the learning material can be provided before class time through intentional content in direct instruction. The Flipped Classroom Instruction is seen as an alternative to direct instruction. In fact, the FCI can be traced back to 1995 when an instructor at Cedarville University noted that learners should have the PowerPoint he was using in class available to them to view before class.

Perhaps two of the most prominent figures when talking about FCI are Jonathan Bergmann and Aaron Sams. In 2007, both Bergman and Sams were faced with a dilemma of how to address needs of secondary students in their science classes who were continuously absent from school, and so they decided to create videos of their class lectures to deliver the instructional material to absent students. To their astonishment,

students who were not absent from class watched the videos, too, aiming to reinforce and review key concepts. The Inverted Classroom, another term for Flipped Instruction, can be traced back to centuries when students in business and law schools were given assignments to complete outside class in preparation of an in-class discussion. The Flipped Classroom is, however, the term more commonly used currently in the K-12 communities (Talbert, 2012) and initially when used in the field of STEM Learning.

2.3.2 Principles of the FCI, Active Learning and Differentiation

The Flipped Classroom Instruction implies a reversal of the normal class set up and the switch between class instruction and homework. It is seen to address the needs of both advanced and struggling students. The FCI allows advanced students to learn independently while struggling students do not give up on homework or classwork, but attempt to solve it without feeling frustrated that they couldn't keep up with the pace of the class explanation.

Normally, students in a “traditional”¹ class receive instruction in class and work on homework, projects or other activities outside of class on their own without help from the instructor. However, what happens through a FCI approach is that students acquire the basic information outside of class, constructing their learning, enjoying the freedom of researching online for further learning. They “pause to reflect on what is being said, rewind to hear it again, listen to as much or as little of the lecture as their schedules permit, and view the lecture on a mobile device rather than in a fixed location” (Talbert, 2012). Conversely, in class, students focus on internalizing the material with the help of their peers and instructor who supports their decisions while they are working on highly cognitive tasks which they were expected to complete by themselves under “traditional” class teaching structure.

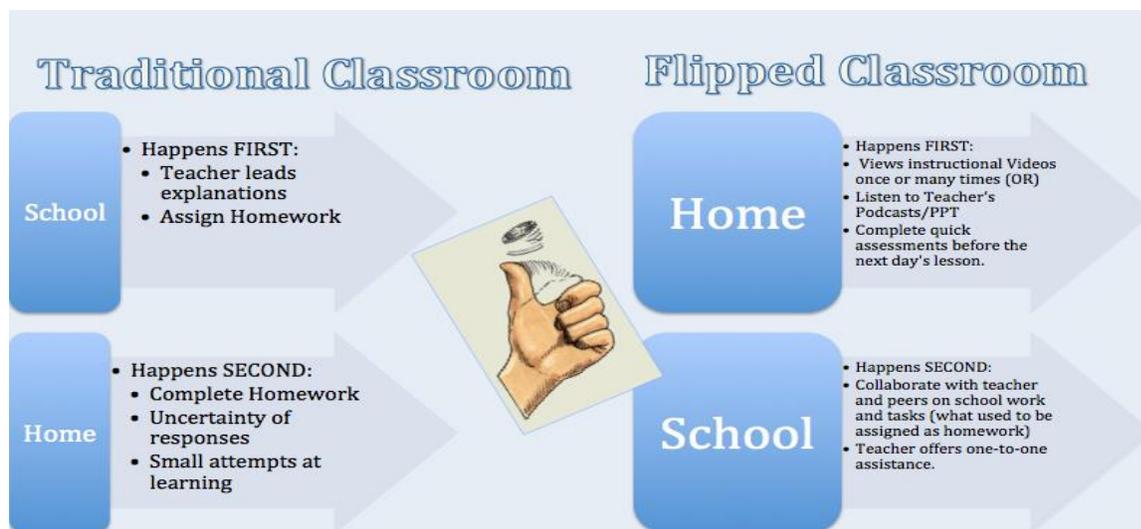
Through the mix of didactic techniques, the FCI is proposed to allow differentiated instruction to help students overcome language-learning obstacles. The FCI provides learners with opportunities to learn by doing since their learning is more personalized. A literature review published by Pearson (2013) stresses that, “flipping the classroom creates the potential for active, engaged, student-centered learning, peer interactions, and personalized instruction.” By assigning the videos to be watched as homework, the teacher aims to situate the content of the writing lesson in the learners' world. Active learning is generally defined as one that engages students in the learning process, where learners are actively and extensively involved in activities and are responsible for and have ownership over their learning. Young learners are more likely to be motivated by their interest in an engaging task, which is in this case, the instructional video. The video is likely to engage learners by involving all of their senses while providing opportunities

¹ “Traditional” does not refer to the way of teaching, but to instruction being teacher-led in a student-centered environment inside the borders of the class.

to try to experiment with the language learning before coming to class. This established routine of watching instructional videos before the class time helps the learners identify their learning goals and make informed decisions, thus implying more autonomy.

The principles of the FCI can be summarized as having a situation where “teachers shift direct learning out of the large group learning space and move it into the individual learning space, with the help of one of several technologies” (Pearson, 2013). The used technologies seem perfectly consistent with Communicative Language Teaching Methods since they emphasize learning by doing, which also solves the Task-Based Language Teaching Approaches where learners respond to sets of tasks depending on their diverse abilities.

Figure 2. Comparison of Traditional Classroom and Flipped Classroom



FCI accommodates students' diverse learning styles as it meets the learning needs of students who are “rule-users” and “data gatherers” (Thornbury, 2006) by providing the learners with opportunities to learn and apply the rules while looking at different examples. Similarly, FCI allows both group-oriented learners and solitary learners to use the approaches. FCI is a model of instructional interaction that is designed to serve a particular purpose. It implies transforming the school experience and rethinking the ways of teaching to develop better learning outcomes. Students can revise content outside the class space and synthesize the material at their own pace. By doing so, their zone of proximal development (ZPD) is not so challenged that it demoralizes them (Orlich et al., 2013, p.25). Instead, they are more confident about their learning which is accessible for them any time it is needed. They are indeed able to progress by working either with other learners or with a teacher who can provide scaffolded help. Zownorega (2013) states, “With the flipped method, a student can refresh their memory before a unit exam or at any moment in the educational experience.”

2.3.3 Past Studies related to using FCI as a model of instruction

Research in the field of FI or Inverted Instruction Model on different subject matters and mostly at a university level has grown significantly in the past few years, yet few research studies have been found on the impact of this instruction method on K-12 students' writing.

Lage et. al published a study in the winter of 2000 where the inverted class approach was adopted to appeal to female students' learning styles in an Economics Course at the Miami University. Students received the videotaped lectures before coming to class. At the beginning of the class, the instructor questioned students for understanding, and if there were no questions, this implied students' assimilation of the concept, which allowed them to see "the economic principle in action" in class. Evidence from this study suggests that such a course may appeal better to female students who might be disadvantaged in the field of Economics. Students' perceptions of the approach were favorable.

In a study run at Miami University (Gannod et al., 2008), the inverted model of instruction was adopted in Economics, Marketing and Computer Science classes. Students were asked to go over podcasts and Keynote Presentation (for MAC) prior to the class time. The "Millennial" students benefited from the collaborative learning that ensued in class and this resulted in an increase in students' attendance and the total number of students passing the courses.

In the year 2008, Bergmann and Sams (2009) created podcasts of Chemistry courses for their students to watch before coming to class. This liberated class time for more hands-on learning activities and the teacher provided one-to-one attention while students were more actively engaged. Surprisingly, the scores of students in the flipped group were lower than the previous year's results.

Zappe et al. (2009) and Pierce, R. (2012) adopted a FCI in an Undergraduate Architectural Engineering Course and a Renal Pharmacotherapy Module, respectively. Both studies found positive implications of the teaching approach on students' learning and improved performance. Students reported better satisfaction and benefit to their learning with the effectiveness of this method.

The FCI is a suitable instruction model for differentiation in learning and for encouraging independent learners. In a study run on senior students of the Environmental Systems and Societies (ESS) Cluster following the International Baccalaureate (IB) Program in the Dubai American Academy, Marlowe (2012) found that low performing students showed an increase in their grades due to the FI. She attributes this to the bigger opportunities that students are given with one-to-one contact with the teacher that was made possible in the inverted classroom in comparison with the traditional one where students complete the cognitive activities at home.

An interesting study by Strayer (2012) investigated the influence of the inverted class on cooperation,

innovation and task orientation in a Statistics class of university students. The study compared the learning environment of a traditional versus a flipped classroom. Although they found it difficult sometimes to make sense of the activities and tasks, students in the inverted classroom were more cooperative and experienced more innovation than their traditional classroom counterparts.

In contrast, in a study run on the effectiveness of flipping class instruction in a Physics class in Illinois, Zownorega (2013) found little difference in students' results no matter what the type of instructional intervention adopted, and students performed at similar levels with the flipped and traditional models of instruction.

Despite the fact that many instructional programs currently exist that utilize educational technology to shift the time and space where the teaching and learning occur, and to switch roles and instruction, there is still little empirical evidence about the efficacy of flipping instruction as a method to improve students' performance in English Writing Classes.

Chapter Three

3. Research Methodology

Introduction

The aim of this research study is to investigate the effect of flipping classroom instruction on the writing performance of twelfth grade Emirati female students at the Applied Technology High School (ATHS) in Abu Dhabi, United Arab Emirates (UAE). The duration of the experiment extended over a period of approximately two terms of the academic year 2013 to 2014 with a total number of fifteen weeks of Flipped Classroom Instruction encompassing the whole first term and the first half of the second term. The *method of teaching writing* is the main *independent variable* of the following study. It can be classified into: (A) the “traditional” teaching approach and (B) the flipped instruction approach. The term “traditional” as used in the context of this study does not refer to a lecture-based class. Instead, it is used to refer to a student-centered and teacher-driven class with all theoretical explanation happening inside the borders of the classroom, while the practical work and homework is assigned for students to complete at home without the teacher’s supervision.

In both approaches, learners utilize personal computers during the course of their studies and for their assignments. The written responses of both groups are recorded using paper and pen. The subjects’ *writing performance* is the *dependent variable*, which is categorized into IELTS Writing Task 1, Task 2 and Overall writing performance.

The research study employs a mixed, quasi-experimental method. The quantitative analysis of the data is expected to allow the researcher to draw comparisons between the scores on pre-post tests, and the questionnaire administered to learners would serve to measure the effect of the FCI and to understand students’ perceptions of the FCI. Creswell (2008) states that quasi-experimental studies help determine the effect of a certain “treatment” or program on a group of participants. By adopting a mixed method approach, the researcher aims to obtain more specific and accurate data to add to the reliability of the test results. All key characteristics of a quasi- experiment are included in this study: (1) pre and post tests, (2) assigned control and experimental groups, and (3) questionnaires. Statistical analysis is integrated in tables and figures throughout the study to provide a clearer reflection of the research findings while excerpts from students’ responses on questionnaire items will be reported.

The current chapter offers a detailed description of the research methodology in the present study. It outlines the procedures followed in the study and provides a description of the participants of the study, the research instrument, statistical measures and other details of the research methodology.

3.1 Participants in the study

The participants of the study consisted of forty-seven twelfth Grade female students in a technical high school in Abu Dhabi. The students at the Applied Technology High School where the study took place are divided into different scientific clusters, i.e. Engineering Sciences (ES), Health Sciences, Information and Computer Technology, and Applied Engineering. The population of this study comprised students in the ES Cluster-a group of students who have high academic scientific achievement with a relatively “good” level of English Language proficiency. The two groups were selected in particular due to the fact that the researcher was their instructor at school for the second consecutive year. The assigned control group consisted of a total of twenty-three students (*Group 2*) whereas the experimental group included twenty-four individuals (*Group 1*). The control group received “traditional” instruction in class while the experimental group adopted the flipped classroom instruction.

Students in both groups speak Arabic as their first language. They both started their English studies in Grade Ten, when they first joined the current high school. All ES students at ATHS are expected to exit school with an overall IELTS Band Score of 6-6.5. Based on the instructor’s past experience with the students and after consulting with other experienced English teachers, it proved earnest to investigate whether or not the Flipped Classroom Instruction (FCI) would impact on students’ results in a productive skill, the writing skill, by allowing them to learn about the basics of sentence structure and appropriate lexis that they had failed to learn during their previous years of instruction at other government schools. Throughout the academic year prior to this research study, in Grade Eleven, the students had been exposed to IELTS training through a preparation course with the textbook, *Focus on IELTS Foundation Book* by Sue O’Connell. In Grade Twelve, students are trained on refining their academic IELTS writing skills using a textbook and other teacher-developed resources. The number of English Periods per week is four and the duration of each period is only forty minutes. This allows little class time for theoretical explanations and inductive learning, which in turn, led the researcher to seek the alternative of flipping the classroom.

3.2 Hypotheses of the study: Research Questions

This research study would provide ESL teachers with a new teaching technique that can be used to test the impact on IELTS writing skills through flipping instruction. It would offer an example of developing and implementing a flipped English Writing Program and suggest ideas for the possible outcomes of flipping instruction in an English Writing class.

The study advances the hypothesis that a flipped classroom instruction has an influence on students’ scores on the IELTS writing module by changing the learning approach.

Up to the researcher's knowledge, there has been little concentration on using a FCI approach as a means of teaching writing skills to twelfth graders in the United Arab Emirates. This study will attempt to bridge this gap. With a null hypothesis that assumes no difference in writing achievement due to the FCI treatment, this study also postulates the following alternative hypotheses:

1. The FCI in an English writing class influences students' IELTS test results.
2. The FCI encourages independent and collaborative learning.
3. The FCI influences students' involvement, confidence and motivation in an English language class.

3.3 Research Design

This research follows a quasi-experimental approach in which the participants were assigned into one control and another experimental group of homogenous background knowledge and abilities. A pretest was designed to evaluate the subjects' performance in writing before the start of the educational program. The same test was then administered as a posttest to measure the differences between the results of the two groups after the program. A questionnaire was given to students to test their attitude towards the Flipped Method of Instruction. The mixed method approach was used to acquire quantitative data through test results and the questionnaire results and qualitative data through open ended questions on Questionnaire A. This data triangulation involves gathering evidence from different individuals or different data collection methods. Creswell (2008, p.266) endorses triangulation since it "encourages the researcher to develop a report that is both accurate and credible." Although it allows discrepancies of different data sources, triangulation helps to counter validity threats (Robson, 2002, p.175). Therefore, triangulation was essential for this study to validate findings and enhance its accuracy and authenticity.

3.4 Research Instruments

In order to attain the aims of the study, a pre-posttest and a questionnaire were created. Learning material was also designed and an evaluation instrument was utilized.

3.4.1 The Writing Pretest and Posttest

The tool used for assessing the impact of the flipped class intervention on learners' writing performance was created in accordance with the IELTS objectives and academic writing module. Three English Teachers explored sample past papers from the series of IELTS Cambridge Books, and randomly selected Sample Task 1 and Task 2 prompts. On the IELTS Writing Module, which is a writing proficiency standardized test, candidates are assessed on their ability to do the following:

- 1- Transfer information: write a 150 word report analyzing data on a graph, known as IELTS Task1
- 2- Write a discursive essay: create a discursive piece of writing in response to a given prompt about a contemporary debatable issue, referred to as Task 2.

The pre and posttest followed the exact same format of the IELTS Writing Module (See Appendix B). It consisted of two main parts:

- 1- Part I was a graph-based type of writing where subjects were asked to analyze, describe and compare visual data on a graph, table or chart using the language of change and comparison. The word limit was, as per IELTS regulations, around 150 words.
- 2- Part II consisted of an essay prompt to which subjects responded within a word limit of 250 words allowing them the freedom to express their opinion on the prompt given.

The subjects undertook the two-part pre and posttest under timed conditions and had to complete the whole writing test within one hour. The pretest took place in April of the academic year 2012-2013 and measured students' writing abilities before applying the FCI program. The posttest was planned for February of the academic year 2013-2014 upon the completion of the FCI program. Participants of the study sat for the Pretest and Posttest in identical testing conditions. The assessment tool used for evaluation was based on the IELTS Task 1 and Task 2 Rubrics, discussed thereafter in section 3.4.3 (see Appendices D and E for the Rubrics).

3.4.2 Questionnaires

In order to gather more input from the participants about their attitude towards writing before and after the newly adopted teaching method, an online questionnaire that included ten questions in the first section (A) and five in the second section (B) was designed (See Appendix C). Section A of the questionnaire aimed at identifying students' opinion of the writing skill through the flipped instruction while section B sought to gain more understanding of their roles in a class where FCI is adopted. Open-ended questions allowed the students to voice their opinions comfortably (Creswell, 2008, p.216). The questionnaire was created as an online Google Drive document. Items on the questionnaire were tested on SPSS for reliability. The link to the questionnaire was sent to the school email address of both the control and experimental group. Only the experimental group responded to Questionnaire A to identify their attitudes towards the writing skill and the new instructional approach. Out of the twenty-four subjects in the experimental group, twenty-two responded to the questionnaire. The questionnaire about the attitude towards flipped instruction was given only once at the end of the study to the experimental group (See Appendix C for the questionnaire items). Study of these individual answers would help generate a theory of student attitudes towards writing in the FCI, and its effect on the role of students in class.

3.4.3 Evaluation Instrument: Writing Rubric

The rubric used for the writing pre and posttest assessment was adopted without any further changes from the public version of the IELTS Examination Board as taken from the British Council website (See Appendices D and E). Each writing task was evaluated using a separate rubric as per IELTS Examination

procedures. Both Rubrics evaluate subjects' responses on four different levels: (1) Task Response or Achievement, (2) Coherence and Cohesion, (3) Lexical Resource and (4) Grammatical Range and Accuracy. These evaluation characteristics were the founding criteria for marking and assessing students' writing performance. Each of these characteristics is marked on a scale that ranges from 0 to 9 with 9 describing an expert user who has "fully operational command of the language: appropriate, accurate and fluent with complete understanding" (IELTS, 2013). The pretest and posttest went through first and second marking, with the second marker being a trained IELTS examiner.

3.5 Test Administration

All subjects of the study had been receiving general IELTS preparation during their academic Eleventh Grade (Academic Year 2012-2013) and were familiar with the format of the test. They undertook the pretest under timed conditions in the school exam hall under the supervision of teachers in April 2013. The duration of the test was 60 minutes in total. No extra time was given to the students. The posttest was scheduled in February 2014 under the exact time and testing conditions.

3.5.1 Test Validity

To ensure a clearer reading of the students' behavior towards the writing skill after the intervention period, the researcher decided to keep the same prompts on the pre and posttest. The measuring instrument is the IELTS Writing Rubric, which was also used in assessing both tests. The researcher marked the tests, which were then marked for the second time by the IELTS examiner supervising the tests. One potential threat to validity was that participants might remember responses, which did not seem to be the case as the duration between the pretest and posttest was around ten months. There were little chances that participants would anticipate the questions on the posttest as the probability of the students remembering the topics given between April and February of the following year was minimal. The period of ten months between the pretest and posttest is not expected to compromise the validity of the test and does not appear to cause a threat to the experiment as such.

3.5.2 Test Reliability

To ensure the reliability of the pre and posttest, the test-retest approach was adopted and task prompts were taken from a past academic IELTS writing test conducted in the year 2007. The test-retest approach serves to examine the extent of stability of scores from one test administration to the other (Creswell, 2008, p.169). According to Robson (2002, p.303), using existing tests for assessing is essential since such standardized tests are considered to be "professionally competent". Due to the fact that developing a test necessitates considerable time and resource to ensure validity and reliability, the researcher chose the middle way of finding the pretest-posttest resources from different existing IELTS tests to better serve the needs of the study. Parts of the pre and posttest were taken from a standardized IELTS academic

module to safeguard test reliability. The gap between the pretest and posttest lasted for ten months, which reduced the risk of the students recalling test details. In addition, students were only informed that they would be sitting for the posttest at the onset of the study, which is in September of the following academic year. Therefore, this did not seem to cause jeopardy to the choice of the pre and posttest.

3.6 Procedures of the study

In conducting the study, the following procedures were followed before and during the first two terms of the 2013-2014 academic year:

- i. Since the researcher was not an official IELTS Examiner at the start of the study, an agreement was made with an IELTS examiner at the ATHS to supervise the delivery and correction of Pre and Posttests.
- ii. Under the supervision of the IELTS examiner who was then the *Curriculum Developer* at ATHS Schools, the researcher created the pretest and asked for feedback from three English teachers at ATHS who had extensive experience preparing students for IELTS. After undergoing three revisions, the test was printed and administered to students in the control and experimental groups in April of the academic year 2012-2013. For the full list of teachers' names, please refer to Appendix G.
- iii. The IELTS Examiner provided training on how to use the Task 1 and 2 IELTS Rubric to mark the pretest to English Teachers at the ATHS. Students' responses were corrected under the supervision of the IELTS examiner who helped in marking the papers for a second time. There were minimal variances between the first marker and second marker's scores. Students' scores were kept for the records on Microsoft excel sheets.
- iv. The researcher consulted with the other English teachers to plan the flipped instruction program. Using the IELTS Guidebook for Tasks 1 and 2 writing objectives, areas for reinforcement and hindrances to students' writing were shortlisted and a list of objectives was created to develop the flipped instructional program (See Figure 3 for the list of objectives). An informed decision was made on the type of Ipad application ("Explain Everything" Annotation Ipad Application) to be used for the screencast and the manner of implementing the program. The material for the flipped instruction was produced and revised by the other Grade 12 teachers referred to in Appendix G.
- v. At the onset of the study in September, permission was sought from the school administration of the ATHS through the school principal, from the English teachers, the IELTS Examiner and from all the participants in the study. Students were familiarized with the program and the purpose behind adopting this research. They were reassured about matters of confidentiality in questionnaires. A copy of the consent form is provided in Appendix A.

- vi. Subjects of the study received introductory demonstrations and class instruction about the expected learning program. The researcher explained how the program would proceed and clarified to the students the reason for following this method of instruction, emphasizing that it is essential that students consider the assigned video or PPT as their homework to come to class ready with the information needed in order to free more practice class time. Expectations from students were described in-depth, but required around two weeks for proper class implementation. This was due to students' initial resistance in the experimental group to the change in the instructional delivery method.
- vii. The researcher ran content analysis and planned the teaching material that will be adopted in the second term with the experimental group. To ensure the planned material meets the requirements of the curriculum, teachers of the same Twelfth Graders revised the material. The supervising IELTS examiner also reviewed the planned flipped videos to ensure they cover the IELTS Tasks 1 and 2 writing objectives.
- viii. Throughout the duration of the research, the *control group* received "traditional" instruction in class in a student-centered learning environment but with the same activities and time for scaffolding tasks for students except that the responses to the writing prompts were completed at home. In contrast, the *experimental group* were learning by doing as the content of their lesson was given to them in advance to provide them with opportunities to learn at their own pace, and be more involved in class activities. The method of instruction was different.
- ix. Every week, students in the experimental group were given a video PowerPoint to watch before the next class. Lesson plans and class activities were designed to test students' learning. After a few weeks, students got accustomed to the approach and were more involved in the class activities. Class activities were task-based and scaffolded depending on students' learning abilities (See Appendix F for examples of the learning material).
- x. Students were informed that the posttest and questionnaire would be administered in February of the academic year 2013-2014 (towards the end of Term 2). Arrangements to book the exam hall and randomly select exam invigilators were made.
- xi. The researcher marked the Posttest, which was then rechecked by the IELTS examiner and other English teachers for reliability. Little to no discrepancy was found between the first marker and the second markers' scores.
- xii. Students in the experimental group answered the survey questions after the posttest.
- xiii. The researcher initiated the data analysis.

3.7 Implementation of the program

The study was conducted over a period of fifteen instructional weeks covering the first term and the first half of the second term of the academic year 2013-2014. The ATHS is considered as an ideal selection for this type of research as the school's infrastructure allows for online blended learning. The school is equipped with a Learning Management System (LMS), "PLATO", that is accessible to all students. Each student is in possession of a MacBook Pro Laptop that is provided from the school at the onset of their studies in Grade 10. Students are part of the net-generation with excellent command of online learning tools. The ATHS offers the most convenient conditions for both learners and teachers to undertake a blended learning experience, particularly, through flipped instruction.

On a weekly basis, one lesson out of the four was dedicated to Writing class practice. Prior to the lesson, the created screencasts were either emailed to students or uploaded on the LMS. Students were asked to watch the screencast or instructional power point presentation, which served to prepare students for the focus of the class, save class time for practice instead of theoretical explanations of how to deal with the requirements of Task 1 or 2 of the IELTS Writing Module and to encourage more independent learning. The first two weeks were not best samples of Flipped Classroom Instruction due to learners not being familiar with this type of homework assignment. Learners in previous years had spent class time learning the mechanics and formulaic steps to Tasks 1 and 2 of the IELTS Writing Exam, after which they would go home to complete their homework, which is a writing task, having many questions and uncertainties that could not be answered instantly. With this in mind, learners resisted at first acquiring the habit of considering a video or PPT as their "homework" and were not really sure of how this could be considered learning. Despite the fact that this initially hindered the flow of the study, learners became more accustomed to this learning method in the following weeks and came to class with questions that needed further clarifications.

3.7.1 Validity and Reliability of the Program

In this quasi-experiment, threats to validity were marginal. Despite the possible impact of maturation on participants, the subjects were limited to learners of the same age and gender range during the same academic year. As Creswell (2008, p.172) puts it, content validity can be identified through a panel of judges or experts in the field. Moreover, in order to ensure equal opportunities of learning and to compensate for the possible inequality arising from the intervention of the flipped instruction, the researcher used the same teaching material inside the classroom with the control group. Class tasks were designed for both groups, but the method of delivery differed.

Targeting validity and reliability of the program, the researcher produced a content analysis that sought the opinion of Grade 12 English Teachers at ATHS of the common mistakes that ESL students made on

the IELTS writing test and possible areas for improvement. Aiming to construct the learning material, the researcher used her past experience and guidelines from the IELTS testing center to compile a list of objectives to be covered throughout the intervention period. Comments of teachers were taken into consideration to produce authentic educational videos and instructional screencasts, which were revised twice for error feedback. The learning material was devised and sent for feedback to other English Teachers. After several recommendations and suggestions, screencasts were recreated in their final form and were uploaded onto the PLATO LMS for students in the experimental group to access or emailed to them prior to the lessons. Figure 2 below outlines the list of principal learning objectives:

Figure 3. A List of Program Objectives

General Writing Objectives
<ol style="list-style-type: none"> 1. Developing writing skills 2. Constructing formal academic vocabulary 3. Developing proper simple and complex sentence structures 4. Writing formally and objectively 5. Using cohesive devices, conjunctions and connectors
Task 1 Objectives
<ol style="list-style-type: none"> 1. Selecting and organizing information 2. Identifying the most relevant trends on a table 3. Analyzing and comparing data on a bar graph 4. Analyzing features on a pie chart 5. Reporting data on a line graph 6. Describing a process 7. Describing two data sources 8. Using the language of change 9. Using the language of comparison 10. Using the language of approximation, fraction and percentages
Task 2 Objectives
<ol style="list-style-type: none"> 1. Generating and organizing ideas 2. Writing effective topic sentences and concluding sentences 3. Presenting clear arguments 4. Providing evidence and supporting details

5. Distinguishing the main IELTS writing modes: discursive, expository, argumentative and causal.
6. Identifying writing formats of essays on Cause/Effect, Problem/ Solution, Advantages/ Disadvantages, etc.

3.7.2 Learning Material

Due to the fact that at the commencement of the study, there were few reliable and valid IELTS English writing screencasts for twelfth graders, the researcher reproduced and redesigned videos and screencasts to target students' problematic areas. The prearranged teaching material was designed for a flipped English writing class.

The Ipad application used to create screencasts was the "Explain Everything", which allowed annotation and sound recording over a PowerPoint presentation. The creation of screencasts was time-consuming and required much editing. The researcher did the following steps for every screencast:

1. Create an instructional PowerPoint presentation
2. Open it in "Explain Everything" Application
3. Prepare the spoken annotations
4. Record the voice over the interactive video
5. Upload the created video onto the PLATO LMS for the experimental group's access or email it as needed.

The use of this application was consistent with the plan to establish flipped and individualized instruction. Students undertaking the experiment were expected to view the video prior to the class using all the interactivity that the designed video offered. The program consisted of fifteen Writing packages (Videos). They helped the students in the experimental group learn concepts at their own pace in a more differentiated manner, to achieve the objectives mentioned in Figure 3. Videos were complimented with recommended online activities and further readings and practice. The writing lessons offered a greater practice time in class, and the class tasks allowed more focus, strategies for independent learning and apprenticeship for students in the experimental group. An example of a screencast and corresponding lesson tasks are provided in Appendix F.

3.8 Ethical Issues

For ethical considerations, a number of measures were carefully adopted to preserve the ethical reliability of the undertaken study. These procedures were divided into three sets of actions: commitment to the employer, to the colleagues and to the students who were themselves subjects of the study.

Before the initiation of the study, the researcher sought written approval from the school administration and the English teachers to conduct the study. A clear and official outline of the nature of the research study, procedures and implementation of the program was submitted to establish agreement with the employer and with colleagues to carry out the experiment. Throughout the intervention period, the researcher made every possible effort to update the employer and colleagues of any changes, achievements and improvements on the study that would improve students' scores. At the completion of the study, the employer received a comprehensive analysis of the research results with the agreement to safeguard confidentiality until the dissertation publication.

As for the participants in the research study, they were equally treated with the greatest confidentiality. Students received clear information about the purpose of the study and their role in it. They signed a consent form for participating in the study. Regular oral discussions occurred with students in the experimental group to ensure the students were not at a disadvantage because of the new learning method. At the end of the study, the results were disseminated to the students to compare between their pretest and posttest scores.

3.9 Data Collection

3.9.a Pretest and Posttest

All participants in the study were expected to use paper and pen to write their responses to Tasks 1 and 2 of the chosen IELTS Writing Test. For the pretest and posttest, the same procedures were adopted: students' papers were sealed in an envelope, which was then delivered to the researcher. After the training on the IELTS writing rubric with the IELTS examiner, the researcher and two other English teachers marked students' responses. The papers were then collected again and a date was assigned for the IELTS Examiner to participate in the second marking of the papers. The researcher recorded all students' results on an excel sheet that was made available online for the use of the school administration. The results were computed on the SPSS version 20 by running the *t*-test analysis.

3.9.b Questionnaire

Responses from the subjects of the experimental group were collected online through the Google Docs analysis. The questionnaire was made available for students' participation for a period of two days, after which students were no longer able to use the link provided. The data was downloaded on an excel sheet, which was then computed through the SPSS version 20 for Windows. The questionnaire served as a tool to collect information and enrich the study with students' perceptions of the FCI. In order to preserve face validity, the items on the questionnaire were given to two experienced researchers to check for lack of ambiguity. For content validity, the questions were revised to avoid misleading statements and to ensure

they are psychologically designed to meet the requirements of the study. The questions were run on the Cronbach Scale on SPSS 20 to measure internal consistency and reliability.

Chapter Four

4. Findings and Discussion

4.1 Findings of the Study

The purpose of the current research study is to examine the association between the Flipped Classroom Instruction and the overall writing performance of Twelfth Grade Emirati female students in the ATHS in Abu Dhabi. Therefore, the results presented in this chapter summarize the main findings on students' writing achievement scores and provide answers to the main research questions of the study.

1. Does the Flipped Classroom Instruction contribute to improving students' scores on an English writing test?
2. Are there any significant differences between the writing attainment of students who received the FCI and that of students who received in-class instruction?
3. What is the attitude of Emirati female twelfth graders at ATHS towards the FCI?

This section will offer descriptive statistical analysis and inferential analysis through the *t*-test to present the key findings of the experiment. Through calculated means and standard deviations of the writing test results, descriptions of the different variables are offered.

The Statistical Package for Social Sciences (*SPSS*) Version 20.0 for Windows was selected to analyze the data. The *t*-test was chosen to compare students' achievement on the pre and posttests. The *t*-test processes the differences between values of two variables. It is used to "determine whether the difference between two sample means is statistically significant" (Ary et.al, 2010, p.193).

4.1.1 Findings Related to Question One:

Does the Flipped Classroom Instruction contribute to improving students' scores on an English writing test?

Table 1 compares the writing achievement of students in the experimental and controlled groups. It is apparent from students' scores that students in the experimental group outperformed those in the controlled group in the posttest Task 1, Task 2 and overall writing score. In fact, there is about one band score difference between the posttest overall mean scores of the students in the experimental group (*Overall Mean*=6.341, *N*=22, *SD* 0.7136) over their counter controlled group score (*Overall Mean*= 5.300, *N*=20, *SD* 0.8491). In the pretest overall scores, the highest score for the experimental group and control group was 6.5 and 6.0, respectively. On the posttest overall scores, the highest scores for the experimental

group and control group was 8.0 and 7.0. The lowest scores on the pretest for the experimental and controlled groups were exactly 4.0 for each, while the lowest scores on the posttest for the experimental group was 5.5 and for the control group 4.0.

Examining the results more closely, it can be seen that on Task 1 for example, students in the experimental group (Group 1, Table 1) had a mean average that increased from Task 1 $mean=5.174, N=23, SD 0.7777$ to a $mean=6.341, N=22, SD 0.6616$, whereas the mean average of task 1 for students in the control group (Group 2, Table 1) slightly increased from $mean=5.0, N=20, SD 0.7947$ to $mean=5.350, N=20, SD 1.0400$. Likewise, there is a noticeable improvement in the Task 2 mean scores of students who received the Flipped Instruction ($pretest\ mean=5.717, N=23, SD 0.6184, posttest\ mean= 6.318, N=22, SD 0.8387$) in comparison with the small change in the Task 2 results of students who received “traditional, in-class” instruction ($pretest\ mean= 5.300, N=20, SD 0.8013, posttest\ mean= 5.325, N=20, SD 0.9497$).

Table 1

Means and Standard Deviation of the Pre and Posttest Scores of the Experimental (1) and Control (2) Groups

		Report					
Group		Pretest Task 1	Pretest Task 2	Pre-total	Posttest Task 1	Posttest Task 2	Post-total
1	N²	23	23	23	22	22	22
	Mean	5.174	5.717	5.443	6.341	6.318	6.341
	Standard Deviation	.7777	.6184	.7204	.6616	.8387	.7136
	Minimum	4.0	4.0	4.0	5.5	5.0	5.5
	Maximum	7.0	7.0	6.5	8.0	8.0	8.0
2	N	20	20	20	20	20	20
	Mean	5.000	5.300	5.000	5.350	5.325	5.300
	Standard Deviation	.7947	.8013	.8736	1.0400	.9497	.8491
	Minimum	4.0	4.0	4.0	4.0	4.0	4.0
	Maximum	6.0	6.0	6.0	8.0	7.0	7.0

4.1.2 Findings Related to Question Two:

Are there any significant differences between the writing attainment of students who received the FCI and that of students who received in-class instruction?

² N= number of participants

In order to verify whether the difference in means between the two groups was statistically significant at the start and end of the program, the independent sample *t*-test was carried out. Table 1 shows that there exists a difference in the mean between the experimental (*Mean* =5.174, *N*=23, *SD* 0.777) and the controlled group (*Mean*=5.0, *N*=20, *SD* 0.7947) in the pretest Task 1. Levene’s test showed that scores of Task 1 pretest and posttest do not vary much, and the independent *t*-test indicated that there exists no statistically significant difference in means between the controlled and experimental groups (*t*=0.724, *DF*=41, *P*=0.473) in Task 1 (See Table 2). In other words, students in the two groups were of similar writing abilities at the start of the study in their responses to Task 1. Similarly, in the pretest Task 2, there is a difference in the mean between the experimental (*Mean* =5.717, *N*=23, *SD* 0.6184) and the controlled group (*Mean*=5.300, *N*=20, *SD* 0.8013), but the independent *t*-test results on Table 2 showed that the difference in means is not statistically significant between the controlled and experimental groups (*t*=1.925, *DF*=41, *P*=0.061), which is also an indication of the average homogeneity of students’ aptitudes in Task 2 writing at the onset of the study. Likewise, the overall total pretest means of the experimental and controlled groups were different (Group 1 *Mean* =5.443, *N*=23, *SD* 0.7204 and Group 2 *Mean* =5.000, *N*=20, *SD* 0.8736, respectively on Table 1). However, Table 2 below shows that this difference is not statistically significant (*t*=1.824, *DF*=41, *P*=0.75) and therefore proves the uniformity of students’ writing capabilities at the commencement of the study and the two tailed significance scores prove that the improvement was not incidental. In fact, the results on the posttest in Table 2 seem to show that the difference between the mean scores is largely attributable to the FCI: the *t*-test has helped to show that posttest results show a significant improvement in the results of students in the experimental group (*P*<0.05) in all three areas, Task 1, 2 and overall writing score.

Table 2

Independent Sample T-test Results and Analysis of Variables

Independent Samples Test								
		Levene's Test for Equality of Variances		<i>t</i> -test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Pretest Task 1	Equal variances assumed	.005	.947	.724	41	.473	.1739	.2402

	Equal variances not assumed			.723	39.914	.474	.1739	.2406
Pretest Task 2	Equal variances assumed	3.847	.057	1.925	41	.061	.4174	.2168
	Equal variances not assumed			1.891	35.543	.067	.4174	.2208
pre-tot	Equal variances assumed	.992	.325	1.824	41	.075	.4435	.2431
	Equal variances not assumed			1.800	36.954	.080	.4435	.2464
Posttest Task 1	Equal variances assumed	3.568	.066	3.719	40	.001	.9909	.2664
	Equal variances not assumed			3.643	31.675	.001	.9909	.2720
Posttest Task 2	Equal variances assumed	.567	.456	3.599	40	.001	.9932	.2760
	Equal variances not assumed			3.577	38.145	.001	.9932	.2776
post-tot	Equal variances assumed	.796	.378	4.314	40	.000	1.0409	.2413
	Equal variances not assumed			4.278	37.313	.000	1.0409	.2433

To examine whether the improvement was significant in the results of the experimental group, the *paired t*-test was further conducted at the start and end of the program.

Looking at Table 3 data, there exists a difference in mean between the pretest (*mean*=5.048, *N*=21, *SD* 0.6690) and the posttest in task 1 (*mean*=6.357, *N*=21, *SD* 0.6735), for the experimental group. The consistency in marks and the linear improvement reveal that there exists a positive intermediate

significant correlation between the method of instruction and the experimental group's scores on Task 1 in the pretest and the posttest ($r=0.515$, $N=21$, $P<0.05$). Based on the fact that there is a difference and a significant correlation between the scores on Task 1 pre and posttests, it is worth investigating the extent to which this difference is significant. The paired sample t -test indicates that this difference is statistically significant ($t=-9.079$, $df=20$, $P<0.01$, 2-tailed). In other words, the flipped instruction had significantly improved students' scores in Task 1. The same findings can be found for the experimental group as per the total difference in mean between the total pretest ($mean=5.367$, $N=21$, $SD 0.7024$) and the total posttest ($mean=6.381$, $N=21$, $SD 0.7054$). The paired samples correlation for the experimental group proved the positive significant correlation between students' total scores in the pretest and the posttest ($r=0.557$, $N=21$, $P<0.05$). The paired sample t -test indicates that the difference and the correlation between the total writing scores of the pre and posttests is statistically significant ($t= -7.013$, $df=20$, $P<0.01$, 2-tailed). In other words, the flipped instruction has significantly enhanced students' total writing scores. With regards to the Task 2, although the difference in correlation between the pretest and posttest results of the experimental group is not considered as positively significant ($r=0.418$, $N=21$, $P=0.059$), the paired sample t -test still reveals that the correlation is statistically significant ($t= -4.402$, $df=20$, $P<0.01$, 2-tailed). Stated differently, the flipped instruction has helped enhance the experimental students' scores on Task 2 writing. Therefore, the analysis helps to reject the null hypothesis since a strong association was found between the flipped instruction and students' writing test scores.

Table 3

Results of the Paired Sample t-test for Correlation between the Variables on the Experimental Group

Experimental Group					
Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Task 1	Pretest	5.048	21	.6690	.1460
	Posttest	6.357	21	.6735	.1470
Task 2	Pretest	5.643	21	.5732	.1251
	Posttest	6.381	21	.8047	.1756
Overall	pre-total	5.367	21	.7024	.1533
	posttotal	6.381	21	.7054	.1539
Paired Samples Correlations					
		N	Correlation	Sig.	
Task 1	Pretest& Posttest	21	.515	.017	

Task 2	Pretest& Posttest	21	.418	.059		
Overall	pre&posttotal	21	.557	.009		
Paired Samples Test						
	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Pretest Task 1 - Posttest Task 1	-1.3095	.6610	.1442	-9.079	20	.000
Pretest Task 2 - Posttest Task 2	-.7381	.7684	.1677	-4.402	20	.000
pre-tot - post-tot	-1.0143	.6628	.1446	-7.013	20	.000

In comparison with the results of the experimental group that show significant difference in means and significant correlation between the method of instruction and the test results, Table 4 shows a difference in means between the results of the control group on pretest Tasks 1, 2 and overall score (Task 1 *mean*= 4.944, *N*=18, *SD* 0.8024, Task 2 *mean*= 5.278, *N*=18, *SD* 0.8264 and Total test *mean*=4.944, *N*=18, *SD* 0.8893) and posttest tasks 1, 2 and the overall score (Task 1 *mean*= 5.222, *N*=18, *SD* 1.0033, Task 2 *mean*= 5.250, *N*=18, *SD* 0.9115 and Total test *mean*=5.167, *N*=18, *SD* 0.7670). A positive correlation was found through the paired samples correlations when investigating the extent of improvement between the controlled group students' total scores in the pretest and the posttest ($r=0.683$, $N=18$, $P<0.05$). However, the paired sample *t*-test indicates that the difference and the correlation between the total writing scores of the pre and posttests are not statistically significant ($t= -1.409$, $df=17$, $P>0.01$, 2-tailed). Put simply, students in the control group who have received no flipped instruction showed no significant improvement in their writing pretest and posttest total scores.

Table 4

Results of the Paired Sample t-test for Correlation between the Variables on the Controlled Group

Controlled Group					
Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Task 1	Pretest	4.944	18	.8024	.1891
	Posttest	5.222	18	1.0033	.2365
Task 2	Pretest	5.278	18	.8264	.1948
	Posttest	5.250	18	.9115	.2148

Overall	pre-tot	4.944	18	.8893	.2096	
	post-tot	5.167	18	.7670	.1808	
Paired Samples Correlations						
		N	Correlation	Sig.		
Task 1	Pretest & Posttest	18	.674	.002		
Task 2	Pretest & Posttest	18	.800	.000		
Overall	pre-post-total	18	.683	.002		
Paired Samples Test						
	Paired Differences					
	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Pre Task 1 – Post Task 1	-.2778	.7519	.1772	-1.567	17	.135
Pre Task 2 - Post Task 2	.0278	.5550	.1308	.212	17	.834
Pre-total - Post-total	-.2222	.6691	.1577	-1.409	17	.177

4.1.3 Findings Related to Question Three:

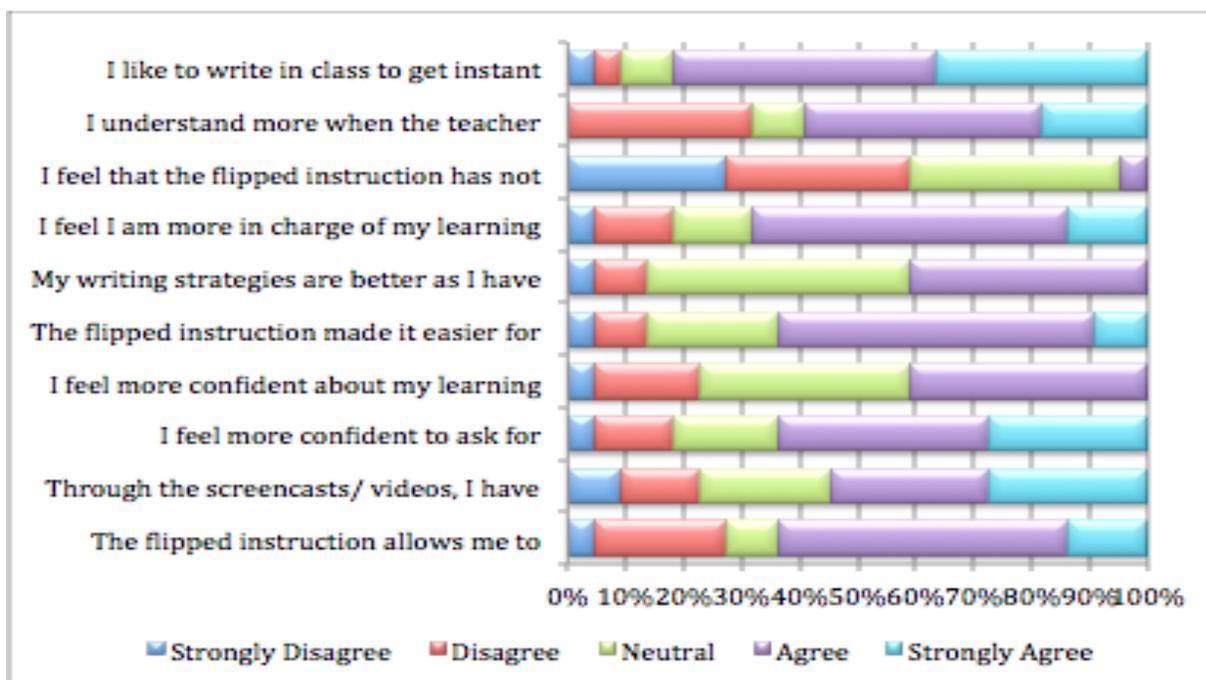
What is the attitude of Emirati female twelfth graders at ATHS towards the FCI?

The findings of the questionnaire help to shed more light and in-depth understanding of female students' attitudes towards the new Flipped Instruction teaching method. The purpose behind the questionnaire was to explain the role of the FCI on students' writing performance, confidence and motivation. Even though at the start of the study, students in the experimental group were hesitant, the majority has shown positive attitudes towards the Flipped Classroom Instruction. For example, about two thirds of the students believe that this method of instruction allows them more time to prepare for class while over half believe that it helped them in writing as they can ask the teacher for "instant feedback and assistance" while in class. Moreover, when asked about their level of confidence, approximately 65 percent of respondents found that the FCI increased their self-confidence and involvement in their learning (See Figure 1). An unexpected answer on this questionnaire was related to the level of the students' understanding when the teacher explains in class, to which almost half the students showed preference to having the teacher explain in class although they favored the FCI in all of the other questionnaire items. One possible explanation of this phenomenon could be related to the Arab mentality where students have always been instructed with a big reliance on the teacher's presence in class as the center of class. In line with this

discovery was another item on the questionnaire that requested students to choose their preferred manner of instruction. Once again, surprisingly, 59 percent of the students favored the traditional instruction with the teacher explaining in class over the flipped instruction where they watch the video by themselves. This could possibly be related to the Arab social culture where collaboration and human interaction are important factors.

When asked to select the type of learners in a class that follows the FCI, the bigger number of students found themselves to be active, involved, independent, responsible and motivated in contrast with 9% of the students labeling themselves as passive and bored and another 9 % who described themselves as unable to interact with others. As a result, it appears that the students in the experimental group had positive attitudes towards the FCI in that it increased their involvement, confidence, motivation and general writing performance. Details of students’ answers to the open-ended question are discussed in section 4.2.

Figure 4. Students’ Perceptions of the Flipped Classroom Instruction



4.1.4 Summary of Findings

Reporting on the main findings of the research study, it is clear that students who received instruction through the Flipped Model significantly outperformed students who did not follow the FCI Model in the IELTS Writing Task 1, Task 2 and Overall Writing performance. In addition, students’ perceptions of the FCI were mostly encouraging and promising.

4.2 Discussion

The outcomes of the current study are compatible with the theoretical assumptions of cognitive language learning and the role of attention and noticing in Second Language Acquisition (Troike, 2012; Schmidt & Ellis in Robinson, 2001). The development of students' writing abilities is largely attributed to the role of attention without which, to many orthodox scholars and researchers, "there is little if any learning" (Robinson, 2001). Language learners notice input as part of their cognitive process, and when the method of exposure is altered and improved to meet their needs, language input becomes more perceptible and noticeable for them. The development of the students' written responses can be explained by ascribing it to the role of deliberate attention to the language features required for their written task production that happened through the FCI. Moreover, this attention focus that is triggered through explicit instruction is also closely associated with the influence of the instructional practices and the learning material.

The results of the study are also consistent with the constructivist theories of learning. Students in the experimental group constructed their long-term learning by applying inductive learning strategies to improve their writing skills in opposition with Chomsky's simplified notion of language learning as an unconscious process. Their learning occurred as a result of critically analyzing key concepts at their own pace in an individualized setting such as their homes. In this fashion, they improved their English writing proficiency by consciously following taught strategies. Furthermore, the findings of the study also support the impact of the method of instruction on students' achievement in writing through the form-focused instruction and input-based instruction (Ellis, 1997 and VanPatten, 1994 in Robinson, 2001). Students in the experimental group emphasized the input-based instruction, which helped them to consciously notice the language features.

To be more specific, the findings suggest that Emirati female students demonstrate an improvement in their scores on the writing test due a specific teaching method in SLA, and that this attainment can be attributed to the Flipped Classroom Instruction teaching method. Drawing on general students' attitudes towards the writing, learning in a traditional way becomes boring to high school students at least in the case of Emirati learners (Hourani, 2008). Therefore, successful teaching methods are fundamental in developing the writing skills of Emirati female students. The teaching method can either be a barrier or an opportunity for learning, and in this course, it appears to have a positive impact on students' learning of the writing skill. Perhaps in this context, linking the FCI teaching method to the theory of Connectionism in second language learning draws comparison to the strength of association that the L2 learners experience throughout the SLA (Troike, 2012, p.84). In reality, the prior class preparation and instructional video provide opportunities for students to assimilate the rules that govern their written

response rather than just have an abstract grasp of a new usage rule, whether it is related to the content, organization or lexical and syntactic range.

Grounded on the outcomes related to questions one and two, the improvement in students' written production can be justified in the light of the conscious cognition that the Flipped Classroom Instruction induced. Students had ample time to be ready for class. They felt little pressure to cope with the key language features as they employed them before coming to class. Students therefore used their own time and controlled their own learning setting, which was evident in their significantly increased scores and overall performance in writing.

The findings could also be interpreted as the benefits of combining a different teaching method, which is a form of blended learning and a set of rich class tasks that are differentiated depending on students' personal and diverse abilities. These tasks represented individualized in-class learning plans that engaged students in an inquiry that led them to reach the same learning outcome in a differentiated, more personalized manner. All in all, students' performance showed a better understanding, a higher knowledge, and improved writing skills. The FCI and the corresponding class activities were carefully designed to help learners to clearly express their ideas and logically organize them in an interesting and correct way. Consequently, the FCI could be openly credited to the writing progress. The rich input through the videos and the following classroom interaction and individualized tasks promoted better skills and enhanced the written productions on the different levels of rhetoric and linguistic level of the language. Students attentively noticed the new linguistic concepts presented in the videos. They were given ample opportunities in the Task-based activities to analyze information, focus on the output production and be engaged in their writing. Hence, adjusting the teaching method to include well-defined writing knowledge enhanced students' awareness of good writing strategies.

In addition, taking into account data from students' responses on the questionnaire, it was found that a considerable number of students felt more motivated and independent because of the Flipped Classroom Instruction. Learner autonomy is best manifested in students through better confidence in their attainment and abilities. This is a feature, which was reported by many students in the experimental group who felt greater confidence to their learning and skills. This, of course, was reflected not only through the questionnaire but also through the improved results, and is found to be consistent with Smith (2008) and Holec (1981) who view learners in the center of their learning, which is enhanced by Blended Approaches to Learning. Past research (Liu, 2013; Chang, 2005; Kemmer, 2011) holds that learners today highly appreciate computers and technology, and blended learning in general increases student-centeredness, motivation, autonomy and writing ability.

In Hourani's study (2008) on Emirati male students' writing difficulties, the general perception was that

the way teachers teach the writing skill is an obstacle as well as the lack of time, motivation and vocabulary that students reported about writing during the class. Similarly, Wold (2011) reported the non-existence of an effective instructional design model that is appropriate for online language writing courses to address the writing needs and he called for the adoption of a blended learning format. The FCI Model of Blended Learning was found to create a learning environment that promotes better learning opportunities for English language learners. This is consistent with studies run on the students' attitudes towards the Blended Learning in general and the Flipped Instruction (Garrison and Kanuka, 2004; Adas & Bakir 2013; Zownorega, 2013). Lage et al (2000) and Gannod et al. (2008) had found equally favorable perceptions of female students towards the inverted, flipped instruction in an economics class. Although students in the current study reported concern regarding the time needed to prepare before class, which consists a major change in their learning attitudes, they conveyed better confident attitudes and more understanding of the rhetoric and linguistic writing features, which is in line with the outcome of many other studies conducted on other subject matters and which proved to be beneficial for students' achievements (Marlowe, 2012; Strayer, 2012; Zownorega, 2013). The FCI approach holds that students have more time to write in class, apply their learning and receive immediate feedback and prompting from the teacher who assists them through their individualized tasks to ensure a production that reflects improved content, organization, cohesion, sentence structure and lexical conventions.

When asked about the benefits of the FCI, students' responses included the answer *"to know the new lessons, and tips in advance, be able to review the videos again any time I want"* while another student's answer obviously showed an increased self-confidence *"Working by myself without feeling shy that I didn't understand something in class."*

More examples of what other students replied with are found below, and they are all a reflection of the higher motivation, stronger autonomy, better self-confidence and engagement in class due to the FCI:

Student A: *"I can ask the teacher to check my sentences in class."*

Student B: *"It reduces the time wasted on explaining so we have more time to write with the teacher and ask her."*

Student C: *"We have more time to practice in class."*

Student D: *"I can watch the video and repeat if I don't understand."*

Chapter Five

5. Implications, Limitations, Recommendations and Conclusion

5.1 Implications of the Study

Many implications are associated with the outcomes of this study. The study presents an innovative, progressive trend towards teaching language, which is not currently being adopted in language classes in Abu Dhabi. Its value also lies in utilizing and implementing a new teaching method in the context of ESL writing classrooms while at the same time uncovering students' weaknesses and attitudes towards the English writing skill. The study investigates the potential benefit of blending face-to-face class interaction with online video and class preparation to gain mastery over features of the English language.

This approach might be a potential suggestion for future research and educational policies that would improve classrooms in the formal educational systems today. It is a call to redesign a classroom course to a blended course in English language teaching and learning. These new propositions are expected to be powerful in the future to prevail over a traditional classroom and transform school experience for the generation of students who are governed by technology and immersed in its world.

The study also holds implications to an educational change, which encourages the rethinking of school budgets and infrastructure to allow for such programs of blended learning. Such an implementation would necessitate policy changes to be incorporated in the UAE schools to align the learning outcomes with the teaching method and adapt the learning environment accordingly to improve the language skills of Arab learners whether in high school or in higher education.

5.2 Limitations of the study

Throughout the course of the study, several factors were identified that may have caused limitations to the outcomes of the current study. One of the most prominent limitations was related to changing the mentality of Arab students to adopt a shift in the teaching instructional method. At the start of the program, students were faced with a dilemma of changing their attitude towards the way they prepare for class. With a heavy reliance on passively receiving knowledge, Arab learners were faced with the reality of being asked to be in charge of their learning. In fact, students' readiness to change this attitude and get into the habit of watching the educational videos before class constituted a chief challenge. Their most common apprehension was that they had no time to watch the video.

Another limitation was due to the relatively small sample size, which could not represent a true reflection of different students' attainment by using the FCI intervention program. The study was conducted on two groups of female Emirati twelfth graders at the Applied Technology High School in the year 2013-2014.

Therefore, the size of the control and experimental group was found to limit the findings, as the participation of a bigger population would have given more accurate results that can be better generalized. Likewise, gender was another limitation that could have impacted the results of the study. Since the research was conducted on a group of female students, perhaps testing the instructional method on male students would have given varied findings. Moreover, because the study is restricted to a standardized test- the IELTS- the results could not be spread beyond the tools and rubrics of the IELTS, which assessed the level of writing based on four different criteria, categorized into rhetoric (task achievement and coherence and cohesion) and linguistic level (lexical resource and grammatical range).

In addition, the time and motivation factor represented another limitation. Since students were in their twelfth year, their results could not be compromised. As a consequence, acknowledging fairness to students' results, the duration of the study had to be limited to the first term and half of the second term of the academic year 2013-2014. Moreover, students' motivation might have represented a possible limitation to the findings of the study. The fact that students were in their last year, they were motivated to graduate and they felt more responsible about their learning and results, which might have affected the results of their posttests.

Finally, from the teacher's perspective, preparation time was also an important factor. Every week, the creation of one video required approximately 4 to 5 hours of planning. This was complimented by differentiated and individualized tasks for class activities based on three different levels of language proficiency: the higher, the middle and the lower achievers. Add to this, the time needed to mark writing responses on a weekly basis was altogether burdensome to the researcher who needed to be timely with marking and feedback for the benefit of the learners.

5.3 Recommendations

The results of the study shed light on some suggestions for further research and implementation: (i) recommendations to the Applied Technology High School (ATHS), and (ii) recommendations for further future research.

5.3.1 Recommendations to the Applied Technology High School

In the light of the findings of the current study, the following suggestions are made to the Applied Technology High School:

- (i) There is a necessity to reconsider teaching methodologies in English classes, namely with the initiative at ATHS to use one-to-one learning and the incorporation of educational technology in all classroom instruction.

- (ii) Due to the individualized learning that the FCI is found to allow, it is good to adopt it for the sake of differentiation purposes in English classes as well as other subjects at ATHS.
- (iii) There is a need to create more training programs and opportunities for teachers to receive professional development for teaching English using the Flipped Classroom Model or other forms of Blended Learning, namely with the learning of different skills of the language.

5.3.2 Recommendations for further research

Based on the results of the study, the researcher suggests the following studies in future research:

- (i) Since the present study focused on teaching the writing skill through the use of the Flipped Classroom Instruction of Blended Learning to female twelfth graders, and since similar studies on the impact of the FCI in a language class were near to non existent, there is a definite need for further studies with a population of male learners to investigate differences in the learning of the writing skill or any other language skills with learners of different grade levels.
- (ii) This research study utilized class time for teachers' feedback and prompting. It also encouraged peer checking & editing by allowing students to use a checklist when editing their peers' written production. Therefore, there is a need to investigate the role of feedback and peer editing in an English writing class.
- (iii) Since the subjects of the study described themselves as motivated and active learners on more than one incidence, it is highly recommended that a study be conducted to investigate the impact of the FCI on students' levels of motivation and class engagement or possibly to look into how class time is utilized in a writing class or in a different language class.
- (iv) Based on the researcher's attempt to create the FCI learning program with its videos, learning material that is differentiated in a language class, more studies into how a similar program can be designed and implemented are suggested. It is also proposed that the culmination of an analogous program is shared on a common platform such as the one existent for STEM subjects such as the Khan Academy website that offers many instructional videos for different scientific and technical videos. Its main function would be to have a bank of instructional videos that are complemented with their various activities to encourage differentiation in class instruction in Arab ESL language classes.

5.4 Conclusion

Throughout the past years, there has been much emphasis on the importance of using educational technology in the teaching of languages. Starting with Computer Assisted Language Learning (CALL) and moving onwards, there seems to be an improvement in the quality of students' writing. The results of

this study indicate that not only did flipping classroom instruction improve students' attainment in writing but also it improved their overall attitudes and beliefs towards the writing skill. Moreover, this teaching method boosted students' motivation and class engagement. Students in the experimental group demonstrated a better writing attainment through the FCI, and found that they became more engaged and responsible of their learning than the students in the control group. It can be then concluded that this method of instruction instigated better interest in the writing and better self-confidence. Students took charge of their learning, and were more engaged and active in their class activities. Their motivation levels were equally challenged through the new instructional method. Furthermore, after a short time of resistance, they adopted the new teaching method and responded well in terms of mastery over linguistic level in comparison with the students in the control group. Students who followed the "traditional" class instruction in the learner-centered writing class felt less confident about their writing abilities.

Blended Learning and the FCI in language writing classes made the female students' writing easier. For example, when watching the videos prior to class, students were able to respond to the task requirements more effectively. When students watch the instructional video at home, they have the chance to watch it as many times as needed to understand the concept, so they can chunk down their learning into various pieces. Many teachers use videos to teach students certain learning objectives. With the FCI, students accomplish a task that is needed in the post-video lesson on the following day. With the heavy reliance on technology in today's generation of students, videos are quite attractive in that they address different learning modes whether it is visual or aural and allow for self-paced learning. This freed more class time for the teacher's prompt feedback, correction or mistakes and clarification of misconceptions. Students consequently spent the greater amount of time in class applying what they had learnt through the videos under the teacher's supervision. In this manner, students' productive written essays and responses were generated and completed in class after the speculative concepts were learnt at home in advance.

The role of students in the experimental group of the study involved more active engagement in the learning that those in the control group who did not share the ownership over the teaching material that the experimental group enjoyed. As a result, students in the experimental group were more independent, motivated and actively enjoyed the writing. Similarly, the teacher guided students in the experimental group through the process of their writing without being worried about the time factor. This created a more collaborative approach, which both teacher and students enjoyed and felt more confident about.

Regarding the rhetoric and linguistic features of the writing, the aid that the flipped instruction offered to students in the experimental group improved the overall writing performance. Students who were taught using the flipped approach showed better awareness of sentence structure and better rhetoric achievement that led to enhanced writing. Students had a wider range of academic words to use since they practiced

the use of the words in class where they applied the rules of replacing with synonyms or antonyms and higher-order terminology. The weekly class practice made the students accustomed to the tasks that were differentiated according to the three levels of performance in class. The class time allowed them to peer-check and edit other students' work, thus encouraging students to identify mistakes and exchange ideas. In general, when students in a language writing class learn through the flipped instruction, their writing ability develops in terms of achievement, cohesion, coherence and overall grammatical and lexical range. Through this intervention program, other abilities were also improved as students' attitudes towards writing, and their motivation, independence and active engagement were developed.

The outcomes of this study indicate that the FCI may be generally successful as a method of teaching the writing skill. There is a fundamental need for future research to be conducted on other grade levels in order to determine whether comparable results would occur. A longitudinal study on a larger student body of both genders is essential to provide more precise findings. A similar study can also examine the evolution of students' performance through the flipped instruction in other language classes. Another pilot study should also attempt to investigate the role of class feedback and peer editing on students' writing abilities and motivation. As far as the female twelfth grade Emirati students involved in this study, it was found that the Flipped Classroom Instruction of blended learning is a prospective method of improving the writing skill although not exclusively used. Students' individual differences and perceptions are a crucial component of the study, and this should not mean that the flipped instruction would miraculously treat students' writing weaknesses. This research has presented yet an innovative method of teaching writing to spark motivation and autonomy in students to become better writers and test takers.

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Appendix A: Consent Form

Information Sheet and Consent Form



Title of the Study: *The Impact of Using a Flipped Classroom Instruction on the Writing Performance of Emirati Twelfth Grade Female students in the Applied Technology High School (ATHS)*

Researcher: *Mireille Farah, English Lead Teacher, ATHS-Female Campus, Abu Dhabi, United Arab Emirates*

Please tick the corresponding box.		
	Yes	No
1. I understand the purpose of the research study.		
2. I ascertain that my participation is voluntary, and that I have the right to withdraw at any time without providing reasons.		
3. I am aware that all records will be kept confidential.		
4. I agree to participate in the study.		
5. I agree to take part in interviews, questionnaires and performance tests.		
6. I approve of recording my interview answers for data records and private access.		
7. I understand that my responses may be used in future research, conferences and data centers.		

I have read this consent form. Opportunity was given to me to ask questions. I, therefore, give my consent to take part in this study.

Name of Participant

Date

Signature

Name of Researcher

Date

Signature

Appendix B: Writing Pretest/ Posttest



Mock IELTS Writing Pre Test/ Post Test

Student Name:	
Student ID Number:	
Grade & Section:	
Date:	

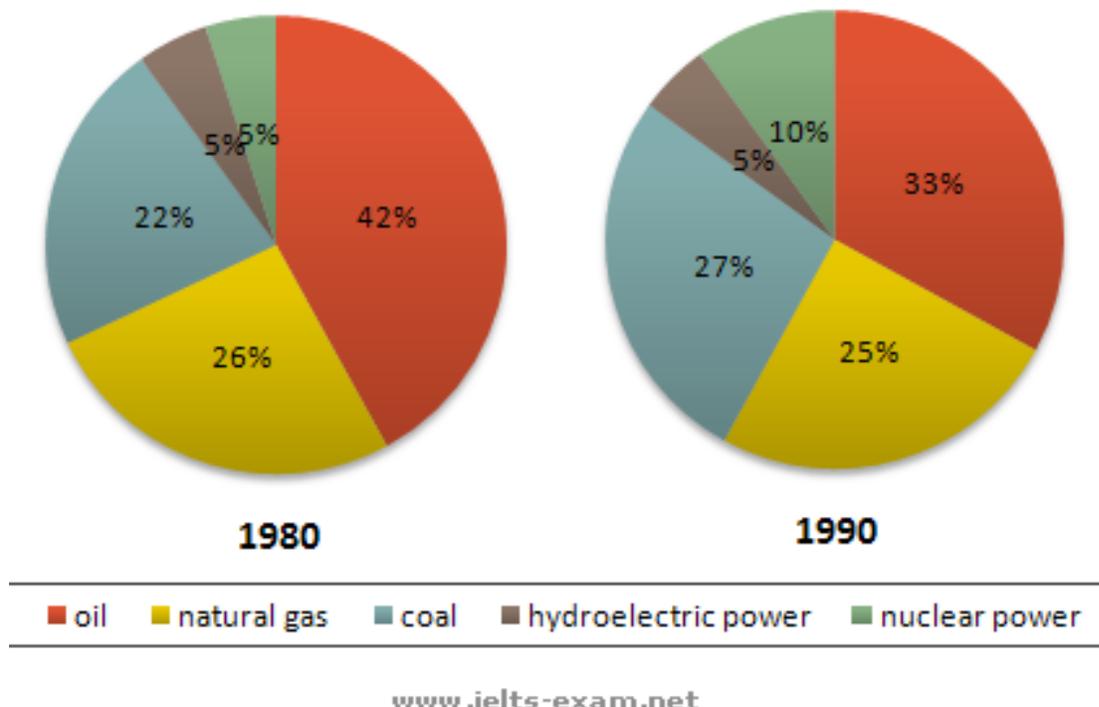
Writing	
Task 1	
Task 2	
Predicted Band Score	

WRITING TASK 1:

You should spend 20 minutes on this task.

The two graphs show the main sources of energy in the USA in the 1980s and the 1990s. Write a report to a university lecturer describing the changes that occurred.

Write at least 150 words.



WRITING TASK 2:

You should spend about 40 minutes on this task.

Write about the following topic:

Modern high technology is transforming the way we work and is of benefit to all society. To what extent do you agree or disagree?

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

Appendix C: Questionnaire A

Students' attitudes towards the Flipped Classroom Instruction:

Dear Students,

Please describe your attitude towards the Flipped Classroom Instruction. Please read the below statements carefully and answer them as truthfully as possible by ticking the right box. Try to answer all the questions given. Please note that all answers are anonymous.

5=Strongly Agree, 4=Agree, 3=Neutral, 2=Disagree, 1=Strongly Disagree

Rate your attitude to flipped instruction in an English Writing Class from 5→1	5	4	3	2	1
1. The flipped instruction allows me to prepare for my class in advance.					
2. Through the screencasts/ videos, I have enough time to acquire the sentence structures.					
3. I feel more confident to ask for clarifications after watching the screencasts.					
4. I feel more confident about my learning due to the flipped instruction.					
5. The flipped instruction made it easier for me to write Task 1 and 2 responses.					
6. My writing strategies are better as I have more time to apply the learning in class.					
7. I feel I am more in charge of my learning through the flipped instruction.					
8. I feel that the flipped instruction has not helped me at all.					
9. I understand more when the teacher explains in class.					
10. I like to write in class to get instant feedback from my teacher.					
11. In your opinion, what are the benefits of the flipped classroom instruction?					
12. Did the Flipped Instruction improve your ability to write in English or did it cause no improvement? Explain.					
13. What are the drawbacks of the Flipped Instruction?					
14. How can you define yourself as a student in class using the Flipped Instruction? Select from the below list. You may choose MORE THAN ONE answer. a. Passive and Bored b. Active and Involved c. Independent and Responsible d. Motivated e. Unable to interact in class					
15. Select the type of Learning Method you prefer. a. Traditional Learning where the teacher explains in class. b. Flipped Learning where the teacher sends the video home for me to prepare before class.					

Thank you for completing the questionnaire.

Appendix D: IELTS Writing Task 1 Rubric

IELTS Task 1 Writing band descriptors (public version)



Band	Task Achievement	Coherence and Cohesion	Lexical Resource	Grammatical Range and Accuracy
9	<ul style="list-style-type: none"> fully satisfies all the requirements of the task clearly presents a fully developed response 	<ul style="list-style-type: none"> uses cohesion in such a way that it attracts no attention skillfully manages paragraphing sequences information and ideas logically manages all aspects of cohesion well uses paragraphing sufficiently and appropriately 	<ul style="list-style-type: none"> uses a wide range of vocabulary with very natural and sophisticated control of lexical features; rare minor errors occur only as 'slips' 	<ul style="list-style-type: none"> uses a wide range of structures with full flexibility and accuracy; rare minor errors occur only as 'slips'
8	<ul style="list-style-type: none"> covers all requirements of the task sufficiently presents, highlights and illustrates key features / bullet points clearly and appropriately 	<ul style="list-style-type: none"> logically organises information and ideas; there is clear progression throughout uses a range of cohesive devices appropriately although there may be some under-use 	<ul style="list-style-type: none"> uses a wide range of vocabulary fluently and flexibly to convey precise meanings skillfully uses uncommon lexical items but there may be occasional inaccuracies in word choice and collocation produces rare errors in spelling and/or word formation 	<ul style="list-style-type: none"> uses a wide range of structures the majority of sentences are error-free makes only very occasional errors or inaccuracies
7	<ul style="list-style-type: none"> covers the requirements of the task (Academic) presents a clear overview of main trends, differences or stages (General Training) presents a clear purpose, with the tone consistent and appropriate clearly presents and highlights key features / bullet points but could be more fully extended 	<ul style="list-style-type: none"> arranges information and ideas coherently and there is a clear overall progression uses cohesive devices effectively, but cohesion within and/or between sentences may be faulty or mechanical may not always use referencing clearly or appropriately 	<ul style="list-style-type: none"> uses a sufficient range of vocabulary to allow some flexibility and precision uses less common lexical items with some awareness of style and collocation may produce occasional errors in word choice, spelling and/or word formation 	<ul style="list-style-type: none"> uses a variety of complex structures produces frequent error-free sentences has good control of grammar and punctuation but may make a few errors
6	<ul style="list-style-type: none"> addresses the requirements of the task (Academic) presents an overview with information appropriately selected (General Training) presents a purpose that is generally clear; there may be inconsistencies in tone presents and adequately highlights key features / bullet points but details may be irrelevant, inappropriate or inaccurate 	<ul style="list-style-type: none"> uses an adequate range of vocabulary for the task attempts to use less common vocabulary but with some inaccuracy makes some errors in spelling and/or word formation, but they do not impede communication 	<ul style="list-style-type: none"> uses a mix of simple and complex sentence forms makes some errors in grammar and punctuation but they rarely reduce communication 	

<p>5</p> <ul style="list-style-type: none"> generally addresses the task; the format may be inappropriate in places (Academic) recounts detail mechanically with no clear overview; there may be no data to support the description (General Training) may present a purpose for the letter that is unclear at times; the tone may be variable and sometimes inappropriate presents, but inadequately covers, key features / bullet points; there may be a tendency to focus on details 	<ul style="list-style-type: none"> presents information with some organisation but there may be a lack of overall progression makes inadequate, inaccurate or over-use of cohesive devices may be repetitive because of lack of referencing and substitution 	<ul style="list-style-type: none"> uses a limited range of vocabulary, but this is minimally adequate for the task may make noticeable errors in spelling and/or word formation that may cause some difficulty for the reader 	<ul style="list-style-type: none"> uses only a limited range of structures attempts complex sentences but these tend to be less accurate than simple sentences may make frequent grammatical errors and punctuation may be faulty; errors can cause some difficulty for the reader
<p>4</p> <ul style="list-style-type: none"> attempts to address the task but does not cover all key features / bullet points; the format may be inappropriate (General Training) fails to clearly explain the purpose of the letter; the tone may be inappropriate may confuse key features / bullet points with detail; parts may be unclear, irrelevant, repetitive or inaccurate 	<ul style="list-style-type: none"> presents information and ideas but these are not arranged coherently and there is no clear progression in the response uses some basic cohesive devices but these may be inaccurate or repetitive 	<ul style="list-style-type: none"> uses only basic vocabulary which may be used repetitively or which may be inappropriate for the task has limited control of word formation and/or spelling; errors may cause strain for the reader 	<ul style="list-style-type: none"> uses only a very limited range of structures with only rare use of subordinate clauses some structures are accurate but errors predominate, and punctuation is often faulty
<p>3</p> <ul style="list-style-type: none"> fails to address the task, which may have been completely misunderstood presents limited ideas which may be largely irrelevant/repetitive 	<ul style="list-style-type: none"> does not organise ideas logically may use a very limited range of cohesive devices, and those used may not indicate a logical relationship between ideas 	<ul style="list-style-type: none"> uses only a very limited range of words and expressions with very limited control of word formation and/or spelling errors may severely distort the message 	<ul style="list-style-type: none"> attempts sentence forms but errors in grammar and punctuation predominate and distort the meaning
<p>2</p> <ul style="list-style-type: none"> answer is barely related to the task 	<ul style="list-style-type: none"> has very little control of organisational features 	<ul style="list-style-type: none"> uses an extremely limited range of vocabulary; essentially no control of word formation and/or spelling can only use a few isolated words 	<ul style="list-style-type: none"> cannot use sentence forms except in memorised phrases
<p>1</p> <ul style="list-style-type: none"> answer is completely unrelated to the task 	<ul style="list-style-type: none"> fails to communicate any message 		<ul style="list-style-type: none"> cannot use sentence forms at all
<p>0</p> <ul style="list-style-type: none"> does not attend does not attempt the task in any way writes a totally memorised response 			

Appendix E: IELTS Writing Task 2 Rubric



IELTS Task 2 Writing band descriptors (public version)

Band	Task Response	Coherence and Cohesion	Lexical Resource	Grammatical Range and Accuracy
9	<ul style="list-style-type: none"> fully addresses all parts of the task presents a fully developed position in answer to the question with relevant, fully extended and well supported ideas 	<ul style="list-style-type: none"> uses cohesion in such a way that it attracts no attention skilfully manages paragraphing 	<ul style="list-style-type: none"> uses a wide range of vocabulary with very natural and sophisticated control of lexical features; rare minor errors occur only as 'slips' 	<ul style="list-style-type: none"> uses a wide range of structures with full flexibility and accuracy; rare minor errors occur only as 'slips'
8	<ul style="list-style-type: none"> sufficiently addresses all parts of the task presents a well-developed response to the question with relevant, extended and supported ideas 	<ul style="list-style-type: none"> sequences information and ideas logically manages all aspects of cohesion well uses paragraphing sufficiently and appropriately 	<ul style="list-style-type: none"> uses a wide range of vocabulary fluently and flexibly to convey precise meanings skilfully uses uncommon lexical items but there may be occasional inaccuracies in word choice and collocation produces rare errors in spelling and/or word formation 	<ul style="list-style-type: none"> uses a wide range of structures the majority of sentences are error-free makes only very occasional errors or inaccuracies
7	<ul style="list-style-type: none"> addresses all parts of the task presents a clear position throughout the response presents, extends and supports main ideas, but there may be a tendency to over-generalise and/or supporting ideas may lack focus 	<ul style="list-style-type: none"> logically organises information and ideas; there is clear progression throughout uses a range of cohesive devices appropriately although there may be some under-/over-use presents a clear central topic within each paragraph 	<ul style="list-style-type: none"> uses a sufficient range of vocabulary to allow some flexibility and precision uses less common lexical items with some awareness of style and collocation may produce occasional errors in word choice, spelling and/or word formation 	<ul style="list-style-type: none"> uses a variety of complex structures produces frequent error-free sentences has good control of grammar and punctuation but may make a few errors
6	<ul style="list-style-type: none"> addresses all parts of the task although some parts may be more fully covered than others presents a relevant position although the conclusions may become unclear or repetitive presents relevant main ideas but some may be inadequately developed/unclear 	<ul style="list-style-type: none"> arranges information and ideas coherently and there is a clear overall progression uses cohesive devices effectively, but cohesion within and/or between sentences may be faulty or mechanical may not always use referencing clearly or appropriately uses paragraphing, but not always logically 	<ul style="list-style-type: none"> uses an adequate range of vocabulary for the task attempts to use less common vocabulary but with some inaccuracy makes some errors in spelling and/or word formation, but they do not impede communication 	<ul style="list-style-type: none"> uses a mix of simple and complex sentence forms makes some errors in grammar and punctuation but they rarely reduce communication
5	<ul style="list-style-type: none"> addresses the task only partially; the format may be inappropriate in places expresses a position but the development is not always clear and there may be no 	<ul style="list-style-type: none"> presents information with some organisation but there may be a lack of overall progression makes inadequate, inaccurate or over- 	<ul style="list-style-type: none"> uses a limited range of vocabulary, but this is minimally adequate for the task may make noticeable errors in 	<ul style="list-style-type: none"> uses only a limited range of structures attempts complex sentences but these tend to be less accurate than simple sentences

<p>conclusions drawn</p> <ul style="list-style-type: none"> ■ presents some main ideas but these are limited and not sufficiently developed; there may be irrelevant detail 	<p>use of cohesive devices</p> <ul style="list-style-type: none"> ■ may be repetitive because of lack of referencing and substitution ■ may not write in paragraphs, or paragraphing may be inadequate 	<p>spelling and/or word formation that may cause some difficulty for the reader</p>	<ul style="list-style-type: none"> ■ may make frequent grammatical errors and punctuation may be faulty; errors can cause some difficulty for the reader
<p>4</p> <ul style="list-style-type: none"> ■ responds to the task only in a minimal way or the answer is tangential; the format may be inappropriate ■ presents a position but this is unclear ■ presents some main ideas but these are difficult to identify and may be repetitive, irrelevant or not well supported 	<ul style="list-style-type: none"> ■ presents information and ideas but these are not arranged coherently and there is no clear progression in the response ■ uses some basic cohesive devices but these may be inaccurate or repetitive ■ may not write in paragraphs or their use may be confusing 	<ul style="list-style-type: none"> ■ uses only basic vocabulary which may be used repetitively or which may be inappropriate for the task ■ has limited control of word formation and/or spelling; errors may cause strain for the reader 	<ul style="list-style-type: none"> ■ uses only a very limited range of structures with only rare use of subordinate clauses ■ some structures are accurate but errors predominate, and punctuation is often faulty
<p>3</p> <ul style="list-style-type: none"> ■ does not adequately address any part of the task ■ does not express a clear position ■ presents few ideas, which are largely undeveloped or irrelevant 	<ul style="list-style-type: none"> ■ does not organise ideas logically ■ may use a very limited range of cohesive devices, and those used may not indicate a logical relationship between ideas 	<ul style="list-style-type: none"> ■ uses only a very limited range of words and expressions with very limited control of word formation and/or spelling ■ errors may severely distort the message 	<ul style="list-style-type: none"> ■ attempts sentence forms but errors in grammar and punctuation predominate and distort the meaning
<p>2</p> <ul style="list-style-type: none"> ■ barely responds to the task ■ does not express a position ■ may attempt to present one or two ideas but there is no development ■ answer is completely unrelated to the task 	<ul style="list-style-type: none"> ■ has very little control of organisational features 	<ul style="list-style-type: none"> ■ uses an extremely limited range of vocabulary, essentially no control of word formation and/or spelling 	<ul style="list-style-type: none"> ■ cannot use sentence forms except in memorised phrases
<p>1</p> <ul style="list-style-type: none"> ■ answer is completely unrelated to the task 	<ul style="list-style-type: none"> ■ fails to communicate any message 	<ul style="list-style-type: none"> ■ can only use a few isolated words 	<ul style="list-style-type: none"> ■ cannot use sentence forms at all
<p>0</p> <ul style="list-style-type: none"> ■ does not attend ■ does not attempt the task in any way ■ writes a totally memorised response 			

Appendix F: The Flipped Classroom Instruction Sample videos and lessons/ activities.

The picture below shows the platform on which videos were uploaded for students to access. Classwork Material is also uploaded on the same PLATO LMS. Videos were also uploaded onto youtube.

2 Term 2 - Week 2

1.6 (Sun, 15. Jan. 12 02:48:22 PM)

1.12 (Sun, 15. Jan. 12 02:49:52 PM)

1.12 (Sun, 15. Jan. 12 02:50:20 PM)

Lessons 1-2: Discussing urban problems (suzanne.kamal_all_sections) (Wed, 08. Jan. 14 08:17:58 AM)

Discussing urban problems.pptx (suzanne.kamal_all_sections) (Wed, 08. Jan. 14 08:19:04 AM)

urban problems vocabulary.docx (suzanne.kamal_all_sections) (Wed, 08. Jan. 14 08:19:49 AM)

lesson plan G12-Wk2-discuss urban problems.doc (suzanne.kamal_all_sections) (Wed, 08. Jan. 14 08:20:38 AM)

Listening practice (mireille.farah_all_sections) (Wed, 08. Jan. 14 08:21:18 AM)

Week 2 listening.pptx (catherine.chamoun_all_sections) (Wed, 08. Jan. 14 08:22:21 AM)

Lessons 3-4: Problem/ Solution Essay (mireille.farah_all_sections) (Mon, 13. Jan. 14 08:16:29 AM)

(mireille.farah_all_sections)
Dear Students,

Please watch the below video before your next class. It is essential that you watch it carefully to be prepared for the class tasks.

(Mon, 13. Jan. 14 08:17:37 AM)

Problem Solution Video.mp4 (mireille.farah_all_sections) (Mon, 13. Jan. 14 08:18:48 AM)

Wk 2 Lesson Plan-Flipped.doc (mireille.farah_all_sections) (Mon, 13. Jan. 14 08:20:58 AM)

Classwork Material (mireille.farah_My Two G12 Classes) (Tue, 28. Jan. 14 06:32:20 PM)

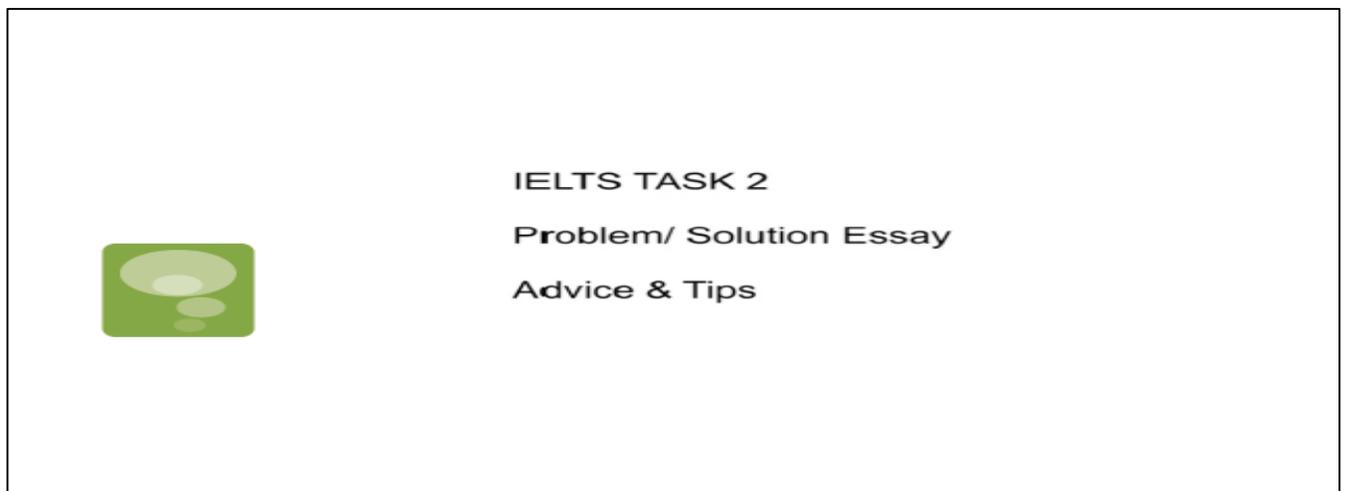
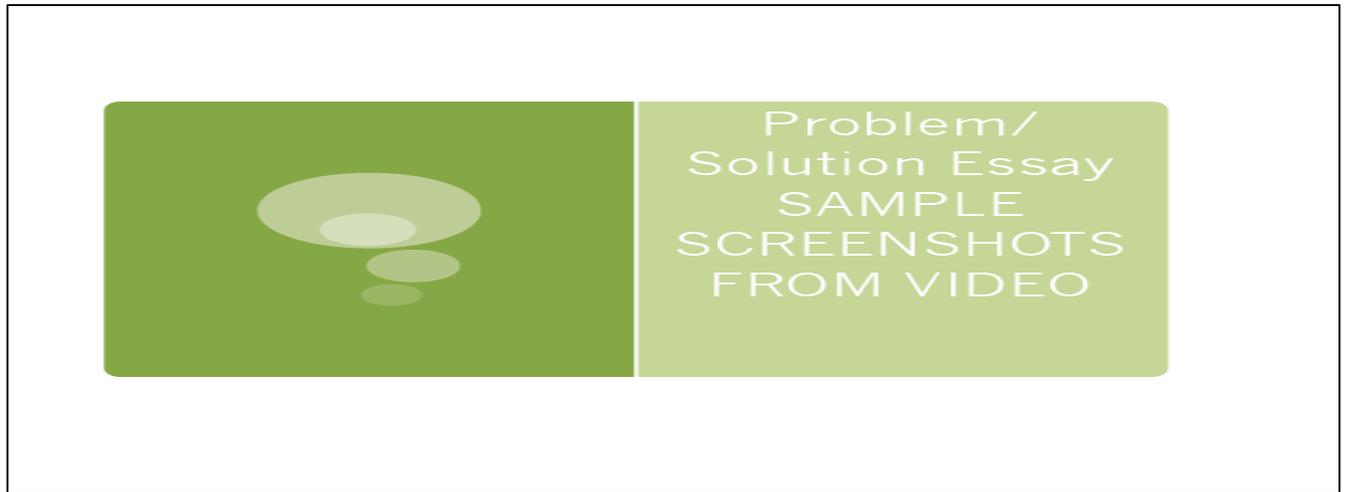
Problem-Solution Class Practice Group 1.pptx (mireille.farah_all_sections) (Mon, 13. Jan. 14 08:22:16 AM)

Problem-Solution Class Practice Group 2.pptx (mireille.farah_all_sections) (Mon, 13. Jan. 14 08:24:06 AM)

Problem-Solution Class Practice Group 3.pptx (mireille.farah_all_sections) (Mon, 13. Jan. 14 08:25:47 AM)

(mireille.farah_all_sections)
PLEASE SUBMIT YOUR FINAL ESSAY TO YOUR TEACHER.

Sample Extracts from the instructional Video



1. Answer the question



Highlight the **key words** in the question.

What does it ask for? Advantages/disadvantages?
Problems/solutions? For and against?



2. Plan your answer

Spend five minutes **planning the content** of your essay.

Make sure you have an almost equal balance of
advantages/disadvantages, problems/solutions, arguments for/against.



4. Think of interesting ways to start your paragraphs.



~~I agree with....~~

~~I disagree with...~~

Some people believe that...

It is generally accepted that...

One argument for _____ is...

There are many arguments for/against

Although there are many advantages/arguments for _____, we must also consider the disadvantages/counter arguments...

A significant problem many countries face is....

This is a pressing issue... because...

Surprisingly,....

....is undoubtedly

The obvious answer



Focus on improving your vocabulary



Look at the two pieces of writing. Which is in a more suitable style for academic or exam writing? Why?



A
There are lots of health problems in the world. I can think of two examples. AIDS, which is pretty new, is one, and malaria, which has been around for ages, is another. Thank goodness we can cure most diseases with drugs now. But there's a problem! These drugs are very pricey, so poor countries can't afford to use them. In my opinion, drug companies must make drugs cheaper for poor countries. I also think they should let poor countries make the drugs themselves. That would cost less

B
There are many serious health problems facing the world today. Some of these are relatively new, like AIDS, while others such as malaria have been in existence for centuries. Fortunately, most diseases can be effectively treated with drugs today. However, such drugs are often too expensive for use in poor countries. Many people argue that drug companies should reduce the price of drugs they sell in poor countries. After all, why should they make a profit out of people's suffering? Another solution might be for these companies to allow their drugs to be manufactured at lower prices.



Find the words below in Paragraph A. How were they expressed in Paragraph B?



Paragraph A	Paragraph B
Lots of	Many
Pretty new	Relatively new
Has been around	
Ages	
Thank Goodness	
Pricey	



Try to rewrite the below sentences using more formal and academic language:



1. Technology is going very fast. No wonder older people can't cope with all the new gadgets!

Begin: *Technology is progressing so incredibly fast that....*
older people are facing difficulties adapting to the latest technological inventions.

2. Loads of people have moved to the city recently. They all need a job and a place to live. It's a pity that a lot of them are disappointed.

Great disappointment for not finding employment or pepper housing after they relocate to live in cities.

Begin: *Unfortunately, most of the people suffer from...*



For our next lesson, you will need to:



1. Read the below topic and think of ways to plan your essay.
2. Write down a list of vocabulary words you will need to use.
3. Think of the number of paragraphs and write a short outline.

What are the key problems facing the world's cities in the 21st century, and what can be done about them?





Writing Task 2
Problem/
Solution Essay

Objectives

1. To practise using varied vocabulary to express problems and solutions.
2. To practise using varied and appropriate grammar structures in writing tasks.
3. To use varied Phraseology to express an opinion about a given subject
4. To present a relevant and clear position in response to the task
5. To present solutions to a problem and justify an opinion (Task 2, 250 words)

You will use the prompt below to write your essay within 40 minutes. Write your response using a pencil on your notebook. 

What are the key problems facing the world's cities in the 21st century, and what can be done about them?

In pairs, practice the use of taught vocabulary using the link below. (10 minutes)



<http://www.dcielts.com/exercises/vocab/hometown.htm>

You now have 5 minutes to rearrange the words below into meaningful sentences:

1. Pollution- the- one- of- is- pressing- most- issues-cities- in- today.
2. living- People- in- cities- world- facing- are- problems- major.
3. continues- unemployment- cities- in- If- grow- to- will- lead- it- to- conditions- poor- living.
4. A- many- significant- cities-is- face-problem- homelessness-increasing.
5. Overcrowding-is- fundamental-issue-a-megacities-in.

Complete the table below by finding synonyms to the expressions given:



Word	Synonym
1. Big problem	Major issue
2. Minor problem	
3. Face a problem	
4. not enough attention	
5. Cause many problems	
6. Solve the problem	
7. In my opinion	

Words you'll need:



What words do you need?

This will depend on your target band score but you will need variety in these areas:

1. nouns: eg, *problem, difficulty, concern, issue*
2. adjectives: eg, *serious, major, minor, significant, insignificant*
3. verbs: eg, *have, experience, deal with, tackle, solve, resolve*

Here are some ideas to get you started



Introduction:

Body Paragraph 1: Problems

1. Growth of Population
 - a. Birth Rate: literacy rate
 - b. Unemployment
 - c. Increase in crime rate
2. Pollution
 - a. Little green areas/ Deforestation
 - b. Business and Industrial center: The pace of life, the cost of living
 - c. Traffic: The rat race, overcrowding, congestion

Body Paragraph 2: Solutions

Brainstorm two solutions and provide explanations and examples for each.

Conclusion: Summarize and give your opinion.

You now have 40 minutes to complete the essay. Below is a sample essay map.



Example of an essay map:

One of the most controversial issues in the world today relates to _____. Currently, there are many serious problems facing _____. Fortunately, these pressing issues can be resolved with proper planning.

It seems that problems associated with cities are many. _____ is undoubtedly one of the most serious concerns. (Explain and Give example).

Although there exist many problems in cities, people and governments play an essential role in facing them. One example is _____.

Finally/ Lastly/ in the end, etc. (summarize and give your opinion)

Note that the essay map is not to be learned, but provides a simple guide.

Submit your essay to your partner for revision and peer assessment. Questions to guide the peer reviewer are below:



Task Response: Has your partner answered all parts of the task?

- Why should we be concerned about urban problems, according to the writer?
- How many problems and solutions are mentioned? What are they?
- Find examples given about each.

Coherence and Cohesion: Is the writing well-organized? Are the ideas linked logically?

- What main topic area does each paragraph cover?
- Underline all linking expressions you can find.

Lexical Resource: Is there a good range of vocabulary?

- How many words and phrases to do with urban problems and solutions can you find?
- Find the ways the writer introduced personal opinion.

Grammatical Range and Accuracy: Is there a variety of sentence structures? Is the writing reasonably accurate?

- Underline examples of passive, SVA, proper punctuation.
- Check for spelling and capitalization.

Use 10 minutes to check the below was covered on your essay:



Task Response:	
1. Does your introduction show an understanding of the question?	
2. Does your introduction show clearly what to expect in the essay? (e.g. In this essay, I will...)	
3. Does the body of the essay answer the question FULLY?	
4. In a task 2 essay, do you answer both parts of the essay (e.g. agree/disagree, problem/solution, advantages/disadvantages)?	
5. Does your conclusion sum up the essay (e.g. Task 1 the overall important parts of the line graph/bar chart etc)?	
6. Do you reach the word limit? (Don't count every word!)	
Coherence:	
7. Does each paragraph start with a topic sentence that relates to the question?	
8. Do you have clear paragraphs?	
9. Do you use connecting words between sentences and paragraphs?	
10. Are the connecting words used accurately?	
11. Do you use a variety of connecting words?	
12. Do you use TOO MANY connecting words?	
Lexical Resource:	
13. Is your spelling OK?	
14. Do you repeat words or have you used synonyms?	
15. Do you repeat whole phrases or sentences from the question? Can you paraphrase it?	
Grammatical Resource:	
16. Check you verbs. Are they in the right tense?	
17. Parts of speech. Do you use adjectives/adverbs correctly (esp Part 1 writing about line graphs e.g. a slight drop/dropped slightly)? Do you use nouns and verbs in the right place?	
18. Do you use a range of sentence structures (e.g. some simple sentences, some compound/complex sentences, sentences with verb/adverb or adjective noun etc) ? To get a Band 6 in IELTS Writing, you need to use different structures throughout your essay.	

The links below provide individual practice for vocabulary related to problems for use at home.



<http://www.dcielts.com/ielts-vocabulary/problem/>
<http://www.dcielts.com/exercises/problem/index.htm>



Objectives



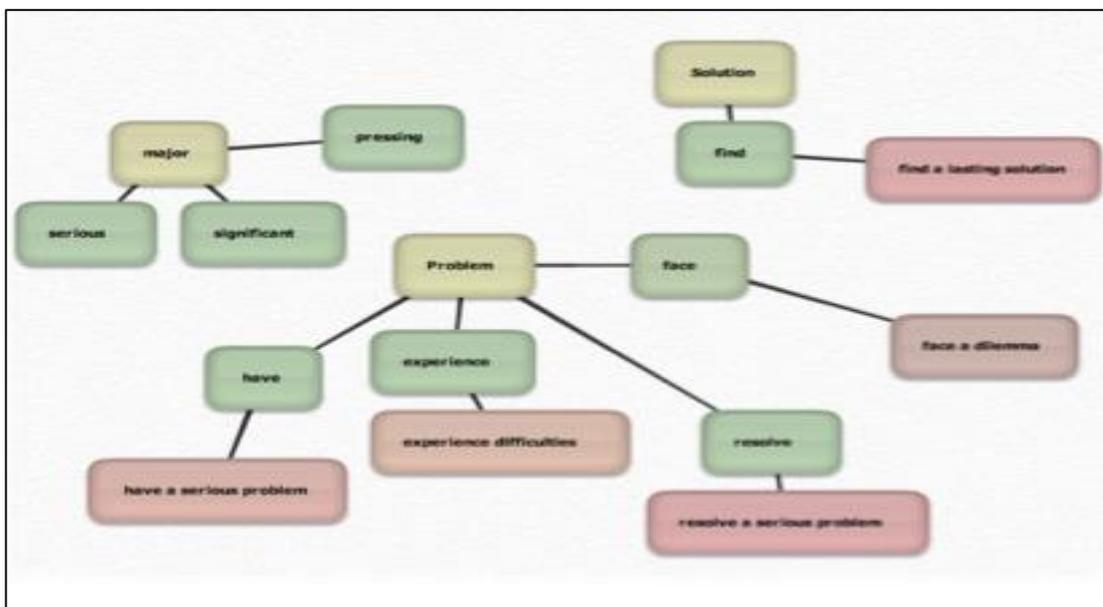
1. To review parts of the planning, organising and editing processes in writing tasks.
2. To practise using varied vocabulary to express opinions.
3. To practise using varied and appropriate grammar structures in writing tasks.
4. To use varied Phraseology to express an opinion about a given subject
5. To present a relevant and clear position in response to the task
6. To present solutions to a problem and justify an opinion (Task 2, 250 words)

You will use the prompt below to write your essay within 40 minutes. Write your response using a pencil on your notebook.



What are the key problems facing the world's cities in the 21st century, and what can be done about them?

EACH FOLLOWING ACTIVITY WILL BE TIMED.



Words you'll need:



What words do you need?

This will depend on your target band score but you will need variety in these areas:

1. nouns: eg, *problem, difficulty, concern, issue*
2. adjectives: eg, *serious, major, minor, significant, insignificant*
3. verbs: eg, *have, experience, deal with, tackle, solve, resolve*

Here are some ideas to get you started



Problems:

Growth of Population

- Birth Rate
- Unemployment
- Increase in crime rate

Pollution

- Little green areas/ Deforestation
- Industrial center
- Traffic

You now have 40 minutes to complete the essay.



Example of an essay map:

One of the most controversial issues in the world today relates to _____. Currently, there are many serious problems facing _____. Fortunately, these pressing issues can be resolved with proper planning.

It seems that problems associated with cities are many. _____ is undoubtedly one of the most serious concerns. (Explain and Give example).

Although there exist many problems in cities, people and governments play an essential role in facing them. One example is _____.

Finally/ Lastly/ in the end, etc. (summarize and give your opinion)

Note that the essay map is not to be learned, but provides a simple guide.

Submit your essay to your partner for revision and peer assessment. Questions to guide the peer reviewer are below:



Task Response: Has your partner answered all parts of the task?

- Why should we be concerned about urban problems, according to the writer?
- How many problems and solutions are mentioned? What are they?
- Find examples given about each.

Coherence and Cohesion: Is the writing well-organized? Are the ideas linked logically?

- What main topic area does each paragraph cover?
- Underline all linking expressions you can find.

Lexical Resource: Is there a good range of vocabulary?

- How many words and phrases to do with urban problems and solutions can you find?
- Find the ways the writer introduced personal opinion.

Grammatical Range and Accuracy: Is there a variety of sentence structures? Is the writing reasonably accurate?

- Underline examples of passive, SVA, proper punctuation.
- Check for spelling and capitalization.

Use this checklist throughout your writing to make it better.



Task Response:	
1. Does your introduction show an understanding of the question?	
2. Does your introduction show clearly what to expect in the essay? (e.g. In this essay, I will...)	
3. Does the body of the essay answer the question FULLY?	
4. In a task 2 essay, do you answer both parts of the essay (e.g. agree/disagree, problem/solution, advantages/disadvantages)?	
5. Does your conclusion sum up the essay (e.g. Task 1 the overall important parts of the line graph/bar chart etc)?	
6. Do you reach the word limit? (Don't count every word!)	
Coherence:	
7. Does each paragraph start with a topic sentence that relates to the question?	
8. Do you have clear paragraphs?	
9. Do you use connecting words between sentences and paragraphs?	
10. Are the connecting words used accurately?	
11. Do you use a variety of connecting words?	
12. Do you use TOO MANY connecting words?	
Lexical Resource:	
13. Is your spelling OK?	
14. Do you repeat words or have you used synonyms?	
15. Do you repeat whole phrases or sentences from the question? Can you paraphrase it?	
Grammatical Resource:	
16. Check you verbs. Are they in the right tense?	
17. Parts of speech. Do you use adjectives/adverbs correctly (esp Part 1 writing about line graphs e.g. a slight drop/dropped slightly)? Do you use nouns and verbs in the right place?	
18. Do you use a range of sentence structures (e.g. some simple sentences, some compound/complex sentences, sentences with verb/adverb or adjective noun etc) ? To get a Band 6 in IELTS Writing, you need to use different structures throughout your essay.	

Classwork Material: Group 3



Objectives



1. To review parts of the planning, organising and editing processes in writing tasks.
2. To practise using varied vocabulary to express opinions.
3. To practise using varied and appropriate grammar structures in writing tasks.
4. To use varied Phraseology to express an opinion about a given subject
5. To present a relevant and clear position in response to the task
6. To present solutions to a problem and justify an opinion (Task 2, 250 words)

You will use the prompt below to write your essay within 40 minutes. Write your response using a pencil on your notebook.



What are the key problems facing the world's cities in the 21st century, and what can be done about them?

EACH FOLLOWING ACTIVITY WILL BE TIMED.

You now have **30 minutes** to write the draft of your essay.



Start NOW 😊

Take 5 minutes to examine and revise your essay. Use the link below for guidance- Scroll down the webpage to the section called: *What to check for?*



<http://www.dcielts.com/ielts-writing/editing-a-checklist/>

Submit your essay to your partner for revision and peer assessment. Questions to guide the peer reviewer are below:



Task Response: Has your partner answered all parts of the task?

- Why should we be concerned about urban problems, according to the writer?
- How many problems and solutions are mentioned? What are they?
- Find examples given about each.

Coherence and Cohesion: Is the writing well-organized? Are the ideas linked logically?

- What main topic area does each paragraph cover?
- Underline all linking expressions you can find.

Lexical Resource: Is there a good range of vocabulary?

- How many words and phrases to do with urban problems and solutions can you find?
- Find the ways the writer introduced personal opinion.

Grammatical Range and Accuracy: Is there a variety of sentence structures? Is the writing reasonably accurate?

- Underline examples of passive, SVA, proper punctuation.
- Check for spelling and capitalization.

The writer now has 5 minutes to revise the essay using notes from the reviewer and this checklist:



Task Response:	
1. Does your introduction show an understanding of the question?	
2. Does your introduction show clearly what to expect in the essay? (e.g. In this essay, I will...)	
3. Does the body of the essay answer the question FULLY?	
4. In a task 2 essay, do you answer both parts of the essay (e.g. agree/disagree, problem/solution, advantages/disadvantages)?	
5. Does your conclusion sum up the essay (e.g. Task 1 the overall important parts of the line graph/bar chart etc)?	
6. Do you reach the word limit? (Don't count every word!)	
Coherence:	
7. Does each paragraph start with a topic sentence that relates to the question?	
8. Do you have clear paragraphs?	
9. Do you use connecting words between sentences and paragraphs?	
10. Are the connecting words used accurately?	
11. Do you use a variety of connecting words?	
12. Do you use TOO MANY connecting words?	
Lexical Resource:	
13. Is your spelling OK?	
14. Do you repeat words or have you used synonyms?	
15. Do you repeat whole phrases or sentences from the question? Can you paraphrase it?	
Grammatical Resource:	
16. Check your verbs. Are they in the right tense?	
17. Parts of speech. Do you use adjectives/adverbs correctly (esp Part 1 writing about line graphs e.g. a slight drop/dropped slightly)? Do you use nouns and verbs in the right place?	
18. Do you use a range of sentence structures (e.g. some simple sentences, some compound/complex sentences, sentences with verb/adverb or adjective noun etc)? To get a Band 6 in IELTS Writing, you need to use different structures throughout your essay.	

Appendix G: Names of Teachers

Teacher's Name	Position	Role	Contact
<i>Phoebe Hindi</i>	English Curriculum Developer	<ul style="list-style-type: none"> ▪ Collaborate on production of Pretest/Posttest. ▪ Reviewing objectives, videos and class tasks. 	Phoebe.hindi@aths.ac.ae
<i>Suzanne Kamal</i>	English Teacher- G12 Level Leader	<ul style="list-style-type: none"> ▪ Collaborate on reviewing objectives, videos and class tasks. 	Suzanne.kamal@aths.ac.ae
<i>Nazi Ahmed</i>	English Lead Teacher	<ul style="list-style-type: none"> ▪ Assisting with IELTS Marking. ▪ Reviewing objectives, videos and class tasks 	Nazi.ahmed@aths.ac.ae

Appendix H: Comparison of Means between Control and Experimental Groups

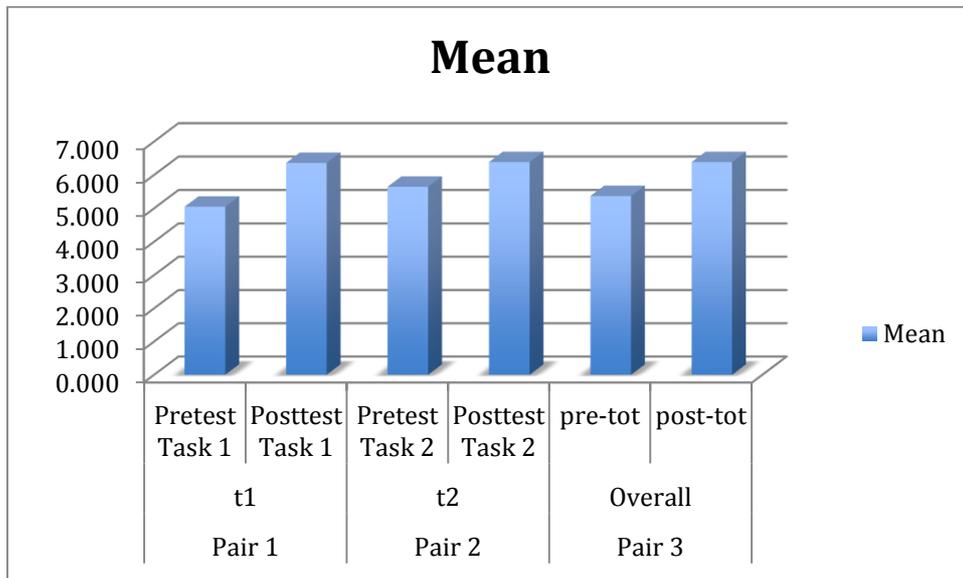


Figure 5. Mean scores of pretest and post tests- Experimental Group

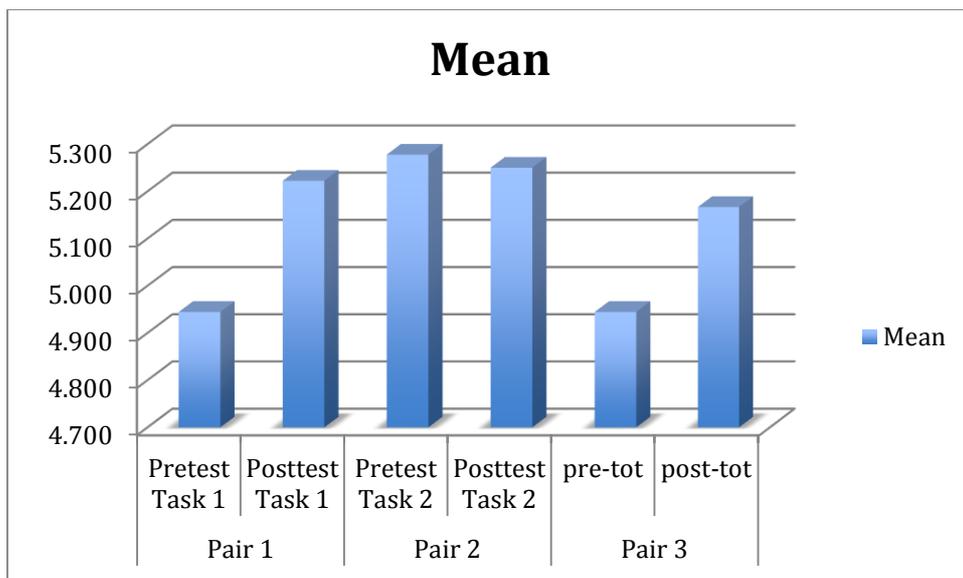


Figure 6. Mean scores of pretest and post tests- Control Group