

Hebron University

Faculty of Graduate Studies

English Department



The Effectiveness of Utilizing Interactive Task-based Activities to Teach English Writing in  
Virtual Classes

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This thesis is submitted in partial fulfillment of the requirements for the Degree of Master of Applied Linguistics and the Teaching of English, Faculty of Graduate Studies & Academic Research, Hebron University, Palestine

October, 2017

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## **Declaration**

I endorse that this thesis represents the outcome of my personal investigations, and it has not been presented for a higher degree in any other university or educational institution.

Furthermore, I confirm that the ideas presented are my own; any contributions, made by others, are previewed, referred to and cited cautiously all through the study.

## **Acknowledgements**

I'd love to express my profound appreciation to all the people who lit my way in Hebron University and in my life. Heartfelt thanks to my supervisor Dr. Mohammed Abdul Hakim Farrah who generously gave me attentive guidance and purposeful feedback all through the process of my research.

My deep gratitude and thanks are dedicated to all my instructors in the M.A program. They gave me splendid knowledge, formed my experience and triggered my ambitions to be like them in the future. In every lecture, I felt that each one of them tried his/her best to guide me, teach me how to write professional academic papers and improve my linguistic proficiency, so all my instructors are unquestionably the reason of my current and future success.

I would like to express my deepest appreciation to Dr. Hazem Bader (the internal examiner from Hebron University) and Dr. Mahmoud Itmeizeh (the external examiner from Palestine Ahliya University) for their cautious feedback and great support. I would love to thank my beloved father, my precious mother and my siblings for their great encouragement. At last, I would like to express my gratitude to my relatives, friends and colleagues for their magnificent support.

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## **Abstract**

This study aims to scrutinize the efficacy of utilizing virtual classes and interactive task-based activities to teach English writing in Bethlehem Secondary School for Girls. The study sample comprised two 11<sup>th</sup> grade sections from the scientific stream. The experimental group practiced writing online; however, this skill was introduced to the control group in a traditional manner. A questionnaire, pre/posttests, online platforms and self-reports were tailored to target the study aims. The outcomes of the questionnaire indicated that the experimental group developed more positive attitudes towards e-learning than the control group. The averages of the pretest were comparable to each other; the control group got 14.85 and the other got 14.77. However, the analysis of the posttest indicated that the experimental group outperformed the control one. The textual statistics of the posts showed that technology helped the participants to produce more intelligible language structures. Finally, the analysis of the self-reports indicated that e-learning developed the students' writings and reduced anxiety. The researcher provided final recommendations; they're summarized as follows: 1. It's significant to introduce e-learning as a didactic tool that enhances authentic classroom practices. 2. It's significant to introduce the writing skill in a developmental process that enhances interaction among students. 3. The integration of technology into teaching English writing is a fruitful process that requires sagacity, preparations and collaborations in the educational process.

*Keywords:* virtual classes, task-based activities, e-learning, English writing

## Arabic Abstract

### ملخص الدراسة

فاعلية استخدام الأنشطة التواصلية القائمة على المهام لتدريس مهارة كتابة اللغة الإنجليزية باستخدام الصفوف

### الإفترضيه

هدفت هذه الدراسة إلى قياس مدى فاعلية استخدام الصفوف الافتراضية والمهام ذات الطابع التواصلية لتعليم الكتابة باللغة الإنجليزية في مدرسة بنات بيت لحم الثانوية، فتكونت عينة الدراسة من شعبتين دراسيتين من الصف الحادي عشر العلمي، لقد درست المجموعة التجريبية على الكتابة عن طريق الإنترنت، بينما عرضت هذه المهارة بطريقة تقليدية للمجموعة الضابطة، وتم استخدام استبانة، واختبار قبلي وبعدي، ومنصات إلكترونية، وتقارير ذاتية من أجل تحقيق أهداف الدراسة. لقد أشارت نتائج الاستبانة إلى أن المجموعة التجريبية قد طورت اتجاهات أكثر إيجابية نحو التعلم الإلكتروني مقارنة مع المجموعة الضابطة، وكانت نتيجة الوسطين الحسابيين للإمتحان القبلي متقاربة، حيث بلغت ١٤.٨٥ للمجموعة الضابطة، و ١٤.٧٧ للمجموعة الأخرى، بينما أشارت نتائج الإمتحان البعدي إلى أن المجموعة التجريبية قد تفوقت على الضابطة، ودلت إحصائيات تحليل المنشورات على أن التكنولوجيا قد ساعدت الطالبات على استخدام تراكيب لغوية مفهومة وأكثر وضوحاً، وفي النهاية أشارت نتائج التقارير الذاتية إلى أن التعلم الإلكتروني قد طور مهارات الكتابة لدى الطالبات وقلل من التوتر. لقد عرضت الباحثة توصيات نهائية يمكن تلخيصها على النحو التالي: ١. من المهم اعتبار التعلم الإلكتروني أداة لدعم الخبرات التعليمية الواقعية. ٢. من المهم تدريس الكتابة باللغة الإنجليزية ضمن عملية تطويرية تدعم التواصل بين الطلاب ٣. يعد دمج التكنولوجيا مع تعليم الكتابة باللغة الإنجليزية عملية مثمرة تحتاج لحكمة، وتحضيرات عديدة، وتعاون بين أطراف العملية التعليمية.

## **Chapter One**

### **Introduction**

#### **1.0. Introduction**

Overwhelmed by the ongoing changes and preoccupations of life, teachers, policymakers, parents and students determinedly attempt to accommodate with new life perspectives that introduce technology as the supreme essence of all walks of life. In the field of education, a huge chasm has developed between many traditional teaching methodologies and the students' dynamic aspirations. The customary black boards, the teachers' pointing sticks and the loaded textbooks are not satisfactory any more for the progression and the sustainability of the demanding educational process. The majority of the students, living in the plethora of the different technological temptations, need several input types that match their interests in order to learn efficaciously, increase their motivation and boost their achievement.

Technology has massively gained popularity in the 1990s and the 2000s. All the domains of life have been connected and controlled by computers, the net and other electronic innovations. Therefore, many policymakers, educators and teachers have attempted to rejuvenate the educational process in a manner that conforms to the current technological era. For example, some students have replaced regular books with electronic resources that are uploaded on small devices like mini-laptops and smart phones. Furthermore, many teachers have developed a tendency to use many technological aids inside their classes to involve their students in the learning process.

It is substantial to note that the dynamic correlation between technology and language teaching underpins three discernable dimensions that are; 1. Social reciprocity 2. Didactic

facilitation 3. Environmental sustainability. First, technology reshapes the teacher-student interaction inside many classrooms. In e-learning, teachers usually play the role of “the learning facilitators” by giving preliminary instructions, supervising the students’ work and intervening when drastic errors and deviations take place. This reshaping has four major educational implications that are:

1. Many students become more active in the teaching-learning process.
2. A reciprocal rapport between teachers and students makes the learning process more developmental, integrative and interactive.
3. Skills become more essential than concrete knowledge.
4. Students often receive miscellaneous technological stimuli that boost and contextualize the learning process.

Moreover, technology gradually diminishes the prototypical image of the “omniscient teacher” that has always been considered a demand to achieve the ultimate educational sufficiency and fulfillment. By the integration of different technological aids, the teachers’ role becomes broad and more dynamic. It constantly shifts in order to support many students cognitively, psychologically and socially. For example, teachers may step aside and observe their students during some activities; however, intervention may be highly necessary in other tasks.

Second, technologically-induced teaching methodologies raise the students’ motivation level, engage them in the educational process and provide authentic and incentive preparations for real life situations (Wichadee, 2013). For instance, when the targeted students are exposed

to video-based tasks, they employ their auditory, visual and even cognitive propensities to accomplish these tasks efficaciously. On the other hand, most of the traditional teaching methodologies enhance the teachers' authoritativeness and inevitably diminish the students' contributions in the dynamic teaching-learning processes.

In education, technology can be perceived as an accompanying tool that enhances what takes place in face-to-face classroom practices. Also, it can be introduced as a separate tool that replaces many traditional routes in learning, particularly in distance educational programs. The former is the major idea of this study; the targeted participants were enrolled in two online platforms and practiced interactive task-based activities to enhance certain writing strategies.

Third, technology provides an appealing learning environment because it is secure, supportive and mirthful. Many students usually have the chance to use the net to look for knowledge in their free time, ask for feedback and learn in a manner that they desire. In the Palestinian educational context, many of the adopted technological aids enhance teaching rather than learning. To elaborate, teachers usually employ PowerPoint presentations, videos and recorders to passively "present" knowledge to their students without any type of interaction. Therefore, much research is needed in the field of e-learning in order to formulate general principles that systematically integrate technology into education.

At the university level, most of the educational institutions in Palestine use e-learning for different purposes listed as follows:

1. University students use their portals regularly to check their grades, registered courses and schedule.

2. Some universities publish the instructors' lectures online in order to give students the chance to access them anytime.
3. Some universities regularly launch e-forums in which instructors and students gather and discuss several issues.
4. Some universities use e-modes in order to give students the chance to access international databases like EBSCO.

At the school level, the field of e-learning is still immature and developing. The Palestinian Ministry of Education launched the website "Madrasty Al-iliktronyah" (my electronic school) in 2012 to extend the use of technology in the public schools. The website introduces many fruitful technical, didactic and social properties. For example, students can send messages to any teacher; also, parents can check their children's grades regularly by signing up. Adopting such website, in the Palestinian context, is challenging because not all schools have a convenient access to the net. Many teachers and students are not "ready" to use this website effectively, so policymakers should propose training in order to diminish the dominance of the traditional trends in education.

In short, technology is not a purely mechanical tool that simply "digitalizes" knowledge and changes language into acoustic and visual forms. It is a teaching-learning continuum in which teachers and students interact so as to build meaning and academically develop.

### **1.1. "PBworks" and Facebook**

The online platform "PBworks" ([www.pbworks.com](http://www.pbworks.com)) was utilized to conduct this study. It's a semi-free website that anyone can access by simply signing up. Additionally, it provides

many possible properties that most of the teachers and the students are usually able to use in order to tailor miscellaneous tasks. For example, pictures, videos and audio materials can be easily uploaded for students to check. It is a convenient website to use because it allows different students to check the assigned tasks, move to YouTube and browse other websites through hyperlinks to post comments directly. Unfortunately, this platform doesn't provide an "editing" icon in posts; students and teachers will have to post their comments for several times if they want to edit something. Regarding spelling, the website automatically highlights mistakes by red lines, so many students will be triggered to check their writings autonomously.

Furthermore, the website provides the chance to simultaneously open more than one session and enroll many students in several connected activities. The design of the website is simple, colorful and appealing. Therefore, the students, who belong to different academic levels, can use it without complications. It doesn't provide a direct chat panel, so a group on Facebook was launched to give the study participants the chance to chat with each other, receive extra instructions about the tasks and ask for feedback. The sessions in "PBworks" were not time-bound; the targeted students were able to go back to previous workplaces and comment anytime. The consultation of other web materials was completely accepted to give the participants enough exposure to language.

The sessions, held in both platforms, were synchronous and asynchronous. Itmazi (2011) defines both working modes as follows; a. The first one is defined as an "e-mode" that simultaneously gathers both teachers and students in online practices to have direct discussions about a certain topic. b. The other e-mode doesn't require such coexistence. Both types play different, significant and intertwined roles in e-learning.

To elaborate, synchronous sessions are highly needed in three contexts that are; 1. When the targeted skills or topics are too complex, the teacher's guidance will be very necessary to simplify the tasks. 2. When the tasks require direct feedback, teachers may provide straightforward comments to help their students. 3. From a psychological point of view, the teacher's online existence gives several students a secure sensation because they usually know that their teacher is with them in order to help. However, asynchronous sessions are effective when the various teachers ask their students to practice and revise familiar tasks. Also, this type is used when the targeted students are asked to do tasks that require wide research. They usually need time to study the instructions, surf the net and look for materials to fulfill specific requirements.

In short, Facebook and "PBworks" were interchangeably used to investigate the efficacy of interactive task-based activities and virtual classes on the students' propensity to develop their writing skills. The former platform was used for chatting and instructions; however, the latter was utilized to post different tasks and comments.

## **1.2. Task-based activities**

The notion of "task-based" activities is a key dimension that directed the route of this study. Nunan (2004) argues that the definition of the word "task" is highly controversial and expansive; however, some researchers agree that task-based activities should minimally entail three basic elements that are; input, questions (or meaning gaps) and procedures. Therefore, the study participants encountered online activities that were tailored to boost investigation, collaboration and several accommodative strategies.

The writing skill was principally chosen in this study because it's one of the most difficult language areas that the many EFL students in Palestine suffer from. Adas and Bakir (2013) point out that many students don't write often in EFL classes, so there has always been a huge chasm between writing and other linguistic aspects. Some teachers tend to avoid or oversimplify the teaching of such skill because it is developmental and context-bound. This means that there are no quick-fix ways to teach writing efficiently. The nature of the target students, the adopted curriculum, the purpose of learning writing and time are all significant features that identify the "how" of teaching such skill.

In traditional language classes, writing is presented as a detached linear task that only requires linguistic knowledge, information about the topic suggested and stylistic skills. This linearity implies that many students passively receive the teacher's instructions, forcefully write even if they don't like the topic and finally submit their work for the sake of the grade. No reciprocal engagements take place at any level, thus the targeted students forget what they have produced earlier. Furthermore, alienation in English classes is considered a hindering problem; students usually feel demotivated and depressed while writing in a language that they don't usually use in their daily life. Therefore, technology is incontestably a sufficient tool that contextualizes teaching and enlightens the various students to correlate knowledge to their social, economic and cultural environments.

In the Palestinian context, the new textbooks (*English for Palestine*) introduce several writing tasks at the end of each unit. The students in the elementary level are usually asked to order words alphabetically, form short sentences and write simple questions. On the other hand, the students in the secondary level are usually exposed to writing tasks that require data syntheses, collaboration, research and higher linguistic structures. In short, the notion of "task-

based activities” is not new in the Palestinian educational context; however, the implementation of such notion should be rejuvenated.

To their best knowledge, Farrah and Tushyeh (2010) point out that, in Palestine, there aren't enough empirical studies that tackle the issue of CALL and teaching; therefore, this thesis is an empirical endeavor to “add up” new perceptions about such area in the Palestinian context. Additionally, Shahin (2012) argues that the use of technology in the Palestinian educational context requires several developments, so great surges of research about this area are significantly needed to tailor an approach that conforms to the particularities of the public schools.

Comparatively, the researcher targeted the writing skill for two 11<sup>th</sup> grade sections—“B” and “C” in the scientific stream. The former was randomly chosen as the control group and the latter was identified as the experimental one. A virtual class was launched to scrutinize the strategies that the students in the experimental group adopted to practice writing. Throughout the study, writing was introduced as a multilayered process in which the students underwent sequential phases and followed cognitive, psychological and social processes to develop writing as a means of communication.

Moreover, the posted tasks were consecutively designed to be controlled, guided and then free. In other words, the targeted students were introduced to a type of tasks that required a predetermined framework of language use, then they were asked to follow a certain pattern to write. After that, they wrote freely to express their own thoughts. This division and chaining of tasks helped the participants to move smoothly from simple and undemanding educational contexts to more complex ones. Additionally, the adopted tasks made the teaching-learning

process more interactive. The students negotiated the aim of learning with their teacher, indulged themselves in particular interactions, worked with others and came up with new perspectives that connected past experiences to the present and the future.

In order to gauge the students' developments in writing, testing and a text content analyzer tool were adopted interchangeably. The former elicitation technique was designed in a manner that targeted controlled, guided and free writing activities. On the other hand, the latter gave detailed statistics that revealed the complexity and the intelligibility of the students' written posts. The researcher used both techniques as an endeavor to get comprehensive data about the specifications of the students' contributions.

It is highly substantial to compare the effectiveness of "activity chaining" in the targeted traditional classes and the launched e-modes (PBworks) to boost the major aim of this study. In general, traditional chains of tasks are inflexible and limited; students usually receive concrete and predetermined sets of knowledge to follow without developing the ability to use them in real life situations. Also, overcrowded classes, acoustic challenges and time limitations make it hard for teachers to employ the process of teaching writing effectively. No apparent levels of interaction generally occur except for the formal academic ones.

Conversely, the integration of technology is paramount because it introduces contexts that simulate real life situations, grant numerous learning opportunities and diminish any time/place limitations. In other words, most of the students, indulged in e-learning, are often subjected to simultaneous visual, auditory and cognitive stimuli that trigger them to recall knowledge from real life, conduct modifications to boost learning and reflect language use in reality. In brief,

the researcher investigated three major pedagogical dimensions in the study to explore the correlation between e-learning and writing. They are summarized as follows:

1. Teaching writing interactively suggests a reciprocal relationship among teachers, students and the educational environment.
2. Technology embodies a communicative medium that usually motivates students to participate in learning.
3. Writing is a complex process that requires preparations, extensive engagements and willingness to reflect what's been learned in reality.

Aside to the methodological correlation between technology and teaching writing, the researcher investigated the anxiety levels and the different attitudinal manifestations that the participants often hold while using virtual classes to practice writing. A questionnaire was administered before and after the experiment in order to track any changes that might take place. To illustrate, such elicitation technique was designed to target the participants' attitudes towards two major dimensions summarized as follows:

1. The efficacy of using the net on the relationships among teachers, students and the learning environment.
2. The efficacy of using technology on developing the writing skill.

Systematically, the researcher wrote several reports and asked the students to do the same in order to track any attitudinal manifestations that might take place all through the study. Also, these reports contained necessary information about the number of the students involved in each session, the quantity of the posts and the levels of anxiety reported by the participants.

To summarize, this study was designed to be both qualitative and quantitative; the targeted students were indulged in e-modes that replaced traditional teaching with technology. Pre/posttests and a text content analyzer tool were administered in order to track any changes that might take place in the students' writing competency. In addition, the students' attitudes were put under scrutiny by administering a questionnaire and self-reports that targeted two dimensions; teaching English writing and the relationships between teachers and students.

### **1.3. Statement of the problem**

Multiple students, in Bethlehem Secondary School for Girls, have a fragile English writing competence. They usually own a convenient listening, speaking, reading and grammar knowledge. When it comes to writing, they hold their pens grudgingly and write isolated sentences that don't convey clear meanings. In the targeted school, the adopted traditional teaching methods usually cause a conspicuous chasm between the students' ability to write in English and achievement. The researcher believed that it's significant to try new methods and change the conventional learning environment in order to bridge the gap between writing and other language skills. Furthermore, the researcher thought that it's significant to give the study participants "a personal writing space" in which they can take their time, look for other materials and put their own voice in their productions aloof from the limitations of the conventional classes. Such space was adopted all through the study to change the students' negative attitudinal manifestations that they usually hold towards writing.

### **1.4. Objectives of the study**

The objectives of the study can be summarized as follows:

1. To examine whether there are statistically significant differences in the students' attitudes towards e-learning between the experimental and the control groups.

2. To examine whether there are statistically significant differences in the students' writing achievement between the experimental and the control groups.
3. To examine whether there are statistically significant differences in the students' attitudes towards e-learning due to the home online access and anxiety.

### **1.5. Research questions**

The study will address the following research questions:

1. Are there statistically significant differences in the students' attitudes towards e-learning between the experimental and the control groups?
2. Are there statistically significant differences in the students' writing achievement between the experimental and the control groups?
3. Are there statistically significant differences in the students' attitudes towards e-learning due to the home online access and anxiety?

### **1.6. Significance of the study**

The notions of “technological pedagogies” have become common trends in the field of teaching languages, including English. Therefore, this study was established to bring such modern notions in the Palestinian educational contexts in order to improve the teaching of English. The following points summarize the significance of this study with regard to the writing skill, technology and task-based activities:

1. This study attempts to present writing through technology as a way of “modern communication” rather than a requirement for academic success.
2. At the school level, using virtual classes in the Palestinian educational context is still immature, so this study helps administrators, teachers and students to get initial perceptions about e-learning.

3. This study diminishes the prototypical images of the conventional classes in which many students, entrenched in rows, receive information passively. The researcher introduced technology as a teaching “medium” rather than a passive tool by which teachers post grades and announcements only.

4. To the researchers’ best knowledge, there isn’t much research about the use of technology to teach English writing in the Palestinian educational context. Therefore, this study will hopefully give other researchers the chance to open the door for other future investigations.

5. This study necessitates the empathetic and the social dimensions of learning writing. Both are usually marginalized in many conventional classes. All through the study, the targeted students were given enough time, allowed to consult other materials, talked to other people and wrote about topics that they’re interested in.

6. This study will hopefully enhance the recent technological reformulations that the Palestinian Ministry of Education is conducting in the public sector.

### **1.7. Limitations of the study**

There are six major factors that will possibly affect the study:

1. The participants may encounter technical problems like online disconnections and broken computers. In the targeted school, the net connection is usually weak and distorted. Therefore, in some sessions the students may be interrupted several times due to this problem.

2. The severe lack of many facilities inside the targeted classrooms can hinder this study. Despite the fact that the school has two computer labs, one third of the devices are disconnected from the internet. Therefore, other laptops may be needed to activate the wireless service of the net. The labs are not available all the time; chemistry, biology and technology teachers use them a lot.

3. The accumulated school assignments might distract the participants and lessen their interest. Generally, the targeted students care about grades much, so they might not sustain a steady level of perseverance all through the experiment.
4. Some of the participants might not be able to use the e-learning modules because they don't have convenient computer skills. This may raise their level of anxiety and passiveness during the experiment.
5. Some of the participants might not be able to access the net from their homes, so they will feel anxious, reluctant and recessive during the experiment.
6. Time limitations can hinder this study. All of the sessions, particularly the synchronous ones, are limited to thirty minutes only. Also, it is sometimes hard to gather the targeted students online for more than half an hour.

### **1.8. Definition of terms**

**1. Blended Learning:** A systematic combination of technological aids and vis-à-vis classroom practices (Poon, 2013).

**2. Learning Module:** “a part of a computer or computer program that does a particular job” (Module, n.d).

**3. E-learning:** “is the use of information and computer technologies to create learning experiences.” (Horton, 2006, p.1).

**4. E-school:** It's a computerized school system that provides different online curricula, expands the students' learning opportunities and launches many communicative continuums outside the school building.

**5. CALL (Computer-assisted language learning):** It is an approach that introduces language areas through computer applications in order to scaffold and facilitate learning. It usually enhances interaction among teachers, students and the learning environment (Levy, 1997).

**6. Computer-supported Collaborative Learning (CL):** “Computer-supported collaborative learning (CSCL) is an emerging branch of the learning sciences. It is concerned with studying how people can learn together with the help of computers.” (Stahl, Koschmann & Suthers, 2006, p.409).

**7. Virtual classroom (correspondence courses):** “a delivery mode that uses some form of telecommunication. This means that a course must be delivered via television, videocassette disc, film, radio, computer networks or other devices that use some audio–video format.” (Harper, Chen &Yen, 2004, p. 586).

**8. Hypertexts:** Texts that are uploaded on computers and contain hyperlinks. By clicking on such links, students move to other web pages that introduce information about certain words, sentences and expressions included in the original text (Can, 2009).

**9. Synchronous virtual classrooms:** E-modes in which teachers and students gather simultaneously to lead discussions, conduct seminars and connect to each other by chat panels, video-conferencing, or audio tools (Martin & Parker, 2014).

**10. Inventive Spelling:** An unconventional way of spelling words that is made up by the learner as a sign of language acquisition. At an early stage, learners mix between the phonemic segmentation and the orthography of words, so they “invent” their way to write (Awramiuk, 2014).

**11. Data Triangulation:** Adopting more than one source of data collection to have more rounded images of a particular study. The affix “tri” means three, but in research it simply means more than “one” (Burns, 2010).

**12. Constructivism:** “Constructivism is an approach to teaching and learning based on the premise that cognition (learning) is the result of "mental construction." In other words, students learn by fitting new information together with what they already know. Constructivists believe that learning is affected by the context in which an idea is taught as well as by students' beliefs and attitudes. Constructivism is a learning theory found in psychology which explains how people might acquire knowledge and learn.” (Bada, 2015, p.66).

**13. Task-based activity:** “a piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form.” (Nunan, 1989, p.10).

### **1.9. Organization of the study**

This study is divided into five chapters that are; introduction, literature review, methodology, findings and conclusions. In the first chapter, general backgrounds about e-pedagogies, the targeted online platforms, the notions of task-based activities and the teaching of writing in EFL contexts are provided to put the study in harmony with the related context. Furthermore, this chapter entails the statement of the problem, the study objectives, questions, significance, limitations and organization.

The second chapter includes the major theoretical insights that connect technology, task-based activities, teaching writing, EFL contexts and anxiety in the existing body of literature. Each aforementioned element constitutes a subsection in this part. Also, the third chapter

details the study methodologies, population, instrumentation and design. The fourth chapter details the demonstrations of the questionnaire, the results of the pre/posttests, the analysis of the students' writings and the self-reports. It provides detailed numbers, percentages and mean scores to compare both the control and the experimental groups. Also, it provides comparisons and correlations among the obtained data. The last chapter restates the major findings of the study and lists major recommendations.

## **Chapter Two**

### **Literature Review**

#### **2.0. Introduction**

The advent of technology as a significantly didactic tool has always been the surge that a wide range of research investigates. The intertwined processes of teaching and learning languages are completely dynamic, context-bound and evolutionary, so there has been an accelerative flow of knowledge and technological inducements in the present era. As Mehanna (2004) and Naidu (2006) show, the utilization of technology, in its full extend, is labelled as the utmost modern phenomena that most researchers, teachers, students and even administrators adopt to improve the efficacy of learning languages through new methods.

Many recent research trends deliver obscure and paradoxical perceptions about the practical uses of the “technological” modules that are usually tailored to improve the students’ level of writing, language proficiency and communication (Wichadee, 2013). It is not easy to provide clear-cut answers about such teaching areas due to the fact that writing is a developmental skill that takes long time periods to manifest itself; also, distance learning is still immature and hazy. Researchers need to tailor general principled approaches in a manner that suits many contextual, academic, social and technological diversities that exist in education generally (Harper, Chen & Yen, 2004).

E-learning, virtual classes, task-based activities, teaching English writing and anxiety are all the major key elements that constitute the pillars of this paper. There has always been an exigent need to tailor a comprehensive approach that harmoniously combines the aforementioned elements in order to address the aspirations of the new generations. On the other hand, Bader (2015) stresses the fact that the use of technology in teaching must not be

haphazard and overwhelming. Therefore, it is significant to explore the theoretical and the empirical frameworks that set the basis of any fruitful technologized teaching approaches.

This chapter is divided into four subsections summarized as follows; 1. The first one provides a highly detailed overview about the different definitions of the term “e-learning”, its common characteristics, pedagogical applications, challenges and evolvments. 2. Subsection two presents “virtual classes” as a branch of blended learning and computer-supported collaborative learning. Also, it browses the theoretical pillar of e-pedagogies. 3. The third one tackles the issues of teaching English writing in EFL contexts, the challenges of learning such skills and the effects of two factors (anxiety and the home access to the net) on the writing competence. Also, it tackles the notion of “task-based” activities, its definitions, implications and correlations to the different technological modules. 4. The fourth and the final one presents pertinent studies and establishes congruencies among eleven research papers that tackle the issue of e-learning and teaching writing.

## **2.1. E-learning**

### **2.1.1. Definition of e-learning**

By exploring the historical evolvments of the pedagogical implications that e-learning underpins, it is apparent that many “technological inducements” started as supplementary tools to boost traditional teaching such as television. However, in the 1960’s and 1970’s, e-learning took a drastic destination towards more major didactic functions (Moore, 2015). Students and teachers were able to join virtual classes and deal with the teaching-learning processes interactively although their ability to use technology was relatively fragile.

The term “e-learning” has always been expansive, field-bound and hard to define. In other words, e-learning has been developed differently in the field of education, commerce and social sciences. It has widely different forms, implications and uses, so it is complex to tailor fixed theoretical and empirical frameworks that show how language teaching and technology harmonize generally (Horton, 2001; Moore, Dickson-Deane & Galyen, 2011; Nicholson, 2007). Pedagogically speaking, there is a vast consent among many researchers that e-learning simply occurs when students are engaged in computer-based instructional practices inside and outside their classrooms; such learning may occur in the school computer labs, at home or anywhere (Arkorful & Abaidoo, 2014; Nagarajan & Jiji, 2010; Naidu, 2006). The aforementioned definition is oversimplified and concise; however, it introduces the five major constituents of e-learning that are; students, teachers, computers, a learning purpose and a sustained learning environment.

Nichols and Anderson (2005) take the definition of e-learning into a more systematic and interactive dimension. Based on the characterization of the New Zealand Ministry of Education, e-learning is depicted as sets of technologized practices that students usually undergo in order to complete certain tasks, learn and discuss subjects individually or through collaborative work. The term “technologized” can be perceived as offline computer-based aids like CD-ROMs or synchronous and asynchronous online existence. In other words, e-learning doesn’t only function as a mechanical “tool” for teaching and learning; it’s a dynamic educational continuum in which students and teachers interact to build knowledge collaboratively. Sharma and Barrett (as cited in Bader, 2015) refute the efficacy of the “mechanical” and the “pedagogical” dual roles of technology; they point out that the

correlation between computer-based practices and education should be supplementary and dynamic. The former role should be utilized in order to enhance the latter but not vice versa.

Referring to the above-mentioned views about e-pedagogies, the following three points depict e-learning and summarize the congruencies among the majority of the researchers as follows:

1. E-learning is a continuum of teaching that requires a harmonious mixture of technological, interactive and academic skills. Such skills boost teaching and learning, especially in synchronous virtual classrooms.

2. E-learning, in its full extent, can be perceived as a complementary teaching tool that gives many students the opportunity to retrieve what has been mentioned in class at any time. Also, teachers may use many modules just to post announcements, assignments and remedial materials.

3. E-learning can be perceived as an interactive medium in which teachers, students, administrators and even parents use language to communicate with each other. Additionally, “Interaction” in this medium can take four major forms that are:

**a. Peer interaction:** Students are triggered to chat with each other, exchange information and work collaboratively to achieve better learning outcomes.

**b. Student-teacher interaction:** Students, particularly the introverts, find it more relaxing to talk to the teacher online without having any face-to-face meetings. Also, teachers can be always available to talk to the targeted students and read their messages even if both of them are not simultaneously online.

**c. Teacher-student interaction:** In e-learning, teachers tend to interact with each student individually to provide differentiated instruction. Also, they are inclined to work collaboratively with their students to provide support, redirect deviations and scaffold learning.

**d. Student-content interaction:** Students are habitually triggered to change their attitudes and the way they complete tasks when teaching and learning are adopted online. They are prone to consult other web materials, complete tasks at their own learning pace, go back to task instructions at any time and receive different kinds of audio-visual materials that they can watch and listen to for several times (Chuo, 2007; Hamlaoui & Benabdallah, 2015; Wichadee, 2013).

### **2.1.2. Characterization of e-learning**

There is a noticeable consensus among large numbers of researchers about the main characteristics that identify what makes e-learning, in its full extent, a fruitful didactic tool and a communicative “continuum”. The following characteristics are considered the general points that depict e-learning, whether it is perceived as a tool or means of teaching and learning in any educational field:

**1. Interaction:** E-learning is a fruitful medium in which students and teachers are triggered to interact with each other and with many contexts in order to build meaning (Osman, Jamaludin & Fathil, 2016). Such property usually helps the involved participants to develop academically, socially and empathetically.

**2. Cost-effectiveness:** Distance learning, or e-learning as one type of it, can save time and money for individuals, systems and institutions (Harper, Chen & Yen, 2004). In other words, individuals will not be compelled to travel to remote places in order to pursue their education.

Academic institutions will assign one teacher to design certain courses for large numbers of students.

**3. Duality:** E-learning plays two roles in education that are: a. It functions as a recap tool that students can use to cope with what has taken place in “real” classes by revising several notes, videos and PowerPoint presentations. b. It functions as a mode of learning in which teachers and students synchronously and asynchronously meet to exchange ideas and build new knowledge.

**4. Individuality:** E-learning can address the wide multiplicity of needs and aspirations that the students all around the world usually manifest (Jwailes, 2015). In other words, this mode of learning opens the door for individuals to surf the net and build knowledge in a manner that they wish for. In traditional classes, both students and teachers are compelled to interact in one general fashion due to time, place and academic limitations.

**5. Authenticity:** E-learning provides many educational situations that echo real life. Students may watch videos, send emails to professionals and read authentic materials about the topic that they are addressing (Chuo, 2007). However, both teachers and students are besieged by the predetermined textbooks that they have in the different traditional classrooms.

**6. Popularity:** E-learning will be an opportune tool to address all students without discrimination because the new generations are closely attached to technology (Jwailes, 2015).

Many researchers and authors clearly declare that the main rationale of using e-learning in education is that it promotes creative thinking, gives students the chance to build on each other’s work, addresses the individuals’ discrepancies and diminishes the limitations that conventional teaching necessitates (Adas & Bakir, 2013; Bates, 2005; Chun, 2016; Davies & Graff, 2005; Wichadee, 2013).

However, other researchers point out that using e-learning in education can be distracting, complex and stressful for certain students. Some issues cannot be effectively addressed online as in vis-à-vis classroom practices (Billings, 2002). Despite the fact that the net access provides a great plethora of information, perceptions and knowledge (Campbell, 2004), web-based materials cannot be always reliable and valid. Also, e-learning diminishes the empathetic connection that vis-à-vis interaction provides; teachers are not usually able to understand the students' needs well in e-modes (Cantoni, Cellario & Porta, 2004). Therefore, teachers should conduct a needs analysis, investigate the targeted educational contexts and train their students to use the net effectively for many academic purposes before introducing any e-mode in class.

### **2.1.3. E-learning as a pedagogical medium**

The wide surges of research have proved that the image of e-pedagogy in the recent body of literature is still uncertain, fragile and embryonic, so there are not steady empirical frameworks that explain the efficacy of e-learning in education, particularly in language teaching (Mehanna, 2004). As a result, multiple investigations, about e-pedagogies, are significantly required to bridge the gap between the needs of the new generations and the nature of the educational system.

Jethro, Grace and Thomas (2012) list nine pedagogical benefits that enhance the correlation between e-learning and teaching in EFL contexts. They are concisely reduced in five points as follows:

1. E-learning revives the process of education aloof from the limitations of the dominating conventional classrooms. Students usually have the chance to extend their level of knowledge by consulting hundreds of materials uploaded online.

2. E-learning boosts creative thinking and helps students to improve their achievement by motivating them.
3. This mode provides differentiated learning by presenting knowledge in diverse forms.
4. It enhances wider participation, especially in overcrowded classes.
5. It provides personalized learning; students can choose the course they need easily.

Interestingly, constructivism seems to appear as the dominant theory that sets the basis for e-pedagogies in the recent era. Dewey (as cited in Can, 2009) points out that education is not about “transmission of knowledge” or introducing fixed knowledge on a golden plate; it is closely reflected in the social processes that dominate the continuity of life. Similarly, Piaget (as cited in Can, 2009) argues that knowledge is not a holistic entity that can be attained or missed at once; it can be developmentally acquired through “interaction” with the external environment.

The notion of “interaction”, that the title of the study reflects, stems from the perceptions of the aforementioned theory. In this experiment, writing was presented as a dynamic process in which the involved students recalled their past experiences, explored the targeted new learning situations and worked collaboratively with other partners to build knowledge. Can (2009) lists three major computer-based methods that teachers can use so as to employ the constructivist approach in teaching writing as follows:

**1. Micro-worlds and Hypertexts:** The former means providing learning environments that echo real-life situations with knowledge gaps while the latter is defined as computer-based texts that contain hyperlinks. These links systematically redirect all students to other sources of information.

**2. Bubble Dialogues:** Teachers, by adopting such method, can provide authentic situations with empty bubble dialogues. Students are usually asked to work, individually or collaboratively, to fill these bubbles with suitable parts of speech.

**3. Videoconferencing:** Students, by adopting this method, are often asked to work individually or collaboratively to exchange knowledge with others by using oral, visual and written communicative practices.

In these methods, all of the students are regularly engaged in activities that underpin knowledge gaps, necessity for meaning negotiation and different levels of communication. Regarding “PBworks”, the study participants were asked to watch visual materials that talked about authentic issues to respond to them. Furthermore, they were asked to consult other resources on the web in order to increase their linguistic reservoir, develop their writing style and simulate other texts.

There is a notable consensus among researchers that technology, with all its forms, is not an alternative for vis-à-vis teaching; however, it is an enriching tool that scaffolds what takes place in reality. Correspondingly, Farrah and Tushyeh (2010) point that technology, particularly virtual classes and platforms, can provide a triggering environment in which learners communicate and connect real classroom practices to the net.

#### **2.1.4. Pedagogical challenges related to e-learning**

As Cantoni, Cellario and Porta (2004) declare, e-learning is a highly fruitful tool to use in education; however, it may cost a lot of money and resources in order to be developed efficaciously. Strikingly, the discussion about the cost of e-learning in the recent existing body of literature is hazy and unsatisfactory. Most research papers tackle multiple pedagogical,

social and cognitive efficacies of technology without taking into consideration the resources that are needed to develop such learning mode (Bartley & Golek, 2004; Cantoni, Cellario & Porta, 2004). Regarding the Palestinian educational context, not all schools have computer labs, electricity and well-equipped classrooms, so it would be severely hard for students to get even chances to train and use e-learning actively. The challenges, based on several studies, can be summarized as follows:

1. Some students prefer to see their teacher face-to-face while conducting certain tasks in class, so e-learning may become a little bit intimidating and stressful (Cantoni, Cellario & Porta, 2004). In other words, virtual classes usually provide a purely mechanical environment that is aloof from any direct social interactions and sensations.
2. Before launching any e-modes, teachers, policymakers and administrators should analyze the contexts in which learning occurs, the policies that govern the targeted society and the educational objectives that exist in the school system (Bartley & Golek, 2004). Therefore, it will be so attiring to assign many people, resources and money to establish technological modes.
3. E-learning may lead to piracy, cheating and plagiarism (Arkorful & Abaidoo, 2014). Due to the fact that the information uploaded online is vast and abundant, teachers may consume long periods of time to check the “authenticity and the credibility” of the students’ productions.
4. It is possible that e-learning may weaken the role of institutions, instructors and other partners in the educational process (Arkorful & Abaidoo, 2014). Usually, body gestures, extracurricular activities and peer work have a great influence on motivation, participation and psychological relief inside schools.

5. E-learning is not a mode of learning that is convenient to some issues and subject matters (Arkorful & Abaidoo, 2014). For example, face-to-face interactions are necessary for students in order to practice oral language skills efficaciously.

6. Arkorful and Abaidoo (2014) explain that e-learning “may also lead to congestion or heavy use of some websites. This may bring about unanticipated costs both in time and money disadvantages.” (p.403).

7. Technical problems such as, electrical blackouts and net disconnections may hinder some students and prevent them from coping with their colleagues. As a result, they may feel that they are completely anxious and trapped. This may diminish the level of their willingness to participate and learn by e-modes.

In short, the positive roles that e-learning plays in the rejuvenation processes of education are incontrovertible (Jethro, Grace & Thomas, 2012). Designing e-courses doesn't simply mean “uploading materials online”. It's a sophisticated process in which many social, academic, technological and political factors intertwine to fulfill the aspirations of the new generations. Consequently, many studies are required in such field so as to create a principled approach that explains how language teaching and technology could harmonize.

#### **2.1.5. E-learning in Palestine**

This subsection provides a concise overview about the developments of e-learning in the Palestinian educational context. Al-Sayyed and Abdalhaq (2016) declare that ICT (information and communication technology) has lately caught attention in the Palestinian context because it contributes to the development of the economic situation, so technology has appeared in all walks of life—including education.

In addition, Shraim and Khlaif (2010) point out that the Palestinians noticeably started to use the net in the 1990s, so new trends in teaching and learning appeared in this decade. Both authors raise several issues that have always affected many reformulations in the Palestinian educational system. The following points synopsise these issues as follows:

1. Many Palestinian teachers regularly use recorders, videos, PowerPoint presentations and the net in their classes; however, these technological practices support “passive teaching” rather than “collaborative learning”.
2. The movement constrains, that the Israelis always impose, make it hard for teachers and students to reach their schools safely. Therefore, the need for e-learning has become urgent in order to overcome the limitations of time, place and movement.
3. Because of the hard economic situation, the Palestinian Ministry of Education isn't usually capable of assigning enough teachers to work in the public sector. Some students stay without teachers for months, so they tend to drop out from school. E-learning is a convenient approach that solves this problem because teachers will be able to address many students aloof from time and place limitations.
4. Some teachers and students are not “ready” to use e-learning. For example, they may not have the necessary computer skills to participate in e-pedagogies, thus they may need training in order to integrate technology fruitfully. Also, some schools are not equipped with convenient facilities that enhance e-learning.

As Affouneh and Raba (2017) point out, An-Najah National University has prominently participated in the development of e-pedagogies in Palestine. For example, the university published hundreds of lectures online in order to enhance and expand the students' learning

abilities. Additionally, an e-learning center was established in 2012 as an endeavor to lift higher education to notable levels.

From a different perspective, Sabbah (2010) indicates that Al-Quds Open University started to apply e-learning in the academic year 2008/2009. The author declares that the university initially made a good progress in e-learning. However, many obstacles stood in the way such as, readiness and infrastructure.

With regard to the secondary level of education, Shraim and Khlaif (2010) point out that both teachers and students are not ready to adopt e-learning in the Palestinian schools. Also, the authors point out that many decision-makers in the Palestinian Ministry of Education are not familiar with the challenging issues of integrating technology into education, so awareness should be spread before introducing e-learning in schools.

## **2.2. Virtual classes**

### **2.2.1. Virtual classes and e-learning**

The use of the different online courses has been increasing during the era of the copious technological innovations. As Sayed and Baker (2015) point out, education has always been a substantial issue in many societies. Therefore, virtual classrooms have been established as a correspondence to the requirements of the global openness in which technology has played a significant role. For example, Allen and Seaman (as cited in Martin & Parker, 2014) mention that, in the United States, over 6.2 million students have been enrolled in at least one online course during fall 2012. Virtual classrooms have gained popularity recently for their immense advantages; they help students who live in remote areas to have equal learning opportunities similar to their colleagues in cities.

Significantly, “e-learning” is the broad term that includes virtual classes as one of its constituents. Gedera (2014) defines e-learning as:

the use of educational technologies to design, deliver, and manage both formal and informal learning and knowledge sharing at any time, any pace and any place. In educational contexts, some e-learning courses are offered fully online without any face-to-face interactions while in some contexts, courses are offered with a blended mode that is the use of both face-to-face and online interactions that are facilitated by educational technologies. (p. 93)

In education, any adopted technological tools, continuums, strategies and methods fall into the category of e-learning. Despite the fact that virtual classes have gained attention recently, there are no clear pieces of evidence that prove whether such mode of learning is helpful or not in the existing body of literature (Gedera, 2014). Finkelstein (as cited in Martin & Parker, 2014) lists six major pedagogical functions that virtual classes underpin as follows:

**1. Instruction:** It is possible for instructors and students to gather online in order to launch lectures, seminars and discussions about certain topics. Teachers can take the lead of instruction; also, students can participate as co-teachers.

**2. Collaboration:** Some studies have shown that using virtual classes and e-learning, in general, creates an appealing electronic environment in which teachers and students are triggered to collaborate to develop knowledge.

**3. Support:** Virtual classes provide three different kinds of support that are: Peer, web and teacher-student support. Students may check each other’s work and give feedback; furthermore, they may consult other web materials to check the validity of their work.

Teachers are available online to guide their students and intervene when drastic mistakes are committed.

**4. Socialization:** Virtual classes are helpful to open the chance for interaction among teachers and students. In many conventional classes, socialization usually occurs, but it seems too formal, limited and directed.

**5. Informal exchange:** Virtual classes function as mediums in which students and teachers work collaboratively to exchange information and build new knowledge sets. The students' contributions are always open to everyone to check, give feedback and learn from.

**6. Extended outreach:** Virtual classes give students the chance to go beyond the limitations of the different conventional classrooms. In other words, students may surf the net and gain information that exceeds what has been presented in traditional classes. E-modes of learning can be accessed at any time and place, so many students will not be compelled to travel to remote places and meet at certain times to pursue their education.

Smith and Kurthen (as cited in Bader, 2015) propose a taxonomy of terms that is closely related to e-learning. They are summarized as follows

**a. Web-enhanced instruction:** using the net minimally to post a syllabus, schedules and course announcements.

**b. Blended instruction:** using online activities significantly alongside with face-to-face practices, but not more than 45%.

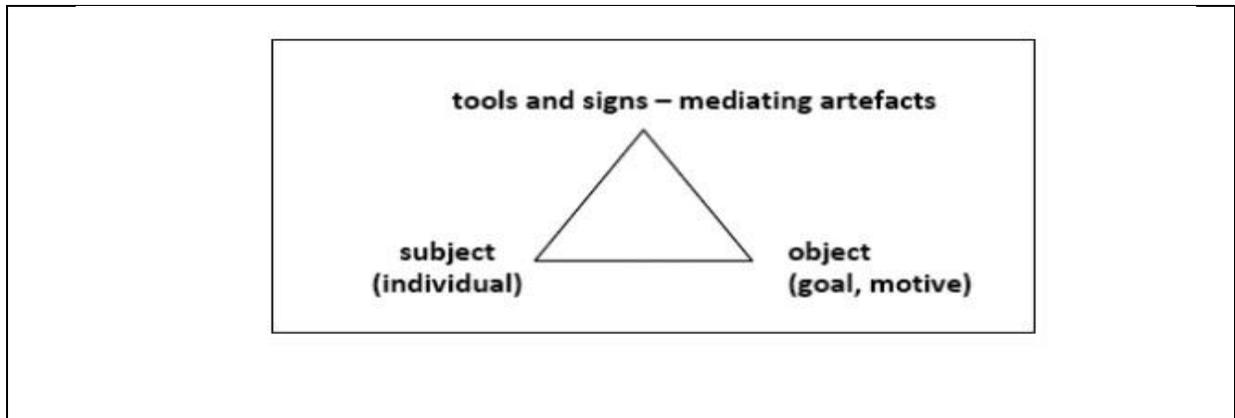
**c. Hybrid:** Smith and Kurthen (as cited in Bader, 2015) point out that hybrid modes are any online activities that replace 45-80 of the "real" class practices.

**d. Full online:** it occurs when 80% and more of the adopted activities are administered online (Bader, 2015).

Virtual classes suitably fall into the “full online” category. The issues discussed in “PBworks” were not tackled in any “real” classes during the experiment. Only glimpses about punctuation marks and verb tenses were discussed to draw the students’ attention to certain issues. Therefore, the use of the term “virtual classes” that the title of this thesis reflects is convenient and logical.

### **2.2.2. Theoretical pillars of virtual classes**

Activity theory, socio-cultural and socio-historical theories set the rational base of using virtual classes, as a computer-based tool and a continuum, in teaching (Gedera, 2014). Vygotsky (as cited in Montoro & Hampel, 2011) points out that human activities, including learning, are “mediated by cultural artefacts, which are culturally, historically and socially produced and reproduced, by means of complex and multidimensional relationships, as Figure 1 illustrates.” (p.122). Therefore, learning languages should be perceived as a human activity that entails several levels of interactions and relationships such as, the social and the cultural exchanges. The following figure is literally taken from Montoro & Hampel (2011) and originally adopted from Vygotsky to show the basic elements of any human activity:



*Figure 1.* The basic elements of any human activity, including learning (Montoro & Hampel, 2011, p.122).

In order to reflect this model in teaching through virtual classes, the subjects of the “learning activity” are unquestionably the teachers and the students who belong to multiple social, economic and educational backgrounds. Also, the tools of learning are the class itself and any audiovisual materials used. Finally, the objective is learning how to write in English efficaciously in miscellaneous educational contexts.

Ostensibly, the aforementioned model introduces learning as a fixed and linear process that contains secluded subjects, objects and mediators. In other words, the specifications of the model don’t include the different social, economic and political contexts in which learning as “a human activity” manifests itself, thus Engeström (as cited in Montoro & Hampel, 2011) introduces learning in a more complex and expanded fashion as follows:

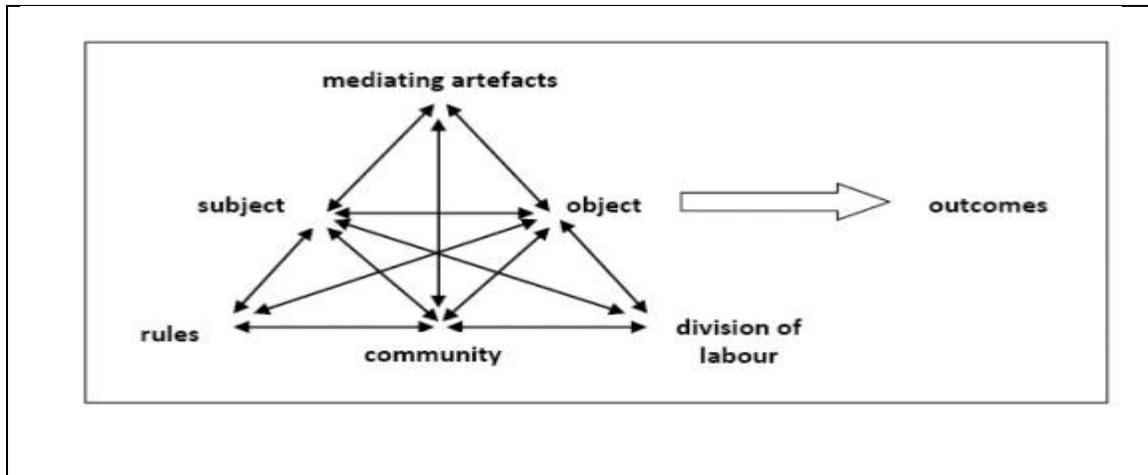


Figure 2. The complex relations in a human activity, including learning (Montoro and Hampel, 2011, p.123)

The triangle in figure one is plain and simple; it only contains tools, individuals and objectives. All of these elements are separated from each other and placed in different directions outside the triangle. However, the triangle in figure two is significantly more complex and multilayered because it contains the societal factor. To apply such model in e-learning, virtual classes should be adapted in a manner that suits the general social, cultural and academic features of the targeted society. Unlike the first triangle, it is apparent that the elements, in the second figure, are connected with intertwined arrows to indicate that learning occurs through complex relations among many academic, social and individual factors.

Constructivism plays an important role in identifying the profound essence of using e-learning in teaching languages. Huang (2002) derives four didactic principles that are stemmed from constructivism and closely reflected in e-learning. They are summarized as follows:

**1. The promotion of communicative and collaborative learning:** Dewey (as cited in Huang, 2002) believes that learners cannot develop knowledge alone without any kinds of interaction with others. Therefore, the different modes of virtual classes function as fruitful environments

that encourage learners to exchange ideas, discuss issues and work collaboratively to learn. For example, teachers may post an issue and ask all of the students to discuss it online (Huang, 2002).

**2. Sheltered learning:** Constructivists believe that teachers should create a secure learning environment in which students feel that it is acceptable to make mistakes and fail (Huang, 2002). Consequently, the teachers' roles will inevitably shift from authority to facilitation. Regarding e-learning, the majority of the students may feel free to participate and post their ideas without any barriers that usually hinder them in "real" classes.

**3. Authentic input:** Constructivists believe that learning should occur in situations that echo real life (Huang, 2002). Encountering such situations helps to develop both the students' knowledge reservoir and life skills. Virtual classrooms are highly enriching sources of authenticity. Teachers may introduce audiovisual materials that tackle life issues and ask students to write about them.

**4. Learner's autonomy:** Constructivists believe that learning is developed through social interactions rather than purely cognitive processes. Additionally, learners are the ones who are responsible for their progression; teachers are only guides and facilitators.

In conventional classes, knowledge is presented on a golden plate and students are only passive receivers. E-learning triggers students to take the responsibility of their education and actively participate. As Huang (2002) puts it, "Constructivism focuses on learner's control of learning processes and it narrows the gap between the school world and real-life society." (p. 34). In short, collaboration, authenticity, interactivity and learner-centeredness are considered the four major themes that constructivism entails and e-learning reflects in education and language learning.

## 2.3. Teaching English writing

### 2.3.1. Teaching writing as a process

Product-oriented and process-oriented approaches are prevalent in the field of teaching writing. The former emphasizes the individuals' final and error-free texts; however, the latter highlights the process that students usually undergo in order to express themselves intelligibly and create meaning (Sarhady, 2015).

Alodwan and Ibnian (2014) point out that teaching writing as a product is sequenced, linear and passive. In this approach, teachers only focus on the final product, check any mistakes and give grades. On the other hand, the process-oriented approach emphasizes interaction and authenticity. Teachers and students work collaboratively in order to develop skills and create meaning gradually. Likewise, Sun and Feng (2009) explain the difference between the aforementioned approaches. Such difference can be listed as follows:

- 1. The product-oriented approach:** students passively receive the teacher's writing models, copy them and focus on the final outcomes.
- 2. The process-oriented approach:** students usually go through steps in order to build meaning. In this approach, the focus is on "how writing is created" rather than the final text.

Palpanadan, Bin Salam and Ismail (2014) list the steps of writing (as a process). They are summarized in six points as follows:

- 1. Brainstorming:** students are supposed to synthesize ideas and linguistic structures that are suitable for the targeted writing task.

**2. Planning:** students are supposed to categorize their ideas in order to identify the major and the minor key points.

**3. First draft and peer feedback:** students are supposed to write their first drafts and exchange ideas with peers.

**4. Editing:** students are supposed to look for the peers' notes and revise some ideas.

**5. Final draft:** students are supposed to write their final drafts and submit them for evaluation.

**6. Evaluation:** students can evaluate each other's work. Also, teachers can step in and grade their students' work.

### **2.3.2. Challenges of teaching English writing in EFL contexts**

Writing is considered one of the most challenging and significant language areas that students, especially in EFL contexts, suffer from. Kassem (2017) points out that EFL students globally need to master this skill in order to academically survive. To elaborate, they need English writing in order to pass their school courses, prepare assignments, gain knowledge and communicate effectively.

Mohammad and Hazarika (2016) point out that EFL students are not usually motivated to write in English for three rudimentary reasons that are: A. Writing is an integral skill that requires phonemic, morphological, syntactic and stylistic previous knowledge. B. Writing is a tool for creation; students usually employ their imagination, sensations and past experiences to express themselves. This is not an easy task for some of them. C. It is a form of communication that requires strong linguistic, pragmatic and social knowledge.

Correspondingly, Al-Khasawneh (2010) lists seven reasons explaining why writing, in EFL contexts, is considered one of the most complex skills that many teachers and students suffer from. They are summarized as follows:

1. Some teachers have a low proficiency in English, so they are not able to make the best use of the suggested textbooks and the recent methodologies to foster the students' learning.
2. Many EFL students usually own a fragile vocabulary reservoir, so they tend to repeat limited words in their texts.
3. The EFL students' compositions are usually hard to understand because the sentences included are syntactically broken and semantically ambiguous.
4. Most of the EFL students don't own enough information about the verb-tense system. The simple present is the only one used majorly.
5. Providing a fragile feedback to the targeted students makes writing harder. Due to the fact that some classes are overcrowded, teachers tend to provide holistic feedback to save time.
6. Literal translations from Arabic lead to ambiguousness. Some students tend to use the exact Arabic words and translate them into English. They have fragile knowledge about language contexts, discourse and structures.
7. Many EFL students don't use inventive spelling in their writings. They use words that they know only.

In addition, Thuy (2009) and Ansari (2012) explain that teaching English writing in EFL contexts is challenging and complex. Both teachers and students regularly feel that they are compelled to deal with this skill for purely academic purposes aloof from willingness, individual desires and personal aspirations. Therefore, instructors should tailor teaching perceptions that are suitable for the targeted context and transmit such perceptions into practice

to bridge the gap between academics and reality. The following procedures are proposed by Ansari (2012) to overcome the challenges of teaching writing:

1. Teaching writing should move from simplicity to complexity. In other words, English teachers should train their students to form simple sentences, words and other structures before introducing complex linguistic features.
2. Vocabulary enrichment is a significant language area that teachers should emphasize in order to scaffold the writing skill. To elaborate, teachers should dedicate enough time and classwork in order to give their students the opportunity to learn new vocabulary items that enrich their writings.
3. Cursive writing is an important skill that many Arab students don't know about. Therefore, training them to develop their handwritings can affect their ability to write acceptably and intelligibly.
4. Students should have enough in-class and home writing tasks. Practicing this skill in a continuous manner will inevitably develop the ability to express ideas swiftly and intelligibly.

Similarly, Mohamed and Zouaoui (2014) believe that most of the EFL students suffer from writing because they don't own the basic knowledge of composition. The methods of teaching writing should be changed to trigger students to develop. Therefore, e-learning provides a triggering environment that develops such skill because technology combines audiovisual materials, authentic tasks and linguistic representations together.

### **2.3.3. Task-based activities**

Adopting the notion of “task-based” activities in education has become massively popular recently. Sasayama and Izumi (2012) define such activities as: “useful tools to promote the development of the form-meaning connections that are crucial for L2 learning.” (p.23). Likewise, Nunan (2004) proposes a basic model to identify the characteristics of “tasks”. It is literally adopted as follows:

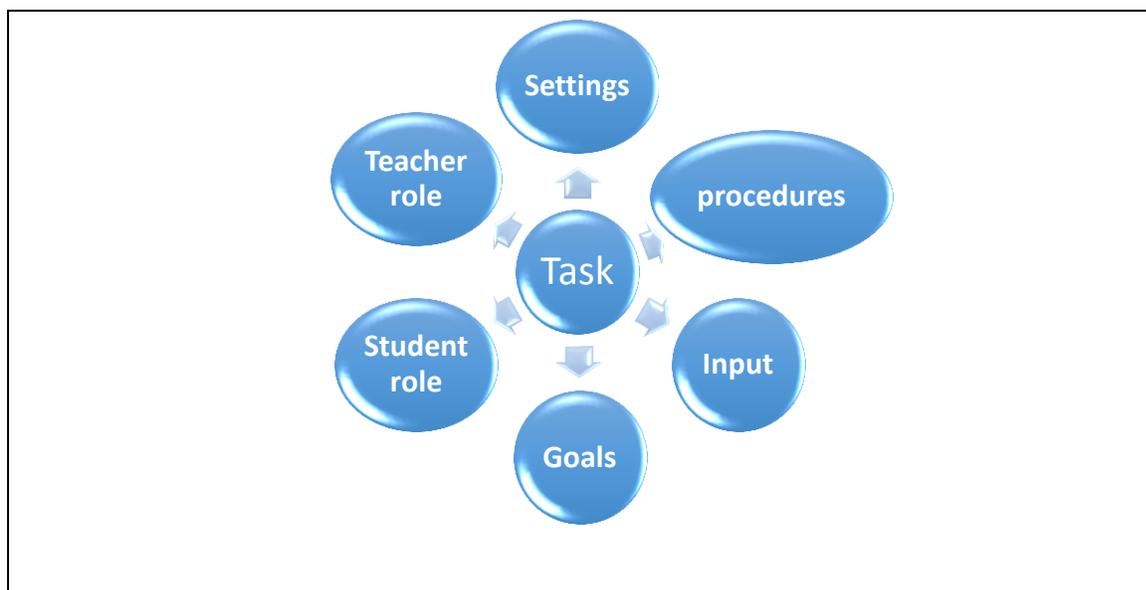


Figure 3. The basic elements of tasks (Nunan, 2004, p. 41)

Referring to the above diagram, Nunan (2004) explains that “goals” are the “general intentions behind any learning task” (p. 41). Before indulging students in task-based activities, teachers should identify the general desired learning outcomes in order to tailor teaching methods that conform to them. Goals can be communicative, academic, social and cultural (Nunan, 2014). For example, “motivating students to use e-learning to write in English” could be a pedagogical objective that teachers should consider to raise the efficacy of education. The different “linguistic input types” are initial and necessary constituents that shape the targeted tasks.

Similar to Nunan, Prabhu (1987) articulates that learners should be introduced to pedagogical activities in which knowledge is “created” rather than linearly systemized or internalized in order to establish a sturdy competence in any second language. Communication and meaning negotiations are both common features that the abovementioned authors focus on. Therefore, utilizing task-based activities to teach writing is not an easy area but it is pedagogically enriching. Learners, whether they are asked to work individually, in pairs or in groups, should be involved in the learning situation, presented to different sorts of stimuli and exposed to authentic materials. In other words, the correlation between task-based activities and teaching writing implies that the latter is a multidimensional process that requires gradual developments rather than linearly decontextualized teaching practices.

E-learning and virtual classrooms should provide tasks that are related to authentic settings. For example, instead of explaining the passive voice directly to students, teachers can engage them in authentic tasks by which the passive voice is embedded. Sariçoban and Karakurt (2016) indicate that task-based activities are highly significant because they trigger both teachers and learners to socialize, exchange knowledge and interact to fill a meaning gap that echoes real life. On the other hand, in many conventional classes, knowledge is usually presented in a lined fashion that diminishes any sorts of interactions among the targeted individuals.

Interestingly, Erten and Altay (2005) mention that task-based activities have a “divergent nature” because learners usually intend to adopt several linguistic, social and pragmatic backgrounds to achieve outcomes that all of the participants accept. Therefore, such way of learning is very motivating, interactive and enriching for both teachers and students in any

context. Preparations for real-life experiences are always perceived as the gist of learning aloof from spoon-fed and decontextualized knowledge that is easily forgettable and trivial.

Swan (2005) proposes several characteristics of task-based activities. The following points show the traits that a task must have:

1. Tasks should present language in a naturalistic setting in order to prepare students for real-life experiences.
2. Tasks should enhance the students' roles in learning.
3. Tasks should focus on meaning rather than accuracy.
4. Tasks should contain a meaning gap. Students are usually asked to exchange ideas with each other to create new sets of knowledge (communication).
5. Each task should entail three phases— pre-task, during task and post-task. These phases help students to internalize language easily. In the first phase, students are usually exposed to activities that prepare them to be fully engaged in the target task. The second represents the task itself; also, all students in the third phase are usually exposed to activities that help them to revise and validate the key points in the target task.

Additionally, Ellis (2009) provides several benefits that make task-based activities very fruitful and significant in the learning process. The subsequent points show the importance of tasks:

1. Tasks provide an enriching environment for the students because language is usually presented in authentic environments that require linguistic, social and stylistic knowledge.

2. Tasks promote creativity. Teachers and students usually tend to make up new linguistic structures to negotiate meaning.
3. The task-based approach is motivating because it diminishes the limitations of the traditional learning experiences.
4. This approach enhances the students' language fluency. Tasks usually contain meaning gaps that require extensive language uses to fulfill certain requirements.
5. It indulges both teachers and students in the learning process. In other words, the former can step in to give guidance and the latter can lead the progression of the tasks.

On the other hand, Son (2016) explains two concerns that might hinder the implementation of task-based instruction in any EFL context. They are restated as follows:

1. Task-based activities underpin an extensive focus on meaning rather than form. During tasks, students usually communicate and exchange ideas without direct corrections or interruptions in order to build meaning. Therefore, it's significant to focus on both "form" and "meaning" to avoid language fossilization and ambiguousness.
2. Some EFL students don't own a convenient language proficiency to participate in task-based activities. In other words, "tasks" usually require higher thinking skills, social awareness and pragmatic sets of knowledge. Not every student can attain such elements and implement them in authentic classroom practices.

#### **2.4. Anxiety, the home online access and learning English writing**

The correlations among anxiety, the home online access and the participants' attitudes were important realms that the researcher investigated in the study. There are three prevalent

types of anxiety that most humans suffer from (Zheng, 2008); they are summarized as follows:

1. State-anxiety: it generally refers to the individuals' temporal susceptibility to feel anxious, nervous and provoked when they face certain threats or detrimental situations.
2. Trait-anxiety: it is nearly closer to the first one; however, it refers to the individuals' regular predispositions to feel anxious and irritated from any future situations.
3. Situational anxiety: it refers to the profound nervous, uncomfortable and exasperating feelings that are typically aroused in a certain situation and fade away afterwards.

Similarly, Peng and Huang (2014) explain that trait anxiety is "long-lasting" and it usually becomes part of the individual's personality. However, state anxiety is momentary and related to the situation itself. Interestingly, learning English writing through e-modes triggered the aforementioned anxiety types all through the study; most of the students felt anxious because e-learning was a new learning mode to them. Also, they felt nervous because they held negative presuppositions towards writing and e-learning.

As Mohammadi, Ghorbani and Hamidi (2011) point out, a convenient access to the net provides a positive learning environment in which many students usually manifest a lower level of anxiety, more motivational surges and strong willingness to communicate with others. Also, Krashen (as cited in Du, 2009) correlates language leaning/acquisition with the surrounding environment (the affective filter theory). This theory proposes that the process of any second language learning/acquisition smoothly occurs when the target students manifest low anxiety levels, stronger motivation and less fear. The same process is usually halted when the surrounding environment doesn't support communication and interaction. All through the phases of the experiment, providing a convenient access to the net had a positive effect on the students' ability to communicate and write in English.

## **2.5. Studies related to teaching writing in online platforms**

This section provides details about eleven studies in the field of teaching writing and e-learning. Despite the fact that the literature review about CALL studies is relatively developing worldwide (Mehanna, 2004), there are various congruencies that can be found among such studies to shape the initial cornerstones of teaching and e-learning.

In a study conducted by Ghafoori, Dastgoshadeh, Aminpanah and Ziaei (2016), the impact of CALL on the grammar of writing was investigated at Azad University of Marivan Branch in Iran. Fifty homogeneous students, who were EFL intermediates, participated in the study. The twenty five students, who used the CALL package, outperformed the others who used the regular textbooks. The four researchers concluded that employing CALL to improve the EFL learners' grammar of writing was worthy of consideration since it motivated both the involved teachers and the learners to deal with writing smoothly.

From a different perspective, Helm (2015) presented a large-scale survey to scrutinize the practices and the barriers that tele-collaboration underpins across the European universities. The results of the survey showed that tele-communication was a highly fruitful tool for collaboration, but utilizing it underpinned numerous problems like time shortage, technical difficulties and content uncertainties. As a conclusion, the researcher pointed out that larger studies are significantly needed to reach a better understanding of tele-communication and education.

Additionally, Jwailes (2015) conducted a study at Hebron University to investigate the effectiveness of blended learning in teaching writing through an American literary course. The analyses of the targeted writings indicated that all of the participants developed gradually.

They used more intelligible and complex linguistic structures to express their ideas autonomously. Furthermore, they expressed higher levels of willingness to learn writing through computer-based and embedded didactic environments.

Aydin and Yıldız (2014) conducted an empirical study to scrutinize the efficacy of utilizing WIKIS to promote collaborative writing. Thirty-four students, belonged to the intermediate level of English, were asked to complete three wiki-based tasks. The students' pages were analyzed in order to investigate the effectiveness of task-based roles in peer-corrections, decision-making and accuracy. The results revealed that the utilization of wiki-based activities led to a major percentage of accuracy (94%) in the students' writings. Also, all the participants were highly motivated to use such modes in learning. Interviews and questionnaires were administered to give the participants the chance to depict the experience and manifest their attitudes towards it.

Similarly, Davoudi, Gorjian and Pazhakh (2013) scrutinized the effects of post-task activities on fifty-five M.A students at Khouzestan Islamic Azad University. The writing competence was the core focus of the study. The students were divided into control and experimental groups randomly. The former group was taught writing conventionally; however, the latter practiced this skill through computers and email correspondences. The results revealed that CALL had a significant influence on the students' writing accuracy. In order to detect such differences in competence, pre and posttests were administered to identify the students' development that took place during and after the study.

In a different study, Helm, Guth and Farrah (2012) investigated the effects of "Solyia Program" on creating a "third" space among all the participants who belonged to many cultural

and social spheres. The results of the study showed that any cultural differences may be shifted into “appealing” issues to trigger students to interact through dialogic exchanges. English language was the means of communication that triggered the participants to establish congruencies among them.

Moreover, Farrah (2011) conducted a study to investigate the effectiveness of online communication programs on language skills, motivation and cultural understanding. Interestingly, the participants were 68 different students from 22 different countries like the Middle East, Africa and the United States. The students were enrolled in the “Solyia Connect Program”; they met for two hours weekly to discuss several issues. All of the participants were non-natives and university students. Overall, the results of the study showed that the targeted program improved the students’ communicative skills, increased motivation and enhanced cultural understanding.

Farrah and Tushyeh (2010) conducted a study at Hebron University to investigate the efficacy of utilizing CALL in teaching reading and writing as integral skills. The participants were 104 English majors who manifested motivation, improvements and different attitudes after the experiment. Regarding the results of the posttest, the experimental group outperformed the control one. Both researchers concluded that CALL positively affected the students’ achievement and attitudes simultaneously.

Interestingly, in a study conducted by Mourtaga (2010), it was apparent that most of the students in Gaza suffer from weak linguistic abilities, so their writings are inevitably poor. He discovered that most of the teachers misunderstand the process of writing, so they cannot trigger their students to develop efficaciously. The author suggested that more creative

teaching methods should be adopted to bridge the gap between the writing skill and the students' abilities to express their ideas freely.

In another study conducted in Jordan by Al-Haq and Al-Sobh (2010), the effect of web-based writing instruction on the Jordanian secondary students was scrutinized. The participants were 122 students who were 17 years old in the 11<sup>th</sup> grade—the scientific stream. Two male schools and two female ones were involved in the study. The experiment continued for two months. Pre/post achievement tests were administered to track any changes that may take place in the students' writing competence. The results showed that “web-based” instruction had major positive effects on the students' ability to write in an intelligible manner. Interestingly, the researchers pointed out that there were significant differences in achievement with regard to the independent variables like group and gender; also, web-based instruction was the major “tool” that affected achievement.

Correspondingly, Al-Menei (2008) investigated the efficacy of computer-based instruction on a large number of EFL learners at the university level. This study was administered at King Saud University in KSA. The results of the study showed that e-learning motivated the participants, increased their quantity of writing and encouraged them to use more complex expressions.

To conclude, it is prominent that motivation, autonomy and writing accuracy are the most common features in many web-based instructional practices. The majority of the research papers reported that e-learning positively affected the target students' achievement, motivation, the quantity and the quality of writing. However, to the researcher's best knowledge, not many studies showed the negative effects of e-learning on the students' willingness to participate.

For instance, Farrah and Tushyeh (2010) point out that e-learning may not reflect the “true” achievement of all students because they may cheat, have someone to do the work for them or plagiarize. Therefore, research about the negative sides of e-learning is widely needed to investigate the pros and cons of such mode.

## **2.6. Summary**

This chapter introduced the theoretical backgrounds connected to the major pillars of the study (e-learning, virtual classes, task-based activities and teaching writing). Additionally, it detailed thorough perceptions about anxiety and the environment of learning because the researcher investigated both of them in the study. Krashen’s affective filter theory was introduced because it’s closely correlated to anxiety and the didactic environments. Eleven pertinent studies and an overview about e-learning in the Palestinian educational context were presented in this chapter so as to connect the study to the recent innovations of using technological practices in education.

The challenges of teaching English writing in EFL contexts were presented in details. Moreover, constructivism and task-based activities (Nunan’s perceptions) were detailed to explain the theoretical pillars of teaching writing through virtual classes. The researcher included three figures in order to explain the theories connected to e-learning, virtual classes and writing. In short, this chapter systematically introduced major perceptions that helped the researcher to introduce e-learning and English writing in Bethlehem Secondary School for Girls.

## **Chapter Three**

### **Methodology**

#### **3.0. Introduction**

This chapter explores the empirical dimensions of this study. It includes the research design, population, instrumentation and analysis. Furthermore, it provides systematic details about the developmental phases of the study, the students' collaboration, the adopted procedures and the hindrances that stood in the way.

The researcher adopted a mixed approach, both qualitative and quantitative, in order to congruently target the complexity of achievement and attitudes. Also, the study participants were chosen in a homogenous manner; all of them belonged to the same school level and academic stream. Both the control and the experimental groups were consistently similar in number, social status, academic aspirations and needs.

Simultaneously, pre/posttests, a questionnaire, a text content analyzer tool and several self-reports were administered in order to reflect the particularities of the study questions. The results of the adopted elicitation techniques were analyzed and presented by using Microsoft Excel, SPSS, multiple tables and bar charts. To elaborate, the participants' writings were analyzed by using a text content analyzer tool. The researcher's reports and the students' reactions, produced after each session, were analyzed descriptively in order to categorize the traces of anxiety and the benefits of having a convenient home access to the net while learning English writing. The ensuing subsections provide detailed perceptions about the practical dimensions of this study.

### **3.1. Research design**

In correspondence with the study questions, the adopted methodologies were meticulously tailored and designed to target the major realms of the study—achievement and attitudes

towards e-learning. The following points review the meticulous correlations between the study questions and the design of the elicitation techniques:

1. With regard to the first question, a questionnaire was designed in order to investigate the students' general attitudes towards e-learning and writing. This elicitation technique was the most suitable tool to use because it gave the researcher the chance to gather data in a short time. Also, it gave the participants a private chance to express themselves aloof from fear, shyness and judgments.
2. The second question targeted the writing competency, so tests were highly suitable to investigate the students' developments all through the study. The pre/posttests were beneficial because they gave the researcher solid, numerical and descriptive data about the participants' writings. To elaborate, the researcher got clear grades that revealed the students' developments with regard to vocabulary, syntax, punctuation and other features like cohesion. Also, analyzing the students' productions, by the text content analyzer tool, was highly important for the purpose of tracing any developments and boosting the results of the tests.
3. The final question related attitudes to two important variables—anxiety and a convenient home access to the net. As Zheng (2008) indicates, anxiety in second language acquisition is a complex and unsteady variable that can be gauged by special medical equipment, behavioral observations and self-reports only. Therefore, the researcher included items about anxiety and the online access in the questionnaire, wrote short reports about the sessions and asked the students to write their own reactions (See the chapter of the findings).

Therefore, the questionnaire, the pre/posttests, the online platforms, the text content analyzer tool and the self-reports played contradictory but significant roles in establishing a rounded image to thoroughly analyze the results of this study. As Burns (2010) points out, the

notion of “triangulation” in research has a great number of advantages that are: 1. It makes research more well-adjusted. 2. It helps to explain contradictions 3. It helps to look at research from more than one angle. Consequently, utilizing different elicitation techniques guaranteed a higher level of reliability and validity in this study.

The same questionnaire was administered twice before and after the experiment in order to track any changes that might occur in the students’ attitudes. Additionally, the two online platforms, Facebook and “PBworks”, were analyzed to track any developments in the students’ ways of writing and interaction with e-modes. Several reports, written by the researcher and the students themselves, were preceded after each session for the purpose of observing the students’ behaviors all through the study.

In order to gauge any developments in the writing competence, the same test was administered before and after the experiment. Controlled, guided and free items were included to analyze how the target students might deal with each one of them. Methodically, the students’ marks were presented and analyzed by using Microsoft Excel. Mean scores, between the experimental and the control groups, were discussed and connected to the major questions of the study. In short, the research design was based on qualitative and quantitative approaches by which the different changes in attitudes, perspectives and achievements were systematically detected.

### **3.2. Study sample**

The sample of the study consisted of 65 students from the 11<sup>th</sup> grade—the scientific stream in Bethlehem Secondary School for Girls. They were randomly chosen from a total number of

four scientific sections in the school. Section B was the control group and the other one was the experimental group. The majority of the participants came from similar social, economic and academic environments. Furthermore, pseudonyms were used in this research in order to warrant the participants' privacy and avoid embarrassment that might take place due to any social, academic and technical complications.

Both groups were homogenous in terms of the academic level. At the beginning of each first semester, all of the teachers in the targeted school usually gather and check the students' grades in the 10<sup>th</sup> grade in order to distribute the 11<sup>th</sup> grade sections evenly. Each class typically contains high-achievers, average students and low-achievers as shown in the following table to maintain a persistent academic level in all of the sections:

Level	Number of students	Criteria
High-achievers	4-6 Students	The total averages range between 85% and 99% in the 10 <sup>th</sup> grade.
Average students	20- 25 Students	The total averages range between 70% and 84% in the 10 <sup>th</sup> grade.
Low-achievers	4-6 Students	The total averages range between 69% and below in the 10 <sup>th</sup> grade.

***Table (1): The students' distribution in sections at the beginning of the school year***

All of the participants, (33) students in the experimental group and (32) in the control one, were informed about the aims, the procedures and the particularities of the study. All of them

willingly participated. They were informed that it's acceptable to drop out of the experiment if they feel apprehensive, bored or unwilling to continue.

### **3.3. Instrumentation**

Scrutinizing the pedagogical issues, correlated to teaching writing through e-modes, entails multiple complicated and developing processes. To elaborate, several factors play undisputable roles in shaping “how” writing should be presented electronically to boost learning. For example, all language teachers should fully comprehend the students' social, academic and psychological predispositions in order to launch e-modes that conform to the specifications of the targeted educational contexts.

In the study, the adopted questionnaire, the online platforms, the pre/posttests, the text content analyzer tool and the self-reports played complementary roles in forming a rounded image about the issue of teaching writing in virtual classes. Generally, surveys, self-reports and questionnaires give researchers clear perceptions about the attitudinal manifestations that the targeted participants show. On the other hand, tests give comprehensive numerical data by which teachers can identify the range of “improvement” in the students' achievement. The following section presents thorough details about the developments of the questionnaire, the platforms, the tests and the reports administered in the study.

#### **3.3.1. Questionnaire**

This elicitation technique was principally designed and administered in order to investigate the students' attitudes towards learning English writing in virtual classes. Both the experimental and the control groups were asked to fill out the targeted questionnaire before being engaged in any type of instruction. Also, they were asked to fill out the same questionnaire again after the experiment in order to figure out if there're any statistically significant differences between them.

The design of the questionnaire was divided into two complementary parts that emphasized several attitudes towards the interactive and the academic realms of e-learning. To illustrate, the first part was tailored to target the participants' demographic data, ability to access the net from home and anxiety. Such data were presented because they gave the researcher initial perceptions about the accumulated attitudes that the participants held towards e-learning. In this part, all the questions were designed to be close-ended; the students were asked to tick the suitable answer for them.

The second part of the questionnaire was designed to investigate the students' attitudes towards e-learning in details. It's divided into two domains summarized as follows: 1. The first one consisted of seventeen items that tackled general beliefs and attitudes towards e-learning. 2. The second one, which consisted of 18 items, targeted the effects of e-learning on the writing skills in particular.

The development of the questionnaire went through several phases in which multiple changes were conducted to make it narrower and more reliable. The first version was handed to two instructors, at Hebron University, to provide a thoroughgoing feedback. One of them suggested that the questions in the first part of the questionnaire should be changed in order to

be relevant to the study questions (See Appendix A, part one). Also, a question about the hours spent online for “academic purposes” was suggested to gain perceptions about the students’ attitudes towards the net when it’s used as a pedagogical mode.

The items were narrowed down to focus on the home access to the net, computers, hours dedicated to study online and feelings about e-modes. Other demographic data like the place of residence and the number of years in school were irrelevant to the three study questions. Additionally, some of the statements in the second part of the questionnaire were wordy and unfocused. They contained more than one aspect; therefore, the researcher broke them into other items so as to have one aspect in each statement (See Appendix A, part two).

In the first version of the questionnaire, three domains were systematically included as follows; 1. Beliefs and attitudes towards learning. 2. The effects of e-learning on developing the EFL students’ writing skills. 3. The integrative development of the different writing, speaking, reading and listening skills in e-learning. One of the referees, at Hebron University, suggested that the third domain should be integrated in the second one as they’re closely connected to each other. Consequently, the last version of the questionnaire included two aspects about the general attitudes and the effects of e-learning on the writing skill (See Appendix A, part two).

Based on many reports, Tavakol and Dennick (2011) point out that the “acceptable” alpha value in research should meticulously range from 0.70 up to 0.95. Such steady range usually indicates that all the items of the questionnaires are interrelated, valid, consistent and reliable. Therefore, the reliability of the questionnaire was systematically calculated by using “Cronbach Alpha Coefficient”, and it was measured in the following table:

**Table (2): The internal consistency of the questionnaire (Cronbach's Alpha Coefficient)**

Domain	Alpha
Beliefs and attitudes towards e-learning	0.76
The effectiveness of e-learning on developing the EFL students' writing skills	0.78
Total Degree	0.87

As listed in the above table, the total alpha value of the adopted questionnaire was (0.87). This showed a high degree of trustworthiness and consistency with regard to the two domains included in the questionnaire (the general beliefs and attitudes towards e-learning) and (the effectiveness of e-learning on the participants' writing skills).

### **3.3.2. Pre/posttests**

As Fulcher (2010) puts it, language testing always has an objective behind it. Such objective can be academic, social or administrative. In this study, the pre/posttests were designed to fulfill three fundamental objectives listed as follows; 1. To get preliminary perceptions about the students' writing competence. 2. To identify the strengths and the weaknesses that the targeted participants usually manifest. 3. To identify the effects of virtual classes on the experimental group.

The pre/posttests were administered before and after the experiment in order to get consistent perceptions about the students' achievement and development with regard to the writing skill. The same design was used for the pre and the posttests; however, the mark

distribution was different in the posttest. Both were graded twice by the researcher and another English teacher in order to eliminate bias and subjectivity.

Generally, both tests consisted of three writing items labelled as follows: controlled, guided and free. In the first item, a table, adopted from the Palestinian Central Bureau of Statistics in 1994, was provided. It tackled the percentages of the labor force in Gaza and the West Bank. A short paragraph, with ten missing pieces of information, was provided beneath the table. The targeted students were asked to read the paragraph carefully and complete the blanks by referring to the information provided in the table. The second item of the test was guided. The students were asked to choose two economic activities from the table and write a comparative paragraph that might simulate the one in the first item.

The final item replaced the students in a free production mode. They were asked to choose two other economic activities and talk about the participation of women by using some of the contrast transitions that were provided. The first item had ten marks, the second and the third had five for each (See Appendix B, part one). The posttest was meticulously similar to the pretest; however, the first item had twelve marks (twelve missing pieces of information), the second had three marks and the third had five (See Appendix B, part two). The marks were redistributed in order to raise the reliability and the validity of the test. The chances of subjectivity and bias in the first item were low; therefore, it took the larger portion of the total grade.

Both the researcher and the other teacher followed certain criteria to hold similar points in mind while correcting the papers. The following table shows the adopted criteria, the descriptive notes for each one and the assigned points:

Criterion	Description	Point
1.An appropriate use of the provided transitional words to connect and compare ideas	<ul style="list-style-type: none"> <li>- If the transitions are used and punctuated correctly, the students get 1.5</li> <li>-If the transitions are used correctly but they are unpunctuated, the students get 1.</li> <li>- If no transitions are used, the students get 0.</li> </ul>	1.5
2.An appropriate use of the targeted punctuation marks	<ul style="list-style-type: none"> <li>-If the paragraphs are conveniently punctuated, the students get 1.</li> <li>-If the paragraphs are partially punctuated, the students get 0.5.</li> <li>-If the paragraphs are not punctuated, the students get 0.</li> </ul>	1
3.The Correct use of the targeted verb tenses	<ul style="list-style-type: none"> <li>-If the used verb tenses are apposite, the students get 1.5.</li> <li>-If the used verb tenses are pertinent but the form is incorrect, the students get 1.</li> <li>-If the used verb tenses are inapposite, the students get 0.</li> </ul>	1.5
4.The correct use of vocabulary	<ul style="list-style-type: none"> <li>-If the used words harmonize with the context, the students get 1.</li> <li>- If the used words don't harmonize with the context, the students get 0.</li> </ul>	1

**Table (3): The criteria of grading the pre/posttests**

Even when the marks were redistributed, the same criteria were adopted to correct both the pre/posttests by readjusting the points. Other than the abovementioned criteria, the general quality and quantity of the students' productions were descriptively analyzed in order to delve into the core of the writing process. In short, the pre/posttests were used to establish numerical and descriptive perceptions about the students' interaction with e-learning.

### 3.3.3. Online platforms

In the study, both "PBworks" and Facebook were utilized in order to post several sessions, upload audiovisual materials and chat. The two platforms were used simultaneously and interchangeably all through the study. In other words, before involving the target students in a certain session, several instructions were posted in both platforms so as to put all the participants in the "mood" of the activities. The following image shows one of the instruction sets in "PBworks":

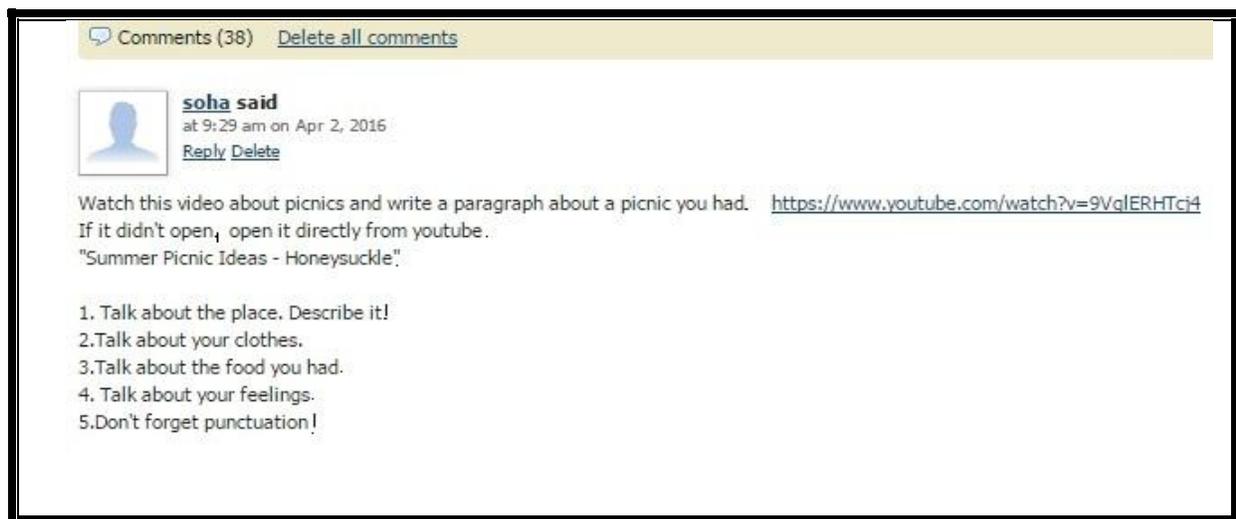


Figure 4. A screenshot that shows instructions in PBworks

The online platform “PBworks” was divided into four major workplaces that contained mini sessions. Each workplace tackled one common theme like bullying, hypocrisy and family. Additionally, “editing” and “writing” were both the core tasks that all the sessions underpinned. To illustrate, the students were asked to read what others had written and propose corrections about verb tenses, punctuation marks and stylistics. Additionally, they were asked to watch certain videos from YouTube and conduct many writing tasks.

### 3.3.4. Study materials

All the presented materials were authentic; the students watched short prize-winning movies and asked to respond to them in certain ways. Also, they were exposed to a text from Wikipedia, a free online encyclopedia, and asked to punctuate it after having instructional sessions about punctuation marks. All of the tasks entailed “a meaning gap”; the students worked individually and collaboratively to fill it. For example, they watched a video about bullying and wrote a message to the victimized character in the film. The following table synthesizes the story of the adopted videos and includes the URLs as follows:

*Table (4): A synopsis of the videos utilized in the sessions.*

The title of the video	A short description	URL
“Summer Picnic Ideas– Honeysuckle”	It is about food types that you can pack in your picnic basket. The girl, in the video, provides several pieces of advice about picnic foods.	<a href="https://www.youtube.com/watch?v=9VgIERHTcj4">https://www.youtube.com/watch?v=9VgIERHTcj4</a>
“Hamburger Paragraph”	It introduces an interesting simulation between preparing a hamburger	<a href="https://www.youtube.com/watch?v=TmOSppCyMxQ">https://www.youtube.com/watch?v=TmOSppCyMxQ</a>

	sandwich and writing a paragraph. Both have three parts that are; the top bun (the topic sentence), garnish (ideas and sub-ideas) and the bottom bun (the conclusion).	
“Learn Use Of Punctuation : English Grammar Video”	It is a tutorial video that targets punctuation marks through a Christmas story.	<a href="https://www.youtube.com/watch?v=nyiMo5loaGs">https://www.youtube.com/watch?v=nyiMo5loaGs</a>
“Identity”	It is a short movie that talks about a teen student who wears a mask in her high school in order to cover her identity. It shows hypocrisy that usually takes place in daily life.	<a href="https://www.youtube.com/watch?v=ikGVWEvUzNM">https://www.youtube.com/watch?v=ikGVWEvUzNM</a>
“Dear Dad”	It is a film about Jim. A boy who is always subjected to bullying by two other boys. His dad isn’t in his life. Jim refuses to talk to everybody. Eventually, he commits suicide.	<a href="https://www.youtube.com/watch?v=5H8RnV9b_cY">https://www.youtube.com/watch?v=5H8RnV9b_cY</a>
“Anonymous”	It’s about a girl whose name is Lara. She posts her picture on Facebook and starts getting hurtful messages from “anonymous” saying that she’s obnoxious and ugly. She starts to believe that she’s ugly, but her friend supports and helps her.	<a href="https://www.youtube.com/watch?v=fKdH_sTUZ_s">https://www.youtube.com/watch?v=fKdH_sTUZ_s</a>

Other than the aforementioned videos, the students were exposed to a text about biodiversity, a topic which they had discussed in their original textbooks, in order to practice punctuation. It was originally adapted from Wikipedia (See Appendix C, part one). Furthermore, the researcher provided pictures that were closely correlated to the themes of the videos; the students were asked to look at these pictures and fulfill certain tasks. All of the presented themes belonged to the following categories:

- 1. Authentic themes:** the researcher chose topics that most students faced in their lives like family picnics and school.
- 2. Academic themes:** the researcher chose topics that the students knew and studied in their original textbooks like biodiversity.

In the subsequent task, the researcher asked all of the participants to thoroughly examine the picture (“Summer Weekends: Picnic fun,” 2012) and describe it by using simple language structures. Interestingly, most of the students related this family picture to the coziness that they usually feel with their own families.



Figure 5. A screenshot that shows a visualized task

### **3.3.5. The text content analyzer tool**

It is a free online tool that helps to analyze any text posted on the net; it is retrieved from: ([www.usingenglish.com](http://www.usingenglish.com)). With regard to its uses, Jwailes (2015) points out that “it can provide the user with statistics concerning the word count of a text; total of unique words; number of sentences; average word per sentence; lexical density; and the Gunning Fog readability index” (p.44). Systematically, it was used in this study in order to analyze and present the details of the students’ productions.

Generally, the tool is easy to utilize; users only copy the targeted text, paste it in the empty box and click on the “calculate now” button. Within seconds, the tool provides full textual statistics that indicate the complexity of the students’ developments in writing. It’s worthy to note that the study participants were asked to “write” and “edit” certain texts; only their personal productions were analyzed. Though, the researcher qualitatively analyzed the other editing tasks. To illustrate, both data, from the personal productions and the edited texts, were compared and related to each other to see if the targeted students interacted with both of them in a persistent manner or not.

### **3.3.6. Participants’ reports**

In order to answer the third question of the study, the researcher wrote several reports and asked the students to write short reactions after each session. Such reports and reactions were adopted in order to synthesize descriptive data about the level of the students’ anxiety, motivation and willingness that were manifested in each session. Additionally, the reports were designed to track the discrepant tendencies in each session; some students tended to post first, others were late all the time and some of them posted more than one time in each workplace.

Significantly, the researcher adopted one module to write all the reports (See Appendix C, part two). Such module was very necessary because it helped the researcher to maintain a persistent assessment in all the workplaces and the sessions. It was designed to contain three parts as follows:

- 1. Part one:** the researcher tracked the names of the sessions, the dates of meetings, the number of the involved students and the frequency of posts.
- 2. Part two:** the researcher observed the students' behaviors, categorized the most common tendencies and assessed the success of the session.
- 3. Part three:** the researcher wrote several personal reactions to the students' participation in the target sessions in order to improve the subsequent meetings.

The students' reactions were highly individualized and unfixed. The researcher asked them to write five-line paragraphs to express their own opinions. Also, they were asked to optionally respond to several questions and include their own ideas in the reactions. The questions were:

1. What were the positive and the negative points of this session?
2. Did you enjoy this session? Why?
3. What were the new things in the session?
4. Did you interact with your teacher and classmates efficiently?

### **3.4. Procedures of the study**

This study took place during the second semester of the scholastic year 2015-2016. The targeted students were enrolled in one or two sessions per week. They were not asked to immediately post even if the sessions were synchronous. They had a chance, maximum two days, to synthesize their ideas and write about them in a clear manner. Paragraph writing was

particularly the core focus of the sessions. The whole experiment went through three sequential phases presented as follows:

### **1. The introductory phase**

A meeting was held for the experimental and the control groups in order to explain the study aims, particularities and requirements. It was held on the first of March before the launching of the sessions. Several points were discussed with the participants; they're listed as follows:

1. This study is conducted for academic purposes only. It doesn't affect other school subjects.
2. Participation in the sessions is not mandatory. However, active participation is considered in the total assessment.
3. Withdrawal from the experiment is completely acceptable at any time.
4. Each task has a deadline. However, late postings are accepted.
5. Personal initiations to post other materials and comments in the sessions are completely welcomed.

The students in the control group were informed that they will learn writing in a conventional manner by using their textbooks, the class chalkboard and the limited class facilitations. On the other hand, the students in the other group were informed that they will be exposed to tutorial pictures to figure out how to sign up in "PBworks", use the constituents of the platform actively and familiarize with the nature of the materials that can be uploaded (See Appendix C, part three). Moreover, both the experimental and the control groups took the pretest and filled the questionnaire in this phase.

## **2. The experimental phase**

In this phase, the students, in the experimental group, were enrolled in the targeted sessions. They were asked to follow the tutorial pictures step-by-step and take a tour in the platform. The session in first week of the experiment was introductory and preparatory. The participants were asked to post anything to make sure that they had registered and mastered the use of the platform. As mentioned before, Facebook was utilized as an accompanying platform in which the target students could contact the researcher and talk to each other.

Moreover, the students were asked to add each other on the Facebook group. Such group was established to give all of them the chance to focus on the instructions more, chat with their classmates and ask their teacher for feedback. The incorporation of Facebook was considered because it's popular, flexible and it could be used interchangeably with other e-learning modules for academic purposes.

## **3. The post-experimental phase**

In this phase, another meeting was held for the experimental and the control groups in order to find out the detailed effects of e-learning and traditional teaching on their ability to write in an intelligible and appropriate manner. Furthermore, both groups took the posttest and filled the same questionnaire to track any changes that might occur. All of the students in the experimental group were asked to write five sentences describing their general experience even if they didn't like it. The following figure shows three samples of the students' depictions with regard to their experience in Facebook and "PBworks":



I benefited a lot from this experience. It encouraged me to give my opinion with confidence, without fear or worry, this way in study makes a student confident in his opinion and benefit from the opinions of others, and makes it bold. Personally, I think that the site made me break the barrier of shame. I learned how to use punctuation, there were many videos expressive help us in the study and in our life in general. I saw that this method is excellent education way for the students and we use technology in benefit things.



I've got used on the traditional way of learning ; Chuck boards , teachers lecturing and the same old book . I was dying to try a new method of learning . Until Ms. Suha surprised us that she wants use to take virtual lessons on an educational website, and I just couldn't be more excited . I signed up and took my first lesson which was about punctuation . I learned many new facts about this subject in an unique way to an extent that I still remember the lesson just as I took it ten minutes ago . This method of learning gave me the ability to restrain information and rules better than the traditional methods . But , this method was feelingless . Although it was three or four sessions , I missed my teacher face , my classmates laughs and being naughty. Eventually , I hope that the learning process in the future won't depend 100% on these methods but to balance between each kind of them . Because there's nothing better than balance in this life .

Pbworks was a good experience for me because I enjoyed the fact that we can study and work whenever we feel like doing so, and that we don't have to work at certain time. In this way I felt the freedom to do my homework without feeling stressed out.

Figure 6. Three samples of the students' experiences

It is worthy to note that the following used names were all pseudonyms. Although the comments included mild mistakes, they conveyed important messages that reflected the interpretations of the study results. Lara's comment, the first one, indicated a significant realm that e-learning systematically underpinned. She pointed out that using virtual classes helped her to break the barrier of shyness that she customarily feels in "real" classes.

Moreover, Lama, in the second comment, tackled two important dimensions listed as follows: 1. Using the net for didactic purposes made her excited. 2. She missed her classmates, the teacher's face and her "real existence" in class. However, Suad's comment, the third one, was very concise but clear. She enjoyed the experience and thought that it's a fruitful tool to use in learning.

### **3.5. Data Analysis**

This study aimed to investigate the effectiveness of virtual classes and interactive task-based activities on the students' ability to write in English. Also, it aimed to scrutinize the attitudes that the target students manifested before and after the study. The Statistical Package for Social Sciences (SPSS) was utilized in order to calculate the internal consistency of the questionnaire, the demographic percentages of the targeted groups, the means and other significant figures. It is important to note that all the items of the questionnaire were close-ended, so this increased the consistency of the analysis process.

With regard to the students' achievement in writing, the same test was conducted before and after the experiment in order to track any developments that might occur. Microsoft Excel was utilized for calculating the means, the averages and the probability values for the pre/posttests. Furthermore, an online text content analyzer tool was employed in order to

diagnose the students' writing productions. Such analyzer, as detailed in the instrumentation section, usually provides thorough statistical information about the lexical density, the syntactic length and other significant statistics to evaluate the students' writings.

In short, the researcher utilized more than one elicitation technique to answer each question, get rounded perceptions about the study realms and boost the cogency of the results. Evidently, the following table categorizes the correlations between the research questions, the study realms and the compatible elicitation techniques:

**Table (5): The correlations between the study questions and the adopted elicitation techniques**

The question	The study realm	The compatible elicitation techniques
1. Are there statistically significant differences in the students' attitudes towards e-learning between the experimental and the control groups?	Attitudes	The researcher administered a questionnaire and analyzed multiple self-reports to target the complex nature of attitudes.
2. Are there statistically significant differences in the students' writing achievement between the experimental and the control groups?	Achievement	The researcher administered pre/posttests to track changes in achievement. Also, the students' posts were analyzed by a special online tool to enhance the results of the tests.
3. Are there statistically significant differences in the students' attitudes towards e-learning due to the home online access and anxiety?	Attitudes in reference to two variables (the home access to the net and anxiety)	The researcher included an item about anxiety and the online access in the questionnaire to get initial perceptions. Also, both the researcher and the

		students reacted to each session to discover the correlations among anxiety, the online access and attitudes.
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Furthermore, the subsequent points empirically justify the use of each elicitation technique in order to provide comprehensive and well-adjusted answers for the study questions:

**1. Questionnaires:** Gillham (2007) discusses several empirical advantages of administering questionnaires in small-scale research papers. They are listed as follows:

a. Questionnaires guarantee a high level of confidentiality. The participants of the study were not susceptible to any direct judgments, so they expressed their thoughts and attitudes towards practicing writing through e-learning spontaneously.

b. They are highly structured and multipurpose; researchers can attain several types of data from many questionnaires to serve different purposes. Based on administering one questionnaire, the researcher got demographic data and identified the students' attitudes towards two different realms of e-learning in the study.

c. The close-ended items provide structured data that can be analyzed and presented aloof from bias. In other words, the researcher of the study included items that required limited answers, like ticking the “yes” or “no” squares, in order to gain fixed data and eliminate any preconceptions and prejudgments.

**2. Tests:** Testing and gauging achievement harmonize perfectly. As Desheng and Varghese (2013) assert, language testing always entails two compatible dimensions— testing of skills and content as well. In the study, the researcher tailored controlled, guided and free items to test the students’ writing abilities. Also, those items were systematically contextualized to test content (the participation of women and men in the labor force).

Usually, tests provide “solid” and quantitative data about the students’ progress in any language skill. Therefore, the researcher employed similar pre/posttests and presented the results so as to trace any developments that might occur in the experiment.

**3. Self-reports:** Correlating anxiety, access to the net and attitudes was not a straightforward task in the study. Therefore, the researcher wrote reports and asked the students to react to each session in order to identify the common attitudes that all the participants manifested. Self-reports were highly fruitful to use because they gave all the individuals a free space to express their own thoughts boundlessly.

**4. Online platforms:** Using technology to practice the writing skill was highly rewarding and worthy of further investigations. In other words, employing e-learning made the teaching sessions more mirthful, engaging, releasing and practical.

### **3.6. Summary**

This chapter introduced in-depth details about the four elicitation techniques that the researcher utilized in the study. Also, it provided direct examples from the sessions in order to substantiate some of the issues raised in this part and in the other chapters of the study. The developments of the questionnaire, the pre/posttests, the online platforms and the self-reports were systematically detailed because all of them had gone through several preparatory and sequential stages before they were used.

Additionally, the researcher established a scrupulous congruency among the study questions, realms and elicitation techniques to enforce the holistic consistency of the experiment. In short, this chapter introduced the empirical sides of the perceptions presented in the introduction and the literature review sections.

## **Chapter Four**

### **Discussion and Findings**

#### **4.0. Introduction**

This chapter methodically depicts the statistical results that the researcher synthesized from the implemented questionnaire, the pre/posttests, the online platforms, the text content analyzer tool and the self-reports. In other words, the students' attitudinal manifestations and levels of achievement were systematically analyzed in order to explain their significance with regard to the research questions. The following domains represent the major focus of this chapter:

1. The questionnaire results are detailed to answer the first question of the study (the general attitudinal differences between the experimental and the control groups).
2. The results synthesized from the pre/posttests are detailed to answer the second question of the study (the levels of the students' achievement with regard to writing). To boost the results of the tests, the researcher explains the complexity of the students' online textual features by using the text content analyzer tool.
3. The researcher's analysis of the self-reports is thoroughly presented for the purpose of answering the third question of the study (the correlation between anxiety, a convenient home access to the net and attitudes towards learning writing through e-modes).

4. The students' strategies that they adopted in "PBworks" and Facebook are discussed; also, the features of the students' developments are presented to validate the results of the elicitation techniques.

#### **4.1. Results related to the questionnaire**

This section depicts the questionnaire results, compares the students' responses and categorizes their attitudes towards learning writing online. SPSS (Statistical Package for the Social Sciences) was used to analyze the data collected from the study instruments. Therefore, it's highly important to note that the degrees of the questionnaire results were measured according to the following scale:

*Table (6): The scale of degrees*

<b>Means</b>	<b>The degree</b>
1.00 - 2.33	Low
2.34 - 3.67	Average
3.68 - 5.00	High

##### **4.1.1. Demographic data of the study sample**

This section presents the demographic data of the experimental and the control groups as shown in the questionnaire. Due to the fact that both groups belonged to the 11<sup>th</sup> grade, “age” and “gender” were completely excluded from the questionnaire. On the other hand, items about the use of the net, computer ownerships, number of hours spent online and anxiety were included so as to formulate initial perceptions about the students’ previous involvements in e-pedagogies. These sets of information were highly significant due to two paramount reasons listed as follows:

1. They represented the initial cornerstone of the analysis process. In other words, they provided basic information that the researcher needed in order to build further explanations.
2. They detailed the similarities and the discrepancies between the experimental and the control groups. Such comparison was vital for the researcher in order to explicate the significance of the study results and track any changes in the subsequent stages.

The succeeding tables show the basic demographic information about the experimental and the control groups. Each table is divided into four columns that include variables, choices, frequencies and percentages.

**Table (7): The demographic data for the experimental group**

<b>Variables</b>	<b>Choices</b>	<b>Frequency</b>	<b>Percent</b>
Stream	Scientific	33	100.0%
	Humanities	---	---
	Commercial	---	---
Do you have a computer at home?	Yes	25	75.8%
	No	8	24.2%
Have you ever participated in e-learning sessions?	Yes	32	97.0%
	No	1	3.0%

Do you have an internet connection at home?	Yes	30	90.9%
	No	3	9.1%
Number of hours using internet daily for academic purposes	1-3	29	78.9%
	4-6	3	9.1%
	7-more	1	3.0%
Have you ever used technology in your English classes?	Yes	28	84.8%
	No	5	15.2%
When the teacher asks me to work online, I become anxious.	Yes	16	48.5%
	No	17	51.5%

*Table (8): The demographic data for the control group*

α Variables	Choices	Frequency	Percent
Stream	Scientific	32	100.0%
	Humanities	---	---
	Commercial	---	---
Do you have a computer at home?	Yes	32	100.0%
	No	---	---
Have you ever participated in e-learning sessions?	Yes	17	53.1%
	No	15	46.9%
Do you have an internet connection at home?	Yes	30	93.8%
	No	2	6.2%
Number of hours using internet daily for academic purposes	1-3	30	93.8%
	4-6	1	3.1%
	7-more	1	3.1%
Have you ever used technology in your English classes?	Yes	31	96.9%
	No	1	3.1%
When the teacher asks me to work online, I become anxious.	Yes	4	12.5%
	No	28	87.5%

It's highly essential to note that both groups were closely comparable to each other in terms of number, academics and exposure to the English writing skills. Referring to the first variable, all of the students in the experimental and the control groups were in the scientific stream. Though, the second variable that tackled the issue of "having computers at home" showed slight differences. In the experimental group, (75.8%) of the students reported that they own a computer at home; only (24.2%) reported the opposite. With regard to the control group, all the thirty two students pointed out that they own a computer at home.

The third item (previous participation in e-learning sessions) indicated drastic variances between the targeted groups. Considering the experimental one, most of the students (97%) participated in e-learning and only (3%) didn't. On the other hand, nearly half of the control group (53.1%) participated in e-learning and only (46.9%) didn't. Such difference was quite ordinary because the targeted school only contained the 11<sup>th</sup> and the 12<sup>th</sup> grades, so all of the students came from different areas and showed discrepant learning experiences.

The fourth item (access to the net from home) closely corresponded with the second variable. In the experimental group, (90.9%) of the students mentioned that they own a convenient internet connection at home and only (9.1%) reported the opposite. Similarly, (93.8%) of the students in the control group pointed that they can access the net from their houses and only (6.2%) mentioned that they cannot. With regard to the number of hours spent online for studying, the majority of the students (78.9%) in the experimental group indicated that they usually spend 1-3 hours online. The percentage in the control group was higher; (93.8%) of the students reported the same.

Additionally, the majority of the students in the two groups reported that they often use technology in their English classrooms. Surprisingly, nearly half of the students in the experimental group (48.5%) indicated that they feel anxious when they use the net for any academic purposes; on the other hand; only (12.5%) reported the same in the control group.

All of the above-mentioned figures highlighted the following major suppositions that affected the advanced phases of the experiment:

1. The issue of e-pedagogies was not new to the students in both groups. Therefore, the researcher didn't waste much time to explain the meaning of "e-learning".
2. The majority of the students had computers at home, so the sessions were easily accessible in more than one context.
3. Many students in the experimental group pointed out that they feel anxious and trapped while working online, so the researcher provided deeper support to lessen such sensations.
4. Many students in the experimental group indicated that they normally spend 1-3 hours online for academic purposes. Therefore, the researcher made use of this tendency to enhance the writing skill.

In short, the outcomes of the "demographic data tables" indicated that the students in both groups were closely compatible to each other. They were exposed to convenient technological teaching methods in their school life. Also, they mentioned that they were able to access the net from their homes in order to study. "Anxiety" was the only variable that showed remarkable differences between both groups. All these indications helped the researcher to modify the experiment in a manner that suited the participants' needs and aspirations.

#### **4.1.2. Degrees of the students' attitudes toward e-learning**

The following tables systematically show the means and the standard deviations of the post questionnaire with regard to the experimental group. The first table introduces the degree of the students' general attitudes towards e-learning; however, the second one explores the attitudes towards the linguistic realms of writing.

**1. Attitudes towards the general realms of e-learning:**

<b>Item #</b>	<b>Item</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Degree</b>
9	E-learning improves the students' attitudes towards writing.	4.03	0.92	High
3	E-learning is an interesting platform to enhance English writing skills.	4.03	0.81	High
11	E-learning gives students the opportunity to surf the net and read about the topic required.	3.97	0.98	High
8	E-learning enables students to have access to resources anytime.	3.94	1.22	High
10	E-learning enhances the students' knowledge about writing.	3.88	0.86	High
12	E-learning provides authentic tasks that develop the students' critical thinking.	3.79	1.08	High
14	E-learning makes the writing process more interactive.	3.73	0.91	High
15	E-learning gives students' the chance to receive an immediate feedback from teacher.	3.70	1.13	High
4	E-learning increases interaction with teachers.	3.70	1.13	High
16	E-learning encourages students to use writing as a means of communication with teachers and classmates.	3.67	1.02	Average
5	E-learning makes teaching student-centered rather than teacher-centered.	3.67	0.89	Average
17	E-learning triggers students to read in order to attain ideas about the topic they want to write about	3.64	1.14	Average
6	E-learning enhances student's	3.64	1.03	Average

	responsibility over their learning.			
7	E-learning enhances the students' motivation.	3.48	0.91	Average
13	E-learning provides authentic tasks that develop the students' creativity.	3.45	1.09	Average
1	E-learning encourages students to work collaboratively with their classmates.	3.39	0.90	Average
2	E-learning engages students in the learning process more than the traditional learning.	3.36	0.82	Average
	<b>Total degree of the domain</b>	<b>3.71</b>	<b>0.59</b>	<b>High</b>

*Table (9): The means and the std. deviations of the students' general attitudes towards e-learning (arranged by their importance)*

The results showed that the students' general attitudes towards e-learning were high with an obviously total mean of (3.71). Extraordinarily, the most significant items, scored by the students, targeted the paradoxical realms that the study underpinned (attitudes and skill development). Both items got the same mean score (4.03) and stated the following:

1. Item number (3) = (E-learning is an interesting platform to enhance English writing skills.)
2. Item number (9) = (E-learning improves the students' attitudes towards writing.)

Additionally, all the next items tackled the “technical” dimensions of using e-learning to practice writing. They're listed from the ones that got the highest mean scores to the lowest as follows:

1. Item number (11) which stated that (E-learning gives student the opportunity to surf the net and read about the topic required.) got a mean score that's equal to (3.97).
2. Item number (8) which stated that (E-learning enables students to have access to resources anytime.) got a mean that's equal to (3.94).
3. Item number (10), which stated that (E-learning enhances the students' knowledge about writing.), was one of the top items that the students highlighted with a mean of (3.88).

On the other hand, item number (1) which stated that (E-learning encourages students to work collaboratively with their classmates.) got a mean of (3.39). Then, item number (13) which stated that (E-learning provides authentic tasks that develop the students' creativity.) had a slightly higher mean score (3.45). Finally, item number (7) which stated that (E-learning enhances the students' motivation.) got a mean of (3.48). The least important item was number (2) which stated that (E-learning engages students in the learning process more than the traditional learning.) with a mean that's equal to (3.36).

## 2. The attitudes towards the linguistic realms of e-learning

Item #	Item	Mean	Std. Deviation	Degree
5	E-learning helps me to develop my punctuation awareness.	4.12	0.86	High
12	E-learning helps me to brainstorm my ideas before writing.	3.97	1.19	High
14	E-learning helps me to develop my ability to revise my writing.	3.94	0.83	High
3	E-learning helps me to achieve better language flow in my writing.	3.91	0.77	High
1	E-learning helps me to develop my vocabulary reservoir.	3.88	1.02	High
13	E-learning helps me to plan my writing.	3.79	0.99	High
16	E-learning helps me to have a better organization for my writing.	3.79	0.74	High
7	E-learning helps me to develop my stylistic awareness.	3.73	0.94	High
6	E-learning helps me to develop my spelling skills.	3.73	1.01	High
2	E-learning helps me to achieve better cohesion and coherence in my writing	3.67	0.78	Average
4	E-learning helps me to develop my syntactic awareness.	3.58	0.83	Average
17	E-learning helps me to develop my ability to write introductions and conclusions.	3.52	0.97	Average

15	E-learning helps me to develop my ability to edit my writing.	3.48	1.15	Average
8	E-learning helps me to develop my capitalization awareness.	3.39	1.06	Average
11	E-learning helps me to develop my morphological awareness.	3.36	0.74	Average
10	E-learning helps me to develop my discourse awareness.	3.36	0.99	Average
9	E-learning helps me to develop my verb form and tense awareness.	3.33	0.99	Average
<b>Total degree of the domain</b>		<b>3.65</b>	<b>0.51</b>	<b>Average</b>

*Table (10): The means and the std. deviations of the students' attitudes towards the effects of e-learning on the English writing skills (arranged by their importance)*

The results showed that the mean scores of the students' attitudes towards the efficacy of e-learning on the writing skills were average; the mean value was equal to (3.65). Noticeably, the highest items, scored by the students, targeted four major issues that the researcher emphasized on "PBworks". They're listed as follows:

1. Item number (5) which stated that (E-learning helps me to develop my punctuation awareness.) had the highest mean value (4.12). A workplace was dedicated to practice punctuation contextually, so the students were affected by their experience.
2. Item number (12), which stated that (E-learning helps me to brainstorm my ideas before writing.), by a mean that's equal to (3.97) came next. The researcher provided many instructions and enough time before each task in order to help the participants to cognitively prepare themselves to participate.
3. Afterwards, item number (14) which stated that (E-learning helps me to develop my ability to revise my writing.) got a relatively high mean (3.94). A workplace was dedicated to "editing". The students were exposed to each other's work and asked to edit any deviations occurred.

4. Item number (3) which stated that (E-learning helps me to achieve better language flow in my writing.) got a conspicuous mean that's equal to (3.91). The researcher provided miscellaneous audiovisual stimuli and stylistic foundations in order trigger the students to use language smoothly and consistently.

Interestingly, all the low items were not directly tackled in the sessions. Items number (10) and (11), which stated that (E-learning helps me to develop my discourse awareness.) and (E-learning helps me to develop my morphological awareness.), had a mean value of (3.36) for each one of them. Also, item number (8) which stated that (E-learning helps me to develop my capitalization awareness.) had a mean of (3.39). The least important item was number (9) which stated that (E-learning helps me to develop my verb, form and tense awareness.) by a mean value that's listed (3.33).

#### **4.1.3. Results related to the first question (Are there statistically significant differences in the students' attitudes towards e-learning between the experimental and the control groups?)**

This section systematically introduces the statistical data, drawn from the post questionnaire, in order to investigate the attitudinal discrepancies between the experimental and the control groups. Both the general and the linguistic domains of the questionnaire were separately investigated by using t-tests in order to answer the first question of the study.

##### **4.1.3.1. General attitudes towards e-learning**

An independent t-test was used to examine the first study question and show if there're significant differences between the targeted groups. The results are shown in the following table:

***Table (11): The results of the independent t-test with regard to the students' general attitudes towards e-learning***

Group	N	Mean	Std. Deviation	T	d.f.	Sig.
Control	32	3.32	0.48	2.894	63	0.005
Experimental	33	3.71	0.59			

The results of the t-test indicated that there were significant differences regarding the students' general attitudes towards e-learning between the experimental and the control groups ( $p=0.005<0.05$ ). The differences were in favor of the experimental group because they manifested more positive attitudes towards e-learning by a mean value that's equal to (3.71) compared to (3.32) for the control group.

#### 4.1.3.2. Attitudes towards the writing skill

An independent t-test was utilized to target the students' attitudes towards the linguistic realms of e-learning. The results are shown in the following table:

*Table (12): The results of the independent t-test with regard to the students' attitudes towards the linguistic realms of using e-learning*

Group	N	Mean	Std. Deviation	T	d.f.	Sig.
Control	32	3.29	0.51	2.886	63	0.005
Experimental	33	3.65	0.51			

The results of the t-test indicated that there were significant attitudinal differences between the experimental and the control groups ( $p=0.005<0.05$ ). Such differences were in favor of the experimental group as they expressed more positive attitudes towards learning English writing online by a mean value that's equal to (3.65) compared to (3.29) for the control group.

Interestingly, the values of the standard deviations were relatively high and similar to each other. This showed that the students, in both groups, manifested greatly variant predispositions towards the effectiveness of using virtual classes to learn English writing. This disparity of attitudes, within the same group and between both groups, was ordinary due to three major reasons summarized as follows:

1. The targeted participants came from different schools to pursue their education in Bethlehem Secondary School for Girls. Some of these schools were equipped with opportune technological facilitations; however, others in remote areas didn't even have computers.
2. Attitudes and computer availability at home were closely related to each other. Some students were able to go online at any time; however, others didn't own a computer at home.
3. The washback effect of tests was a controlling element that shaped the students' attitudes. In other words, some students considered e-learning as an extra activity that won't be included in their exams; on the other hand, others were overwhelmed by the experiment and worked hard to participate in it.

#### **4.1.3.3. Significance of the questionnaire results**

Based on the results of the post questionnaire, this subsection discusses the role of the traditional teaching-learning experiences in sculpting the students' attitudes towards e-learning. In other words, it sheds light on the paradoxical attitudes that the students manifested all through the study in order to interpret the study results intelligibly.

Interestingly, there's a highly apparent incongruence between the students' attitudes towards e-learning and the traditional methods of education in the first aspect of the questionnaire (the general beliefs). The following table highlights the three items that the students paradoxically responded to at the final stage of the study:

**Table (13): The items that the students paradoxically responded to**

Item #	Item	Mean	Std. Deviation	Degree
9	E-learning improves the students' attitudes towards writing.	4.03	0.92	High
3	E-learning is an interesting platform to enhance the English writing skills.	4.03	0.81	High
2	E-learning engages students in the learning process more than the traditional learning	3.36	0.82	Average

The students in the experimental group paradoxically responded to the items in the above table. The majority of them agreed that e-learning improves their attitudes and upsurges their interests in the writing skill. On the other hand, most of them pointed out that e-learning isn't more engaging than the traditional learning methods. Such attitudinal incongruence can be related to two reasons summarized as follows:

1. The Hawthorne effect: Bornmann (2012) points out that this effect usually means a modification in certain behaviors or attitudes conducted by any study participants when they know that they are observed or evaluated. Therefore, it's highly probable that the students in the experimental group got overwhelmed by the experiment, so they provided certain responses to please the researcher and conform to the requirements of e-learning.
2. In the Palestinian educational context, the students' minds are usually "programmed" to perceive the traditional classrooms and the teachers' physical presence in class as the supreme elements of a "good education". Shifting towards virtual classes is a multifaceted step that takes longer time periods (more than two months) to reformulate clear and steady attitudes.

The subsequent points thoroughly summarize the pedagogical implications of the top attitudes that the students in the experimental group scored:

**1. The empathetic tendencies:** Indulging the target students in e-learning raised their interest since computerized activities established new learning environments that diminished the limitations of many traditional classrooms. Also, technology socially and psychologically engaged the participants in the writing process.

Correspondingly, in the post questionnaire, items number (9) and number (3) which stated that (E-learning improves the students' attitudes towards writing.) and (E-learning is an interesting platform to enhance English writing skills.) had the higher scores with regard to the experimental group.

**2. Input Multiplicity:** Incorporating technology into teaching writing exposed the target students to a wide plethora of resources that helped them to reformulate their ideas and learn new linguistic patterns. According to the post questionnaire, the students in the experimental group manifested a major predisposition to highlight item number (11) which indicated that (E-learning gives students the opportunity to surf the net and read about the topic required.).

Also, the students highlighted item number (8) which stated that (E-learning enables students to have access to resources anytime.). The writing activities that were not bound to the “class time and place” triggered the participants to densify their focus and raise their confidence.

Startlingly, the students manifested less positive attitudes towards using technology as a continuum to teach writing in a motivating, encouraging and authentic manner. To elaborate, items one, two, seven and thirteen (in the first domain) got the least mean values among all the other items. This indicated that the study participants were inclined to improve their writing skills in a more conventional fashion.

The students manifested average attitudes towards the influence of technology on improving the writing skill. Punctuation was the top language area that the students tended to score because much attention was paid for it in the target sessions. However, item number (9) which stated that (E-learning helps me to develop my verb form and tense awareness.) by a mean that's equal to (3.33) was the least important one. This indicated that the students didn't have strong and clear feelings about the effectiveness of technology because the experiment was relatively short and new.

As a response to the first research question, it's clear that the students in the experimental group owned positive attitudes towards e-learning. However, with regard to the attitudes towards improving the writing skill, the students in the experimental group didn't establish clear and certain perceptions to correlate e-learning to any improvements in this skill. To elaborate, the mean score of the general attitudes towards e-learning was (3.71); on the other hand; the mean scores of the attitudes towards e-learning and the improvement of writing in particular were lower (3.65).

Additionally, the mean scores for the control group were noticeably lower than the experimental one (See Appendix F). The first domain, which targeted the general attitudes towards e-learning, got (3.32); on the other hand, the second domain that targeted the attitudes towards e-learning and writing got (3.29). This indicated that indulging the target students in e-learning relatively affected their perceptions towards e-pedagogies as well as the English writing skills.

#### **4.2. Results related to the second question (Are there statistically significant differences in the students' writing achievement between the experimental and control groups?)**

The researcher adopted “testing” and the “text content analyzer tool” in order to closely examine the students’ writings and gauge achievement. Therefore, this section systematically introduces the results of the pre/posttests and the analyses of the aforementioned tool for the purpose of tracking the developmental features of the students’ writings. Microsoft Excel was utilized to present grades, measure the means for each question and identify any crucial differences between both groups (See Appendix E). Additionally, the researcher analyzed the students’ online contributions by the text content analyzer tool that provided detailed textual statistics about the used words, sentences and paragraphs.

#### **4.2.1. Results of the pretest**

The results of the pretest were very important as they gave the researcher initial perceptions about the students’ achievement in writing. Therefore, the subsequent table shows the means for each question and the total mean values for the final grade. It’s significant to note that question one was graded out of (10); however, the second and the third were graded out of (5). The total grade was calculated out of (20) (See Appendix D).

*Table (14): The averages of the pretests*

<b>Group</b>	<b>Average of question 1</b>	<b>Average of question 2</b>	<b>Average of question 3</b>	<b>Total (20)</b>
Control	8.68	3.46	2.70	14.85
Experimental	9.27	3.13	2.34	14.77

Unquestionably, both groups manifested an “average” writing competency. For example, the averages of the first question were (8.68) for the control group and (9.27) for the experimental one. The students were able to deal with highly controlled writing tasks well because the amount of writing was highly limited. Regarding the second question, both

averages showed that the students had a “fragile” ability to imitate other texts. Finally, the values of the final question showed that the students’ ability to write freely was relatively limited.

#### 4.2.2. Results of the posttest

The following section analytically presents the results of the posttest and compares them to the pretest. As mentioned before, Excel was used in order to list the grades and analyze them. The distribution of marks was slightly different from the pretest; the first question got (12) marks. However, the second got (3) and the third was graded out of (5) (See Appendix E). The following table shows the total mean values of the posttest:

*Table (15): The averages of the posttests*

Group	Average of question 1	Average of question 2	Average of question 3	Total
Control	10.65	1.48	2.09	14.25
Experimental	11	2.12	2.59	15.66

The results showed that there’re distinguished differences between the experimental and the control groups. Regarding question one, the control group got an average that’s equal to (10.65); however, the experimental one got (11). The difference was not very high in this question because it was highly controlled.

In question two, it’s apparent that the experimental group (2.12) outperformed the other one (1.48). Also, the control group got an average that is equal to (2.09) and the experimental one got (2.59) in the third question. The total averages of the grades indicated that virtual classes had positive effects on the students’ writing competence. To conclude, the results of the

t-test showed that there're significant differences in the results of the posttests between the experimental and the control groups ( $p=0.02<0.05$ ).

### **4.3. “PBworks”**

This section systematically analyzes the responses that were posted on “PBworks”. In other words, it provides statistical data about the lexical density, the sentence lengths and other textual features adopted by the study participants. It is significant to understand the following terms before presenting the results of the analyses. The definitions are summarized as follows:

**1. Lexical density:** the occurrences of the content words in comparison to the grammatical ones within the same text (Jwailes, 2015).

**2. Fog Index:** this term refers to a tool that is usually used to measure the obscurity or smoothness of reading a certain passage in relation to the level of lexis (Jwailes, 2015).

#### **4.3.1. The introductory session**

The introductory session was held on the 22<sup>nd</sup> of March, 2016. The students were asked to explore instructional pictures about “PBworks” in order to sign up correctly. Also, they were asked to post anything in order to make sure that they could access the platform efficaciously. The following table details the students’ textual features in this session:

*Table (16): The textual statistics for the introductory session*

Total Word Count:	<b>46</b>
Number of Sentences:	<b>4</b>
Average Sentence Length:	<b>11.5</b>
Number of Paragraphs:	<b>0</b>
Lexical Density:	<b>71.74</b>
Fog Index:	<b>7.21</b>

Twenty students out of thirty-three participated in this introductory workplace. As shown in the above table, the total word count for all the responses was (46), the total number of the sentences in each post was (4) and the average sentence length was (11.5). Most of the students responded by posting isolated greeting words like “hi” and “Aloha” without constructing a singular sentence. Interestingly, one student used the Arabic greeting word “Marhba” in order to interact with her classmates.

Moreover, the value of the lexical density showed that most of the used words were content ones (71.74%). The complete absence of any well-tailored paragraphs and the high reliance on content words were completely ordinary because the researcher didn’t provide many instructions about the requirements of this phase. Checking the participants’ ability to access the platform was the ultimate aim of this session.

#### **4.3.2. The identity session**

This session was divided into three workplaces. In the first one, the students were asked to punctuate a text about biodiversity. Then, they were asked to watch a video about identity and

fill out a given text. Afterwards, they were asked to write about hypocrisy in the final one. Only the students' personal productions in the final workplace were analyzed.

Total Word Count:	<b>1679</b>
Number of Sentences:	<b>94</b>
Average Sentence Length:	<b>17.8</b>
Lexical Density:	<b>32.33</b>
Fog Index:	<b>10.29</b>

*Table (17): The textual statistics for the second session*

As shown in the above table, the targeted students showed more sophisticated writing productions in comparison to the pretest and the first session. The total word count was (1679), the number of the sentences was (49) and the average of the sentence length was (17.8). Remarkably, the lexical density was relatively low; this indicated that the students used more functional words so as to connect sentences together and construct structural relations among texts. Also, the value of the fog index was higher than the one in the first session; this indicated that the complexity of the input types provided triggered the target students to develop.

#### **4.3.3. The picnic session**

This session was divided into three workplaces. In the first one, the target students were asked to watch a video about picnics and respond to certain questions. In the second, they were asked to describe a photo about the same topic. Finally, in the third one, the students were asked to study the “hamburger paragraph” and write about a school trip. The following table shows the textual statistics for all of them:

<b>Aspect</b>	<b>Space one</b>	<b>Space two</b>	<b>Space three</b>
Total Word Count:	<b>1456</b>	<b>1607</b>	<b>1801</b>
Number of Sentences:	<b>76</b>	<b>84</b>	<b>90</b>
Number of responses:	<b>27</b>	<b>27</b>	<b>22</b>
Average Sentence Length:	<b>17.3</b>	<b>19.1</b>	<b>20.9</b>
Lexical Density:	<b>36.47</b>	<b>28.69</b>	<b>27.96</b>
Fog Index:	<b>10.39</b>	<b>13.15</b>	<b>16.71</b>

***Table (18): The textual statistics for the third session***

As shown in the above table, the complexity and the flow of the students’ writings augmented gradually. Both the used words and the posted sentences increased progressively in comparison to the first session. Furthermore, the average sentence length became higher even when the number of the responses was smaller. This indicated that using technology had indubitable effects on the students’ propensity to write intelligibly.

Interestingly, the lexical density of the students' productions declined in the advanced writing tasks when compared to the initial sessions of the experiment. This showed that the target students used more grammatical, or functional, words alongside the lexical ones. Fries (1952) proposes a helpful distinction between both word categorizations that the researcher adopted to analyze the students' responses on "PBworks". Lexical nouns refer to words that have direct meanings in dictionaries such as, life activities and feelings. However, functional or grammatical nouns refer to words that are hard to find in dictionaries. The function of such noun categorization is to build syntactic relations among sentences.

The declining value of the lexical density showed that the students' sentences were more compound and complex in the advanced writing tasks. In other words, the students had an online session about constructing a well coherent and punctuated paragraph, so they applied it in other tasks. The following examples show some of the students' writings (pseudonyms were used to save the students' privacy):

1. "Since my mom is a great cook, she cooked some Shawerma sandwiches, made a great bowl of salad , set up some cups of juice and cokes and hid some cookies in her bag." (Salma, the picnic session).
2. "We slid the big and amazing slide which ends in the pool. After that, we grilled chicken and meat and ate lunch together. Then we sat to hang out together talking, laughing and having fun. Finally, we returned back home with a very happy mood." (Nadia, the picnic session).
3. "Teacher, I cannot find neither the video nor your explanation." (Sue, the identity session).

In short, the three examples indicated that the target students moved from simple sentences (S.V.O formation) to more complex ones. Therefore, indulging students in e-learning, for the purpose of practicing writing, had a paramount effect on developing this skill.

#### **4.3.4. The editing session**

Similar to the aforementioned ones, this workplace was divided into three correlated mini sessions to target both writing and editing. In other words, the students were asked to edit their classmates' writings and post letters to some bullied characters appeared in the videos. Only the second and the third workplaces were systematically analyzed as they required free writing productions.

<b>Aspect</b>	<b>Space one</b>	<b>Space two</b>
Total Word Count:	<b>1513</b>	<b>1705</b>
Number of Sentences:	<b>63</b>	<b>83</b>
Number of responses:	<b>25</b>	<b>29</b>
Average Sentence Length:	<b>24</b>	<b>28.21</b>
Lexical Density:	<b>32.37</b>	<b>28.26</b>
Fog Index:	<b>13.18</b>	<b>15.42</b>

***Table (19): The textual statistics for the editing session***

As shown in the above table, when the students got accustomed to the advanced online tasks, their level of writing became more complex with regard to the words used, the length of the sentences, the lexical density and the fog index. The data provided showed that the students in the last session used more words (1705), more sentences (83), longer sentences (28.2) and a higher fog index.

In short, all the textual statistics of the sessions indicated that the students' writing competency developed gradually and systematically. Such development was semantic, syntactic, discourse and stylistic. In other words, the majority of the students expressed their own thoughts by using more complex and intelligible vocabulary items, sentences and ideas.

#### **4.4. Results related to the third question (Are there statistically significant differences in the students' attitudes towards e-learning due to the home online access and anxiety?)**

In order to answer this question intelligibly, the researcher included two items in the introductory part of the questionnaire that targeted the home online access and anxiety. Correspondingly, the participants (both the researcher and the students) wrote several reports after each session in order reflect upon their experiences.

#### **4.5. Analysis of the self-reports**

It is strongly paramount to note that the experiment contained four major workplaces and each one was divided into three sessions. All through the study, the researcher wrote ten reports and many students optionally provided reactions in order to investigate the behavioral

features manifested in the four workplaces. These reports and reactions were significant due to three reasons summarized as follows:

1. They gave the researcher solid data about the number of the students involved, the posted writings and the manifested interaction.
2. They entailed general and rounded data about the students' participation in all the sessions. Therefore, the researcher was able to track any differences in the students' behaviors from session one to session ten.
3. With regard to the third question of the study, the researcher wrote these reports in order to observe the developments of the students' anxiety levels, the frequency of the home access to the net and attitudes.

Based on the researcher's reports and the students' reactions, the subsequent chart manifests the correlation among participation, anxiety and the ability to access the net in the ten sessions. Also, it reveals the nature of the relationship between anxiety and the home online access to answer the third question of the study:

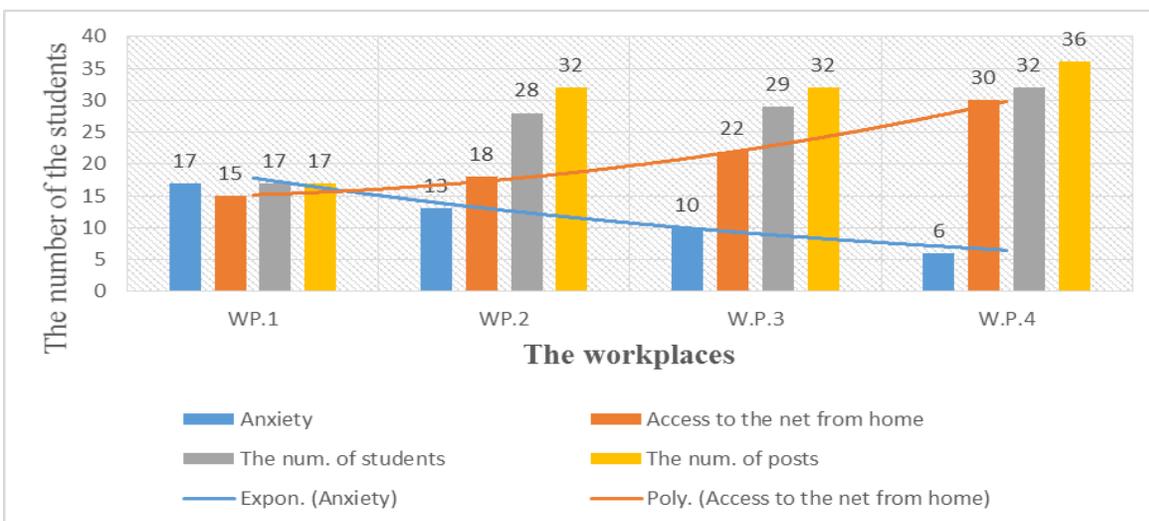


Figure 7. The analysis of the participants' reports

It's important to note that this chart is divided into four workplaces (shortened as W.P). Each one of them contains four columns that represent the number of the students who felt anxious (the blue one), the ones who could access the net from home (the orange one), the ones who participated in the sessions (the grey column) and the number of the posts (the yellow one).

In the first workplace, it's obvious that nearly half of the students didn't post because they needed longer time periods to understand the idea of "PBworks". Interestingly, all the (17) students reported, in their reactions, that they felt anxious because they didn't physically exist in their classrooms. Therefore, they posted once in order to please their teacher only. Those students fall in the category of "the risk-takers" because they tried something new and they didn't worry about any potential errors.

On the other hand, more students participated in the next workplace (28 students out of 33). They mentioned that they felt less anxious due to three reasons listed as follows:

1. They watched their colleagues' experience in the first session, so they became more willing to participate in order to fit in and interact with their classmates.
2. They liked the idea that they had the chance to write freely aloof from any time and place limitations.
3. They reported that they "need" to practice English writing through modern ways because the traditional methods have always been unrewarding.

Additionally, both the number of the students who accessed the sessions from home and the frequency of the posts became higher. As shown in the chart, the students reported less levels of anxiety, higher participation, more posts and more recurrent access to the net in the

last two workplaces. To sum up, it's evident that there's an inverse relationship between the level of anxiety (the blue line) and the students' ability to access the net from home (the orange line). When the researcher gave the participants enough time to access the net and participate, their nervousness became lower because they knew that they had the chance to consult other materials, review their work and go to previous sessions to post their writings.

#### **4.6. Samples of the students' posts**

This sub-section comparatively provides various excerpts that show the students' writing strategies and other unique textual features. It's important to note that the researcher chose all the samples randomly in order to illustrate the students' developmental patterns in writing.

##### **A. The complexity of writing**

It is highly important to mention that the notion of "complexity" has a positive connotation in this interpretation; it refers to the students' developments with regard to the grammatical and the pragmatic realms of writing. In the online sessions and the posttest, the students in the experimental group used more "complex" linguistic structures in comparison to the other students who were taught traditionally. OH (2015) argues that "language complexity" is a multifaceted feature that entails the following types: 1. Grammar-based complexity. 2. Usage-based complexity. The former deals with the structural multilayers of language as syntax; on the other hand, the latter tackles the "acceptability and practicability of language" in reference to the larger language corpora.

The researcher adopted both of the linguistic complexities and analyzed random excerpts, taken from the students' writings, in order to critically interpret the outcomes of the text content analyzer tool.

**Excerpt one:** (A human in many faces)

“Everyone in his/her life has something to worry about it, someone may be worried about study, trust in people, and the hypocrites. In ancient times of the prophet Mohammed, there were many hypocrites; they attacked the Muslims without knowing that this person is against you or with you. Unfortunately, we have like these people in our life, People you trust them, but actually they have a lot of hatred in their hearts for you. **(Salwa)**

**Excerpt two:** (Be yourself)

Humans have reached the 21 century, invented magnificent things and solved many problems. But they still judge each other, hold hate on each other, not respecting or accepting the idea that someone's beliefs are different than theirs! They forgot that we all live under the same sun. But at the end, only the intelligent ones will be themselves, only they will realize that life is too short to wear fake masks and care about people's opinion, because you are beautiful the way you are! Just be yourself no matter what they say, before it's too late! Just connect your inner life with your life outside “The life that you live” and be different.

It's okay to be different. **(Rinad)**

**Excerpt three:** (Picnic in nature)

I'm in my nature, I like to go to the natural places full of greenery and trees. One day, I went with my family to a park, and we took delicious food and a few drinks and ate together. Then, we sat down and we played together, where flowers and beautiful fresh air existed. It was the most beautiful day, and already enjoyed. **(Samia)**

Based on the abovementioned excerpts, the following points summarize the major grammatical and usage-based complexities that the students manifested all through the study:

**1. The use of many “relative clauses” and “compound sentences”:** The student in the third excerpt used the relative pronoun “where” in order to add additional information about their place of playing. Also, Salwa used a compound sentence and separated its parts with a semicolon: “There were many hypocrites; they attacked the Muslims without knowing that this person is against you or with you.”

**2. The use of many multisyllabic words:** Most of the students used long adjectives and adverbs like “magnificent”, “unfortunately” and “hypocrites” in order to enrich their ideas. In other words, they informed the researcher that they consulted google translate and other dictionaries to look for more “catchy and eloquent” expressions.

**3. The use of many punctuation marks:** Salwa used a lot of commas so as to keep a plausible “flow” in her response. Moreover, the student who wrote the second excerpt used many exclamation marks in order to indicate rising emotions and excitement.

**4. The use of verb tense and form:** Most of the students mastered the use of the verb tense and form in order to narrate past events and talk about many present situations. For example, Rinad used the present perfect to talk about the humans’ achievements that have happened through a continuum of time. Also, she smoothly shifted to other tenses to talk about the present and the past.

## **B. Creative writing**

Indulging the targeted students in virtual classes encouraged them to look for more creative ways to post their writings. For instance, the following sample was posted in the picnic session in which the students were asked to look at a photo of a family having a picnic and describe it:

(Fine, awesome, magnificent, intelligent, lucky and young)! If we take the first letter of these words, we will have the word family that gives us many things. This word consists of 7 letters but it means many things. It means whole life we must thank God because family is a gift from Him and I cannot describe what real family gives to the person. I need years to talk about family five lines are not enough. **(Suad)**

The student in this sample took each letter from the word “family” and wrote an adjective to describe “what a family means” in a sentimental manner. The picture triggered the students’ feelings and brought back the vision of their own families. Such empathetic involvement would not take place in traditional classrooms because of the limitations of time, place and stimuli.

Additionally, the invention of many new vocabulary items or “inventive spelling” was a common textual feature that the students showed all through the study. For example, the following sample shows some new vocabulary items that the student used as a sign of language acquisition:

About two years ago, I visited Nablus with my gang (friends), to be more specific, to fun land full of amazing, dizzy-causing games. It was a hot, pleasant day to enjoy, it was very hot to an extent I ate 2 big ice creams! The stunning part about this trip that the fun land was exposed to natural views 360 degrees around. As long as Nablus is known with its profoundly delicious Kunafa, melting as though it was still in the oven. From the sunshine to its sunset, this trip was astonishing! **(Samia)**

The student used the compound adjective “dizzy-causing” to describe the games that they experienced in Nablus. Also, she used the expression “from the sunshine to its sunset” instead of saying that the trip was very long but interesting. As mentioned in the first two chapters of the study, technology usually helps to develop the students’ language skills because it opens the door for them to search the net, look for examples and construct their own language.

### **C. The amount of writing**

Despite the fact that quality matters more than quantity, the number of the adopted words, the posted sentences and the tailored paragraphs frequently indicate the developmental levels that may occur in the writing process. In other words, the process of investigating the nature of the participants’ amount of writing doesn’t simply mean “counting” the textual features in any post. This process helped the researcher to attain thoroughgoing perceptions about the students’ productions. Such perceptions are summarized as follows:

1. Counting the used words in “PBworks” gave the researcher clear perceptions about the students’ lexical reservoir, discourse levels and linguistic intelligibility. For example, some students tended to repeat certain words in their posts and others used new items.
2. Counting the lengths of the sentences gave the researcher clear perceptions about the students’ ability to construct simple, compound and complex linguistic chunks. Also, the number of the sentences used indicated the degrees of the students’ predisposition to utilize cohesive and coherent features to connect ideas together. For instance, some students tended to write short and separated sentences in a robot-like manner. Others used connectors to introduce their ideas smoothly.

3. Investigating the number of the paragraphs used was significant because it gave the researcher clear perceptions about the students' ability to connect ideas together in an intelligible and "readable" manner. Some students introduced their ideas in multiple paragraphs; however, others unintelligibly mixed their ideas in one paragraph.

It's notable that the students in the control group maintained the same quality and quantity of writing; however, the other participants developed in a gradual manner. The following images show the differences of the students' writing amounts with regard to control group; the following figure is collaged from the posttest:

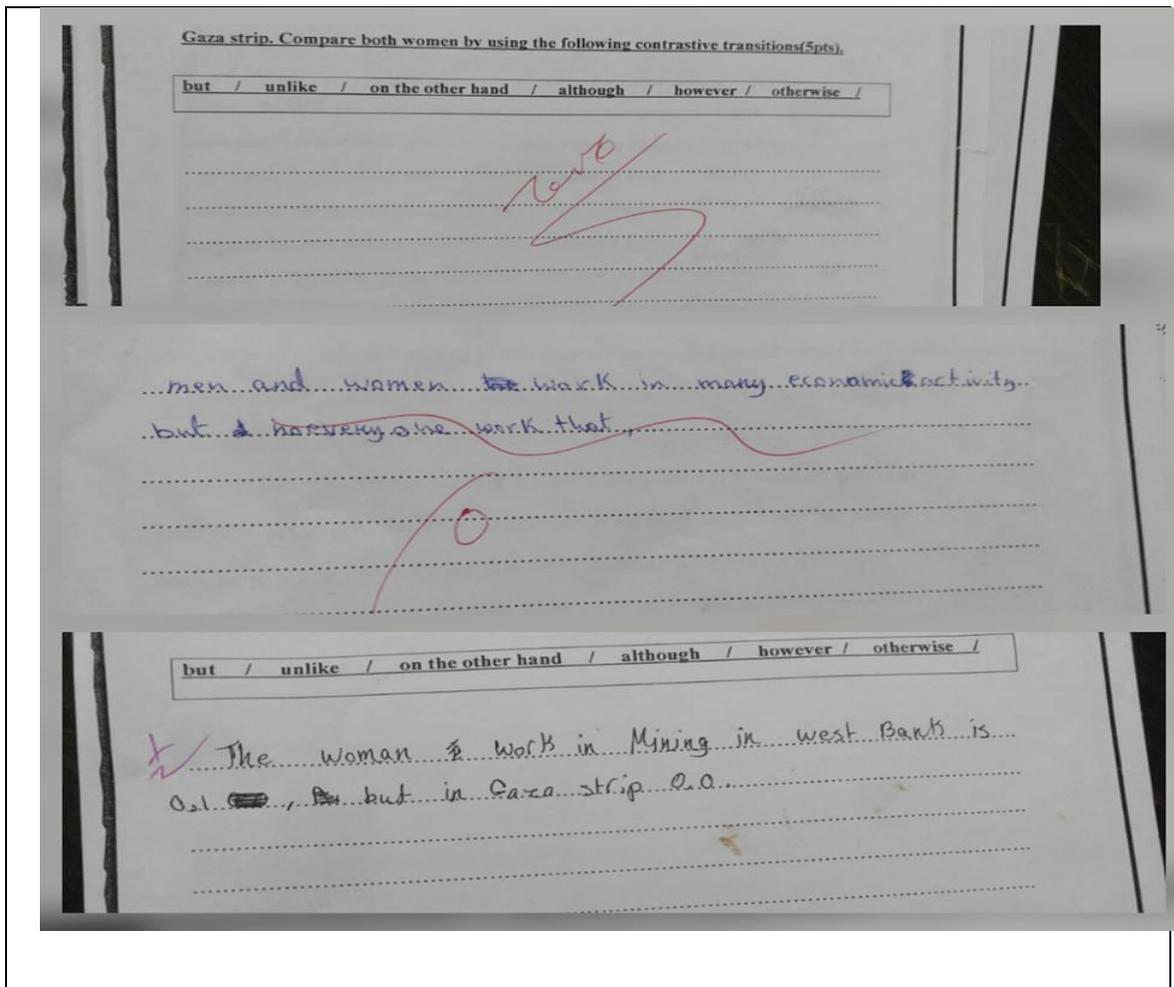


Figure 8. Three samples of the students' writings in the control group (the posttest)

After being exposed to two-month traditional teaching, the students in the control group didn't show a conspicuous development in the level of their writings. They interacted with the free writing items in three manners listed as follows:

1. As shown in the first part of the collage, some students left the question completely blank. They informed the researcher that they have ideas but they don't know how to express themselves in English.
2. Other students, as in the second part of the collage, tried to copy sentences from the first and the second questions as an endeavor to write something.
3. The final part of the collage shows that some students didn't write full and intelligible sentences at all. They gathered unrelated linguistic patterns and ordered them randomly.

Significantly, all the students' productions in the control group lacked many necessary linguistic, discourse, textual and stylistic patterns, so their writings were ambiguous and scattered. Such features are summarized as follows:

**a. The absence of many punctuation marks:** some students wrote their paragraphs without using a single punctuation mark. The following picture shows such feature:

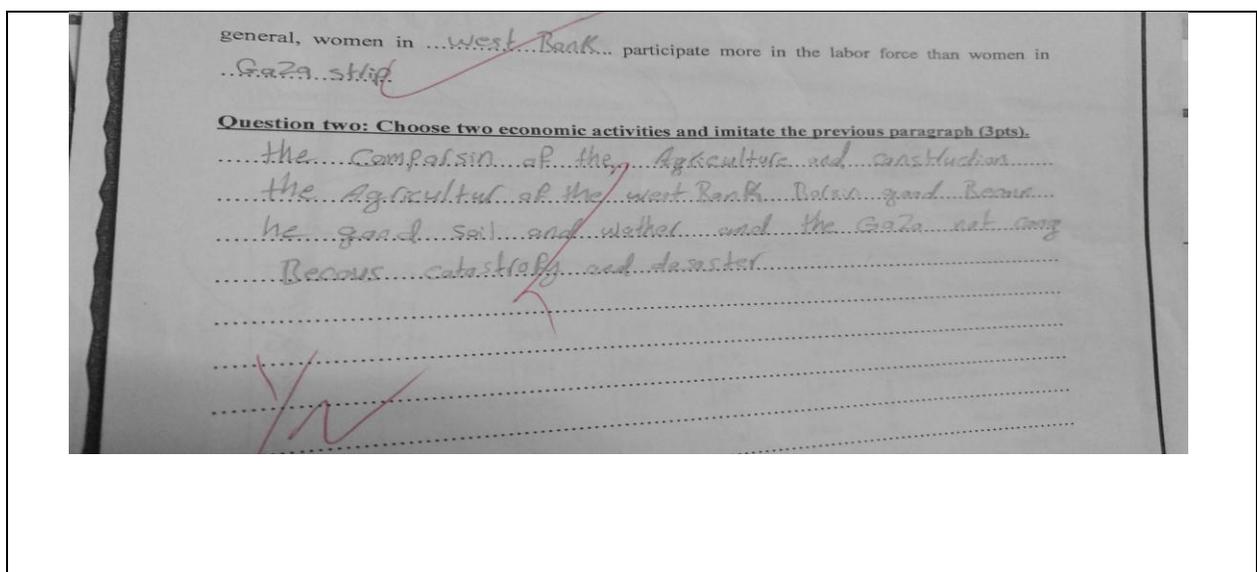


Figure 9. A sample that shows the complete absence of all punctuation marks

b. **A highly unparalleled use of some verb tenses:** the students were not aware of the correct uses of the verb tenses. For example, some students connected present and past verbs by “and” as follows (the names used were pseudonyms):

-“women in the West bank participated in the labor force and men participate also”.

---(Lina)

c. **The absence of capitalization:** the students were inclined to drop the capital letters at the beginning of any sentence, with names and the pronoun “I”. For example a student wrote: “the woman in west Bank work ...”

--- (Liza)

On the other hand, the following collage shows the contributions of the experimental group:

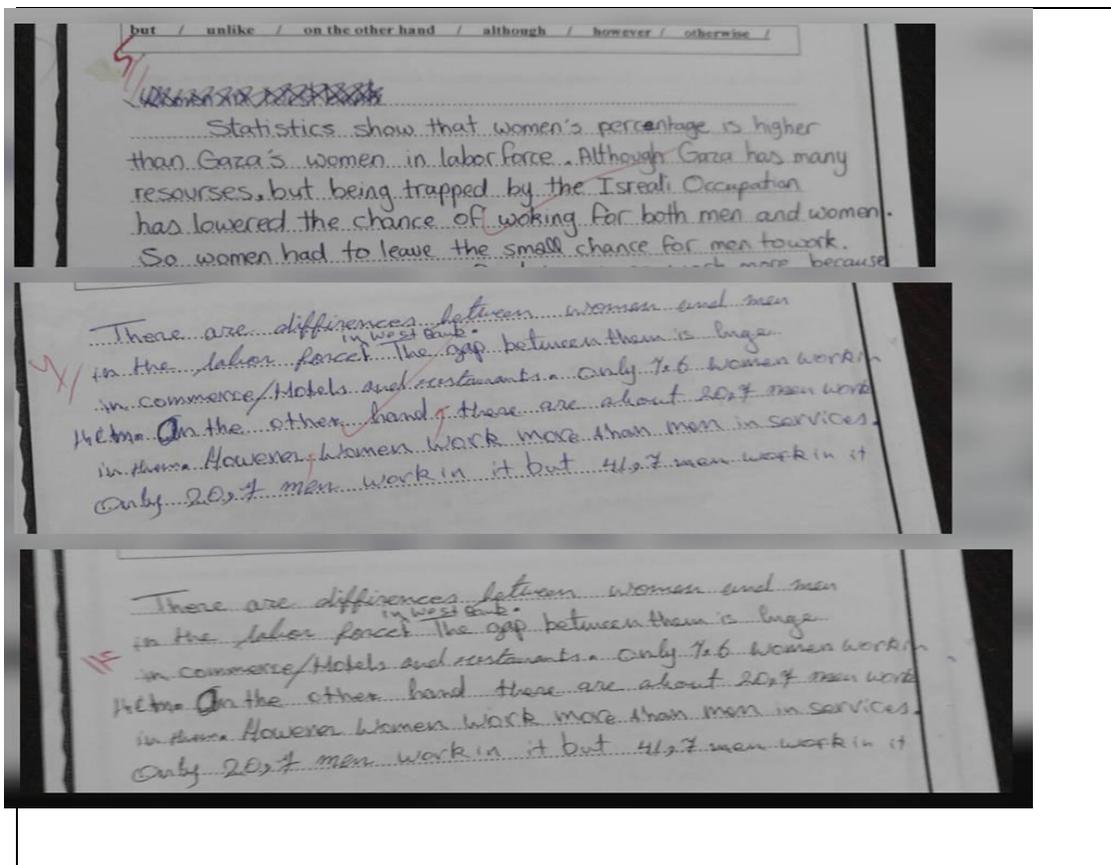


Figure 10. Three samples of the students' writings in the experimental group

With regard to the general layouts of the above paragraphs, it's apparent that the students' writings were more well-established than the ones produced by the control group. This indicated that enrolling the target students in e-learning had positive and incontrovertible roles in developing the writing skill. Such roles are generally mentioned as follows:

- 1. The social role:** engaging students in e-learning helped them to work collaboratively to communicate by writing.
- 2. The linguistic role:** technology gave the students the chance to search other resources in order to learn new ideas, see language in authentic contexts and acquire new vocabulary items.
- 3. The empathetic role:** the input types that were uploaded on "PBworks" engaged the majority of the students in the teaching-learning process. Most of the participants wrote about their own experiences as an endeavor to emulate what's presented in the sessions.
- 4. The technical roles:** technology gave the targeted students the chance to think about the activities and respond to them aloof from any time and place limitations. This sense of aloofness reduced the anxiety that they felt.

#### **4.7. Students' strategies**

The analyses of the questionnaire and the reports indicated that there's an inverse relationship between the efficacy of e-learning and the students' level of anxiety. The former gradually diminished the latter because the target students were enrolled in a communicative environment that encouraged them to participate and learn from their mistakes. The following points list the common strategies that the students developed all through the study in order to decrease their anxiety:

- 1. Observing the risk-takers:** Indulging the students in "PBworks" strongly helped them to develop their risk-taking abilities. For example, only (17) out of (33) students participated in

the first session. The rest of them observed their colleagues and joined later. Those (17) students didn't care much about any possible mistakes that they might commit, so they stimulated the others to "take the risk" and join this new experience.

**2. Imitating the distinguished students:** The researcher noticed that most of the students waited for the best achievers to post in order to imitate them. In other words, the intermediate students and the low-achievers tended to "borrow" some words and expressions from the distinguished students. The following figures reveal such imitation:



at 7:34 pm on Apr 2, 2016  
[Reply](#) [Delete](#)

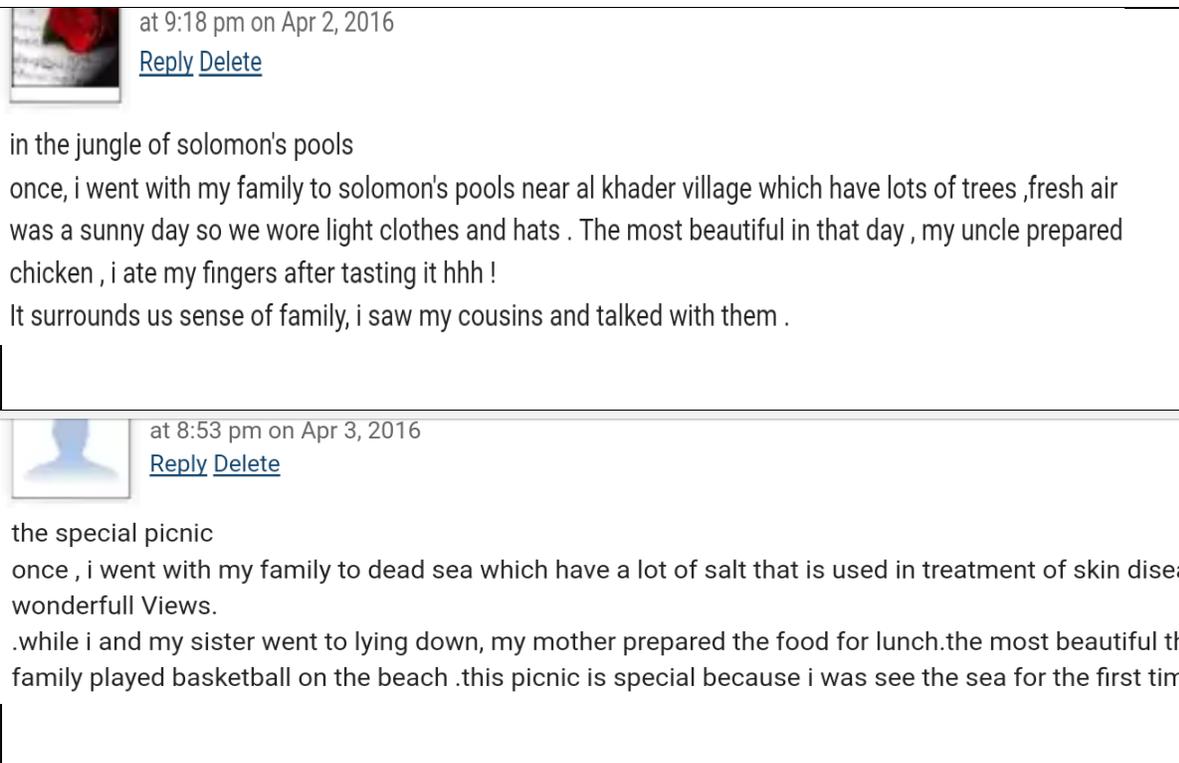
Once , I and my family had a picnic in the wild where my grandpa planted grape trees , a host c carpet of green grass underneath us , this couldn't be better .I was really excited because it wa my family. I never planned for anything in my life as I did in this picnic. I wore comfortable, brig mom is a great cook, she cooked some Shawerma sandwiches , made a great bowl of salad , and hid some cookies in her bag . what spectacular emotions flushing through me ! it is rare tl family in one day , one hour , on the same table. My dad is telling us about the old days , my si: mom is making sure every one gets his share of the food . Maybe in the future we won't be abl the most mesmirizing places on earth , Palestine.



at 9:16 pm on Apr 2, 2016  
[Reply](#) [Delete](#)

The most beautiful picnic in my life

Once, I and my friends went to a wonderful garden its the most beautiful garden , the flowers full it with high trees was so amazing , there's a clean air , a calmly place , that's day I wear an ordinary and comfo friends were wearing like me . In this day we brought a delicious and tasty foods with us (shawerma , fr fruits , biscuits , juice, cola, chocolates and alot of chips ). We aet , drink , walk , played for a long time . To be honest , this is my best picnic . Being with my friends just make me so happy and of course food



*Figure 11.* Four excerpts from the students' posts that show imitation

The researcher adopted these excerpts from the picnic session; the students' names were cropped in order to save their privacy. In the first two posts, it's apparent that both students started their posts similarly. The first one (the high-achiever) wrote: "Once, I and my family"; also, the second student started her post similarly but she changed the word "family" to "friends". The students who wrote the third and the fourth excerpts were literally similar. This positively indicated that e-learning exposed the students to each other's contributions in order to learn effectively.

**3. Asking for the teachers' feedback before posting:** The intermediate students and the low-achievers were prone to send their writings to their teacher on Facebook, the communication medium in the study, in order to check it. After feedback, they became more "secure" and less

anxious to post. The following figure shows a photo that reveals a message sent to the teacher by one of the students:

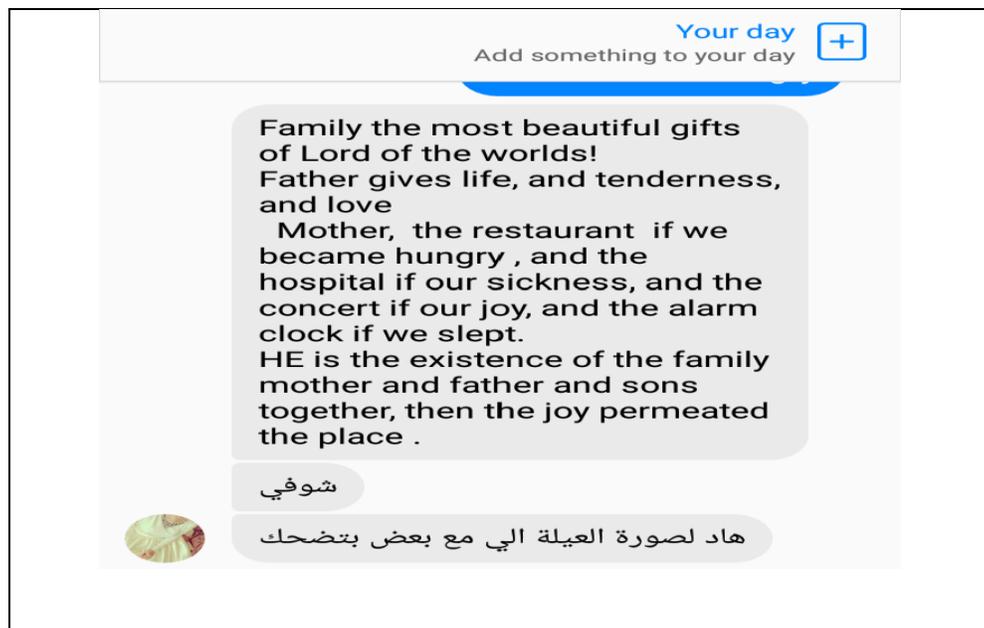


Figure 12. One of the students' messages on Facebook asking for feedback

As shown in the above Facebook message, the student slightly used slang Arabic in order to ask her teacher for feedback. In general, students usually tend to switch to Arabic because they worry that the teacher and their colleagues will judge their “fragile” English badly. Therefore, they ask for feedback in order to make sure that their contributions are equal to the high-achievers.

#### 4.8. Summary

In this chapter, the researcher tackled the results of the adopted elicitation techniques; the questionnaire, the pre/posttests, the text content analyzer tool and the participants' reports. Also, the major textual features and the strategies shown by the study participants were detailed to interpret the significance of the study results.

The questionnaire was developed through phases in which the researcher consulted university instructors from the English and the Education Departments in Hebron university to attain feedback. The design of the questionnaire was divided into two sections—demographic data and attitudes. Furthermore, the pre/posttests had three items to practice controlled, guided and free writing.

The results of the questionnaire showed that there're significant differences between the target groups. The experimental group showed more positive attitudes towards e-learning than the control one. Furthermore, the pre/posttests indicated that virtual classes had a positive effect on the students' ability to develop their writing skills. The text content analyzer tool provided textual data to track the students' developments with regard to the writing competence. Finally, the participants' reports systematically showed the common attitudinal manifestations that were evident in all of the sessions.

Several samples about the students' writings were presented to explain the developments that occurred because of the study. It's apparent that the students in the experimental group produced more intelligible written texts than the other one. Furthermore, the former group used more punctuation marks, correct verb tenses and coherent strategies. The other group didn't show noticeable progress with regard to the writing skill.

At last, the researcher provided examples about the strategies that the students adopted in order to participate in the study actively. For instance, some students tended to ask for the teacher's feedback all the time. Others waited for the high-achievers to post in order to borrow some linguistic structures from them.

## Chapter Five

### Conclusions and Recommendations

#### 5.0. Introduction

This chapter summarizes the major findings of the study, presents further studies and lists eleven recommendations to target the issues of teaching writing through e-learning in the Palestinian context. In other words, this chapter is divided into three major subsections listed as follows:

**1. Section one:** This part includes a summary about the major findings attained from the questionnaire, the pre/posttests, the online platforms and the self-reports. Each elicitation technique is concisely discussed in order to delve into the details of the study results. Also, the researcher constructs a congruency among all the elicitation techniques as an endeavor to validate the study major conclusions.

**2. Subsection two:** Further research trends are thoroughly presented in order to expand and enrich the experiences of e-learning in the Palestinian educational context. In other words, this chapter introduces international trends that have become prevalent in the field of e-pedagogies recently.

**3. Subsection three:** In this part, the researcher introduces eleven major recommendations that are connected to teaching writing in the Palestinian schools, the incorporation of technology and the collaboration between the Palestinian Ministry of Education and the societal spectra.

## 5.1. Major Findings

As mentioned before, this subsection recapitulates the major findings of the study. Furthermore, it introduces the congruencies among all the elicitation techniques in order to enhance the notion of “data triangulation” and sustain the validity of the study.

### 5.1.1. Results related to the questionnaire

Both the experimental and the control groups filled in the same questionnaire in order to track any changes in attitudes. All of the concluding results indicated that the experiment affected the attitudes of the experimental group positively. It’s substantial to note that the questionnaire targeted two dimensions— general attitudes and writing. The subsequent table compares the attitudes of the targeted groups towards e-learning as follows:

<b>Group</b>	<b>Mean scores of the general attitudes</b>	<b>Mean scores of the attitudes towards the writing skills</b>
Control	<b>3.32</b>	<b>3.29</b>
Experimental	<b>3.71</b>	<b>3.65</b>

*Table (20): The concluding results of the administered questionnaire*

Seemingly, there was a noteworthy difference in the students’ attitudes between the experimental and the control groups. Such difference underpinned three pedagogical implications listed as follows:

1. The correlation between the attitudes of the targeted groups and writing was intertwined. The experimental group faced new learning experiences, so they changed their attitudes and gradually developed their writing skills. Conversely, the other group manifested fixed attitudes all through the study because they were exposed to writing traditionally.
2. Introducing writing as a product didn't noticeably develop the writing skills of the control group. However, indulging the experimental group in the "processes" of writing led to many constructive changes in attitudes and achievement.
3. Developing the empathetic aspects of practicing writing led to an evitable improvement in achievement. The students in the experimental group were emotionally involved in the writing process. They were exposed to authentic stimuli; also, they recalled personal experiences. The experience of the control group was different. All of the students practiced writing in class to pass exams and get grades.

#### **5.1.2. Results related to the pre/posttests**

The researcher administered the same test before and after the experiment in order to gauge the students' developments in writing. The following figure shows the total values of the mean scores with regard to the pre/posttests:

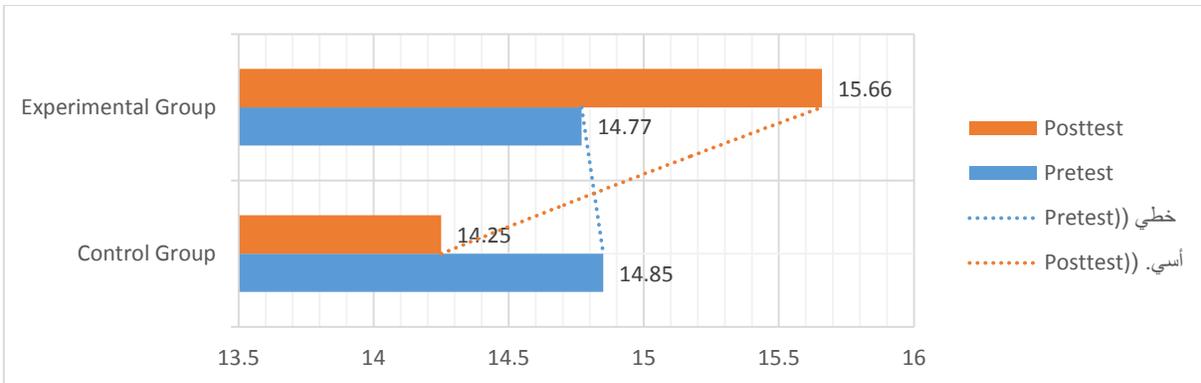


Figure 13. The total averages of the pre/posttests

The pre/posttests provided both numerical and descriptive data about the students' writing developments. It is apparent in the figure that both groups had nearly the same level of writing in the pre-experimental phase. However, the experimental group outperformed the control one (as the orange line show) at the final stage of the study.

Additionally, the researcher analyzed the students' responses in the posttest in order to identify the linguistic features of their development. The following points were the major characteristics that the targeted groups manifested:

1. The paragraphs, written by the experimental group, were punctuated well. However, some students in the control group wrote without using a single punctuation mark.
2. The students in the experimental group provided a convenient amount of writing. The other ones left most of the test items empty.
3. The experimental group mastered the use of the verb-tense system. On the other hand, the other group used the simple present all the time.
4. The students in the experimental group used capitalization and transitional words. However, the other groups wrote separate chunks that didn't convey intelligible and connected messages.

### **5.1.3. Results related to the text content analyzer tool**

The text content analyzer tool was utilized in order to get full textual statistics about the experimental group's writings. The ensuing points concisely depict the results synthesized by this tool:

1. The targeted students used longer sentences and more coherent strategies. For example, they used many relative clauses to expand their ideas.
2. They used more grammatical words in order to express and connect their ideas intelligibly.
3. They used higher levels of lexis. In other words, they used multisyllabic words and inventive spelling to express their ideas. For example, they used the words "hypocrisy" and "magnificent".
4. The rate of participation and posting gradually increased. The targeted participants tended to repeatedly post in the platforms to provide new ideas and stand out.

### **5.1.4. Results related to the self-reports**

The researcher wrote reports after each session in order to categorize the common strategic tendencies that were manifested in the experiment. Also, the participants were asked to identify the positives and the negatives of each session to investigate "anxiety" in e-modes. The following points summarize these tendencies as follows:

1. Some students tended to take the risk and participate in "PBworks". Others felt anxious, so they waited for the high-achievers to post in order to learn from each other.

2. Other students were inclined to ask for the teacher’s feedback before posting. They used to send their paragraphs (through Facebook) to the teacher. After getting the required feedback, they tended to post without any hesitation.
3. Many students tended to “borrow” words and structures from each other.
4. Some students tended to post first in each session and others waited to see other posts.

## **5.2. Intersection among the results of the questionnaire, the pre/posttests, the text content analyzer tool and the self-reports**

Scrupulously, this subsection entails the congruencies among the results of all the adopted elicitation techniques. It’s significant to note that the researcher tailored the study questions in order to scrutinize two paradoxical realms—attitudes and achievement. Therefore, the utilization of the questionnaire, the pre/posttests, the platforms, the text content analyzer tool and the self-reports was optimal to maintain the study sustainability.

Based on the results of the aforementioned elicitation techniques, the researcher argues that e-learning, when it’s used sagaciously, can definitely be a fruitful method to engage the target students in communicative practices to learn how to write. The following points summarize the congruencies among the results of the study:

1. The results of the text content analyzer tool and the posttest indicated that indulging the targeted students in virtual sessions boosted the development of their writing competence.

They used longer sentences, more sophisticated vocabulary items and clearer punctuation marks.

2. The results of the questionnaire and the self-reports indicated that enrolling the target students in e-pedagogies boosted interaction, decreased anxiety, developed competence and enhanced the positive predispositions towards writing.

### **5.3. Further research trends**

This subsection systematically presents several technological trends that have gained popularity in education recently. For example, mobile-learning, micro-learning, app-based methods and video-based learning are all technological trends that have changed the features of e-learning lately.

First, El-Hussein and Cronje (2010) point out that many smart portable devices have underpinned a noticeable revolution in all walks of life—including education. Also, the authors explain that “Mobile learning” occurs when students are fully engaged in phone activities to fulfill certain pedagogical requirements. The effectiveness of using mobiles to practice writing would be a catchy issue to investigate.

Second, the issue of “micro-learning” has become common in education recently. It focuses on dividing the constituents of e-learning into “small bites” in order to facilitate and scaffold learning (Aitchanov, Nussipbekov & Zhaparov, 2012). Such method is significantly a new issue that requires research to understand it better.

Third, app-based methods have introduced new perceptions in e-learning. In this approach, learning fully occurs through mobile and online applications. Students are usually asked to

work individually or collaboratively in order to launch e-modes and participate in ready-made apps that target certain pedagogical aims. Asking students to launch their own apps and teaching writing is a catchy combination that triggers research.

Finally, the utilization of videos has become prominent in the field of language learning. Pappas, Myllymäki, Hakala, Härmänmaa and Laine (2017) elaborate that VBL (video-based learning) occurs when students are engaged in video-based activities to gain knowledge and exchange ideas. Such trend and virtual classes are meticulously correlated, so it would be so fruitful to investigate the efficacy of video-based activities on the students' ability to transform visual, auditory and acoustic stimuli into written responses.

#### **5.4. Recommendations**

The following subsection lists eleven paramount recommendations for administrators, teachers, students, parents and researchers in order to improve the teaching of writing in all levels. The recommendations are listed as follows:

1. Technology and teaching English should be inseparable in the Palestinian governmental schools. Students need several and simultaneous input types in order develop their linguistic apparatuses. Technology is the most convenient medium to enhance teaching and learning English.
2. The portions of teaching English writing in the governmental schools should be increased because it's a developmental skill that requires time, in-class interactions and a lot of preparations.
3. Alternative assessment should be seriously taken into consideration aloof from complete reliance on conventional testing. For example, employing portfolios, online journals and

chatting gives a more rounded picture about the students' improvements because such types of assessment track writing in consecutive stages.

4. The writing tasks, whether in textbooks or online, should be presented in a chainlike manner. In other words, the tasks should be preceded with pre-activities that focus the students' attention on certain linguistic patterns. Also, post activities should be included to boost any developments that may occur.

5. All of the writing activities that are included in the series of *English for Palestine* introduce predetermined topics that some students may like and others may not. A free space for students should be determined in the textbooks to encourage them to write about their own experiences and real life.

6. The Palestinian Ministry of Education should hold intensive workshops to train teachers and students to knowledgeably adopt technology as a communicative, pedagogical and rewarding continuum.

7. The Palestinian Ministry of Education should launch competitions, offer rewards and encourage teachers to conduct research about e-pedagogies and teaching writing. Such procedures diminish the teachers' recessive mode that triggers them to care about passive teaching more than research and developments.

8. The Palestinian Ministry of Education and the societal spectra should work collaboratively in order to equip all schools, especially the remote ones, with the basic technological aids in order to develop the teaching of writing.

9. Through the utilization of e-pedagogies, the practice of English writing should be freed from the limitations of the conventional classrooms. In other worlds, the Palestinian Ministry of

Education should consider launching official online forums in which administrators, teachers, parents and students communicate in English to discuss various academic issues.

10. Teaching English writing as an isolated “linguistic requirement”, which students must pass, should be completely ruled out from the Palestinian school system. Instead, writing should be embedded in authentic tasks that target several skills in an integrative manner. For example, asking the target students to read a newspaper article about globalization and write a report about is more fruitful than writing a paragraph in class aloof from any authentic exposures.

11. Using technology to teach writing should be perceived as an accompanying pedagogical tool rather than a replacement for traditional teaching. Sometimes, students need to see their teachers and colleagues in order to learn actively. Also, some issues need personal interactions in order to be processed successfully like speaking.

## **5.5. Summary**

This chapter summarized the significance of the results obtained from the questionnaires, the tests, the platforms, the text content analyzer tool and the reports. Additionally, it explained the concluding results of the research questions that tackled attitudes, achievement, technology and writing.

Also, the researcher systematically explained the congruencies and the paradoxes found in the students’ responses in order to reveal the significance of the attitudes manifested towards e-learning. The concluding outcomes of the questionnaire, the pre/posttests, the text content analyzer tool and the self-reports harmoniously revealed that e-learning developed the students’ attitudes and achievement.

The researcher concluded that using technology to teach writing was pedagogically fruitful for several reasons summarized as follows: 1. Technology establishes authentic learning contexts that boost students to connect learning to personal experiences. 2. It exposes learners to different academic resources. 3. It encourages learners to use language to interact. 4. It provides input multiplicity that encourages students to learn writing as an integrated language skill aloof from decontextualized learning requirements.

Finally, several recommendations were proposed based on the results of the adopted elicitation techniques. Some of these recommendations tackled teaching writing, others targeted technology and referred to task-based activities.

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#### Appendix A

##### 1. The first version of the questionnaire:

- ✚ The purpose of this questionnaire is to measure the effectiveness of utilizing virtual classes to enhance the EFL students' writing skills. Data will be used for the purposes of the research only.
- ✚ The questionnaire comprises three parts that are; 1. The first deals with the participants' attitudes and beliefs towards e-learning. 2. The second tackles the effectiveness of e-learning on developing English writing skills. 3. The third highlights the integrative development of writing, speaking, reading speaking skills in e-learning.

**Part One (Demographic Data):**

Please, tick the option that is appropriate for you.

<b>A-Stream:</b> <input type="checkbox"/> Scientific <input type="checkbox"/> Humanities <input type="checkbox"/> Commercial
<b>B-Years of study in governmental schools:</b> <input type="checkbox"/> 1-4 <input type="checkbox"/> 5-9 <input type="checkbox"/> 10-12
<b>C-Place of residence:</b> <input type="checkbox"/> City <input type="checkbox"/> Camp <input type="checkbox"/> Village
<b>D-Do you have a computer at home?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>E- Have you ever participated in e-learning sessions?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>F- Do you have an Internet connection at home?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>G- Have you ever used technology in your English classes?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No

**Part Two (statements):**

Indicate the extent of your agreement, disagreement or neutrality regarding the following statements by ticking the option that matches your opinion. **Consider the following scale:**

Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

<b><u>Domain one:</u></b> Beliefs and attitudes towards e-learning.						
No.	<i>Statement</i>	1	2	3	4	5

1.	I think e-learning units encourage students to work collaboratively with their classmates.					
2.	It is interesting to learn how to write in English online.					
3.	I believe that virtual classes engage students in the learning process more than the traditional teaching methods.					
4.	E-learning encourages students to think creatively and independently.					
5.	E-learning limits interaction with teachers because there is no face-to-face encounter.					
6.	E-learning makes teaching student-fronted rather than teacher-fronted.					
7.	It is easier and quicker to do homework online because I can access resources anytime.					
8.	It is difficult for me to learn a language online. I prefer to see the teacher and sit inside class.					
9.	Utilizing e-learning to develop English writing skills is distracting and time consuming.					
10.	Utilizing e-learning to develop English writing skills is motivating and applicable in governmental schools.					

**Domain two:** The effects of e-learning on developing the EFL students' writing skills.

No.	<i>Statement</i>	1	2	3	4	5
1.	The employment of e-learning units helps students to develop and increase their vocabularies so as to be able to express themselves by writing.					

2.	The employment of e-learning units helps students to develop a syntactic awareness to construct meaningful structures while writing.					
3.	The employment of e-learning helps students to develop a punctuation awareness.					
4.	The employment of e-learning units encourages students to understand discourse, language function and form.					
5.	Online writing instruction gives students the opportunity to surf the net and read about the topic required.					
6.	E-learning efficiently provides authentic tasks that develop the students' critical thinking.					
7.	E-learning distracts the students' focus on English writing skills because it provides more than one stimuli at once.					
8.	E-learning gives students the chance to consult other resources to check grammatical errors, spelling and punctuation.					
9.	E-learning gives students the chance to receive an immediate feedback from the teacher. Therefore, the writing process becomes interactive.					
10.	E-learning units raise the students' awareness to benefit from their mistakes more than in traditional classes.					

**Domain three:** The integrative development of writing, speaking, reading and listening skills in e-learning.

No.	Statement	1	2	3	4	5
1.	E-learning units triggers students to read in order to attain ideas about the topic they want to write about.					
2.	The employment of e-learning develop the students' conversational skills because some tasks requires group work and meaning negotiation.					
3.	The employment of e-learning develop the students' critical thinking skills because some tasks requires problem solving and analytical abilities.					

4.	The employment of e-learning develop the students' listening skills because some tasks requires attaining information by listening to fulfill the writing task.					
5.	The employment of e-learning develop the students' productivity skills because some tasks requires the students' collaborative work.					
6.	Online writing instruction develops the students' sense of responsibility as they take charge of their own learning.					
7.	The employment of e-learning develops the students' multi-tasking skills because some tasks integrate listening, reading and writing.					
8.	The employment of e-learning develops the students' creativity because some tasks require using learned forms and structures in new contexts.					
9.	The employment of e-learning develops the students' technical skills because some tasks require uploading videos and audios.					
10.	The employment of e-learning develops the students' awareness of the subject matter that they want to talk about because the net is an enriching source of knowledge.					

2. The second version of the questionnaire:

- ✚ The purpose of this questionnaire is to gauge the effectiveness of utilizing virtual classes to enhance the EFL students' writing skills. Data will be used for the purposes of the research only.
- ✚ The questionnaire comprises two parts that are; 1. The first deals with the participants' general attitudes and beliefs towards e-learning. 2. The second tackles the effectiveness of e-learning on developing English linguistic skills.

**Part One (Demographic Data): Please, tick the option that is appropriate for you.**

<b>A-Stream:</b> <input type="checkbox"/> Scientific <input type="checkbox"/> Humanities <input type="checkbox"/> Commercial
<b>B-Do you have a computer at home?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>C- Have you ever participated in e-learning sessions?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No

<b>D- Do you have an internet connection at home?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>E- Number of hours using internet daily for academic purposes.</b> <input type="checkbox"/> 1-3 <input type="checkbox"/> 4-6 <input type="checkbox"/> 7-more
<b>F- Have you ever used technology in your English classes?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>G-When the teacher asks me to work online, I become anxious.</b> <input type="checkbox"/> Yes <input type="checkbox"/> No

**Part Two (statements):**

Indicate the extent of your agreement, disagreement or neutrality regarding the following statements by ticking the option that matches your opinion. **Consider the following scale:**

Strongly Disagree	Disagree	Neutral	Agree	Strongly agree
1	2	3	4	5

<b><u>Domain one:</u></b> <i>Beliefs and attitudes towards e-learning.</i>						
<b><u>No.</u></b>	<b><u>Statement</u></b>	1	2	3	4	5
1.	E-learning encourages students to work collaboratively with their classmates.					
2.	E-learning engages students in the learning process more than the traditional learning.					
3.	E-learning is an interesting platform to enhance English writing skills.					
4.	E-learning increases interaction with teachers.					
5.	E-learning makes teaching student-centered rather than teacher-centered.					
6.	E-learning enhances students' responsibility over their learning.					
7.	E-learning enhances students' motivation.					
8.	E-learning enables students to have access to resources anytime.					
9.	E-learning improves the students' attitudes towards writing.					
10.	E-learning enhances the students' knowledge about writing.					
11.	E-learning gives students the opportunity to surf the net and read about the topic required.					
12.	E-learning provides authentic tasks that develop the students' critical thinking.					
13.	E-learning provides authentic tasks that develop the students' creativity.					
14.	E-learning makes the writing process more interactive.					

15.	E-learning gives students' the chance to receive an immediate feedback from teacher.					
16.	E-learning encourages students to use writing as a means of communication with teachers and classmates.					
17.	E-learning triggers students to read in order to attain ideas about the topic they want to write about					

**Aspect two:** *The effects of e-learning on developing the EFL students' language skills.*

No.	Statement	1	2	3	4	5
1.	E-learning helps me to develop my vocabulary reservoir.					
2.	E-learning helps me to achieve better cohesion and coherence in my writing					
3.	E-learning helps me to achieve better language flow in my writing.					
4.	E-learning helps me to develop my syntactic awareness.					
5.	E-learning helps me to develop my punctuation awareness.					
6.	E-learning helps me to develop my spelling skills.					
7.	E-learning helps me to develop my stylistic awareness.					
8.	E-learning helps me to develop my capitalization awareness.					
9.	E-learning helps me to develop my verb form and tense awareness					
10.	E-learning helps me to develop my discourse awareness.					
11.	E-learning helps me to develop my morphological awareness.					
12.	E-learning helps me to brainstorm my ideas before writing.					
13.	E-learning helps me to plan my writing.					
14.	E-learning helps me to develop my ability to revise my writing.					
15.	E-learning helps me to develop my ability to edit my writing.					
16.	E-learning helps me to have a better organization for my writing.					
17.	E-learning helps me to develop my ability to write introductions and conclusions.					
18.	E-learning helps me to improve my language accuracy.					

Appendix B

In the Name of Allah

1. The writing pretest:

Name:

11<sup>th</sup> grade

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**Question one: Study the following table and complete the paragraph (10 pts):**

**Table 4-3: Employed Persons by Economic Activity and Region, by Sex (%)**

Economic Activity	West Bank			Gaza Strip		
	<i>Men</i>	<i>Women</i>	<i>% Women</i>	<i>Men</i>	<i>Women</i>	<i>% Women</i>

Agriculture	12.7	34.1	34.5	9.1	9.3	10.1
Mining/Quarrying	1.6	0.1	1.0	0.0	0.0	0.0
Manufacturing	16.6	15.4	15.4	14.8	15.7	10.3
Construction	21.8	0.7	0.6	14.5	0.6	0.4
Commerce/Hotels/Restaurants	20.7	7.6	6.7	18.6	6.9	3.9
Transportation/Storage	6.0	0.5	1.6	4.5	1.3	3.0
Services/Other	20.7	41.7	28.4	38.6	66.2	15.7
TOTAL	100	100	16.4	100	100	9.8

**Source:** See PCBS, *Census of Establishments, 1994*.

There are notable differences among ..... and women in the Palestinian labor force in Gaza strip and the ..... For example, ..... women work in Agriculture in the West Bank, but ..... men work as farmers. In Gaza strip, there is a slight difference in the number of men and ..... in agriculture. .... men work as farmers and ..... women do. On the other hand, women are dominant in the services sector. In Gaza strip, ..... women work in services, and ..... women in the West Bank.

**Question two: Choose two economic activities and imitate the previous paragraph (5pts).**

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**Task three: Women in the West Bank participate in the labor force more than women in Gaza strip. Compare both women by using the following contrastive transitions (5pts).**

<b><u>but / unlike / on the other hand / although / however / otherwise /</u></b>
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2. The writing posttest:

Name:

11<sup>th</sup> grade

**Question one: Study the following table and complete the paragraph (12 pts):**

**Table 4-3: Employed Persons by Economic Activity and Region, by Sex (%)**

Economic Activity	West Bank			Gaza Strip		
	Men	Women	% Women	Men	Women	% Women
Agriculture	12.7	34.1	34.5	9.1	9.3	10.1
Mining/Quarrying	1.6	0.1	1.0	0.0	0.0	0.0
Manufacturing	16.6	15.4	15.4	14.8	15.7	10.3
Construction	21.8	0.7	0.6	14.5	0.6	0.4
Commerce/Hotels/Restaurants	20.7	7.6	6.7	18.6	6.9	3.9
Transportation/Storage	6.0	0.5	1.6	4.5	1.3	3.0
Services/Other	20.7	41.7	28.4	38.6	66.2	15.7
TOTAL	100	100	16.4	100	100	9.8

**Source:** See PCBS, *Census of Establishments*, 1994.

There are notable differences among men and women in the labor force. ....  
 is the economic activity that has the lowest percentage because nature in Palestine doesn't  
 sustain such activity. However, ..... is the economic ..... that has  
 the highest percentage in ..... regarding women's participation.  
 Women in the West Bank don't work in ..... because it is considered a male's job  
 that requires physical strength. Only ..... women work in it in the West Bank. No  
 women work in ..... in Gaza Strip because it is very risky. Conversely,  
 numbers show that most women in the West Bank prefer to work in..... Most

Men in the West Bank prefer to work in ..... In general, women in ..... participate more in the labor force than women in .....

**Question two: Choose two economic activities and imitate the previous paragraph (3pts).**

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**Task three: Women in the West Bank participate in the labor force more than women in Gaza strip. Compare both women by using the following contrastive transitions (5pts).**

<b><u>but / unlike / on the other hand / although / however / otherwise /</u></b>
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### Appendix C

1. The provided text in the first workplace:

#### **Biodiversity( )**

It refers to the variety of life on mother Earth ( ) One of the most widely used definitions defines it in terms of the variability within species ( ) between species and between ecosystems. It is a measure of the variety of organisms present in ecosystems ( ) This can refer to genetic variation ( ) ecosystem variation or species variation (number of species)

within an area. Terrestrial biodiversity tends to be greater near the equator ( ) which seems to be the result of the warm climate and high primary productivity. Biodiversity is richest in the tropics. Marine biodiversity tends to be highest along coasts in the Western Pacific ( ) where sea surface temperature is highest. There are latitudinal gradients in species diversity. Biodiversity generally tends to cluster in hot spots ( ) and has been increasing through time ( ) but will be likely to slow in the future. The number and variety of plants, animals and other organisms that exist is known as biodiversity. It is an essential component of nature ( ) and it ensures the survival of human species by providing food, fuel, shelter and medicine. The richness of biodiversity depends on the climatic conditions and area of the region.

All species of plants taken together are known as flora and about 70( )000 species of plants are known till date. All species of animals taken together are known as fauna which includes birds ( ) mammals( ) fish, reptiles, insects, crustaceans( ) molluscs, etc. Rapid environmental changes typically cause mass extinctions. Estimates on the number of Earth's current species range from 10 million to 14 million, of which about 1.2 million have been documented and over 86 percent have not yet been described. The total amount of related DNA base pairs on Earth is estimated at  $5.0 \times 10^{37}$ ( ) and weighs 50 billion tonnes. In comparison ( ) the total mass of the biosphere has been estimated to be as much as 4 TtC ( ) trillion tons of carbon ( ).

2. The module of the reports:

<b>A report</b>
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**Part one:**

1. The name of the session .....
  2. The date of the session: .....
  3. The number of the students involved: .....
  4. The number of the students' postings: .....
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**Part two:** What were the positive and the negative sides of the sessions? How did the students behave in the session?

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**Part three:** How can I make the future sessions more interactive and fruitful?

How can I involve the participants more?

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3. One of the tutorial pictures:



Appendix D

The results of the pretest

1. The results of the control group:

<b><u>Student</u></b>	<b><u>Q.1</u></b>	<b><u>Q.2</u></b>	<b><u>Q.3</u></b>	<b><u>Total</u></b>
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1	7	3	1	11
2	10	4.5	3	17.5
3	10	4	4	18
4	5	3	1.5	9.5
5	10	4	4	18
6	8	3	3	14
7	9	4	2	15
8	8	4	2	14
9	10	4	3.5	17.5
10	10	3	1.5	14.5
11	10	3	3	16
12	10	3	3	16
13	10	4	3	17
14	10	2.5	3	15.5
15	0	2	1	3
16	10	3.5	3	16.5

17	9	4	3	16
18	10	4	3	17
19	10	4.5	4	18.5
20	10	4	4	18
21	10	3.5	3	16.5
22	10	3	3	16
23	10	4	3	17
24	10	3	2	15
25	1	3	2	6
26	10	3	2.5	15.5
27	6	3	2	11
28	10	4	3.5	17.5
29	6	2	1	9
30	9	4	3.5	16.5
31	10	3	2	15
32	10	4.5	3.5	18

<b><u>Means</u></b>	<b><u>8.6875</u></b>	<b><u>3.46875</u></b>	<b><u>2.703125</u></b>	<b><u>14.85938</u></b>
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2. The results of the experimental group:

<b><u>Student</u></b>	<b><u>Q.1</u></b>	<b><u>Q.2</u></b>	<b><u>Q.3</u></b>	<b><u>Total</u></b>
1	10	3	3	16
2	10	5	4	19
3	10	3.5	4	17.5
4	5	2	0.5	7.5
5	10	4	3	17
6	10	4.5	2.5	17
7	7	2	3	12
8	10	3	4	17
9	10	4	1	15
10	10	3.5	2.5	16
11	10	2.5	1	13.5
12	10	3	3	16

13	10	4	4	18
14	10	2	2	14
15	10	3	2.5	15.5
16	10	3.5	3.5	17
17	10	4	3	17
18	10	4.5	3	17.5
19	6	1	0.5	7.5
20	9	3	0.5	12.5
21	10	2	1	13
22	10	3	2	15
23	10	3.5	1	14.5
24	10	3	3	16
25	7	0.5	3	10.5
26	10	2.5	1.5	14
27	10	4	3.5	17.5
28	10	4.5	2.5	17

29	8	2	2	12
30	10	3.5	4	17.5
31	10	4	1	15
32	10	3	1	14
33	4	3	2	9
<b><u>Mean</u></b>	<b><u>9.272727</u></b>	<b><u>3.13636</u></b>	<b><u>2.34848</u></b>	<b><u>14.77272</u></b>

## Appendix E

### The results of the posttests

1. The results of the control group:

<u>Student</u>	<u>Q.1</u>	<u>Q.2</u>	<u>Q.3</u>	<u>Total</u>
1	5	0.5	1	6.5
2	12	1	1	14
3	12	1.5	2	15.5
4	12	1	1	14
5	11	2.5	4	17.5
6	10	2	1	13
7	9	1.5	2	12.5
8	11	2	1.5	14.5
9	10	4	4.5	18.5
10	11	1.5	2.5	15
11	11	0.5	3	14.5
12	12	1	3	16
13	12	2	3	17
14	12	2	3	17
15	10	1	1	12

16	12	2.5	2	16.5
17	11	3	3	17
18	12	0.5	3	15.5
19	12	2	3	17
20	11	1.5	3	15.5
21	10	1	1.5	12.5
22	10	1.5	2.5	14
23	11	2	2	15
24	10	1	1	12
25	11	1	1	13
26	9	1	2	12
27	10	0.5	2	12.5
28	11	1	2.5	14.5
29	10	1	1.5	12.5
30	10	1.5	1	12.5
31	9	1	1	11

32	12	2	1.5	15.5
<b><u>Mean</u></b>	<b><u>10.65625</u></b>	<b><u>1.48437</u></b>	<b><u>2.0937</u></b>	<b><u>14.25313</u></b>

2. The results of the experimental group:

<b><u>Student</u></b>	<b><u>Q.1</u></b>	<b><u>Q.2</u></b>	<b><u>Q3</u></b>	<b><u>Total</u></b>
1	12	3	4	19
2	12	3	5	20
3	12	2.5	3	17.5
4	10	1	0	11
5	12	3	3.5	18.5
6	12	2.5	4	18.5
7	12	2.5	4	18.5
8	12	3	4	19
9	11	1.5	2.5	15
10	12	2	3	17
11	11	1.5	2	14.5
12	11	2	0	13

13	11	3	4	18
14	12	2	2	16
15	12	2	3	17
16	10	3	4	17
17	12	2	3	17
18	11	2	3.5	16.5
19	10	1	1.5	12.5
20	12	2	2	16
21	11	2	2	15
22	11	3	1	15
23	9	2	3	14
24	12	2	2.5	16.5
25	8	1	0	9
26	11	1	2	14
27	11	2	3	16
28	12	2.5	3.5	18

29	11	2.5	2	15.5
30	10	2	2	14
31	12	2	2.5	16.5
32	10	1.5	0.5	12
33	7	2	1	10
<b><u>Mean</u></b>	<b><u>11.03030</u></b>	<b><u>2.12121</u></b>	<b><u>2.51515</u></b>	<b><u>15.6666</u></b>

#### Appendix F

1. The means and the std. deviations of the students' general attitudes towards e-learning  
(Arranged by their importance/the control group):

	<b>Item #</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>degree</b>
8	E-learning enables students to have access to resources anytime.	4.06	1.08	high
17	E-learning triggers students to read in order to attain ideas about the topic they want to write about	3.75	1.02	high
11	E-learning gives students the opportunity to surf the net and read about the topic required.	3.63	1.24	average
7	E-learning enhances students' motivation.	3.59	1.10	average
5	E-learning makes teaching student-centered rather than teacher-centered.	3.44	1.16	average
14	E-learning makes the writing process more interactive.	3.44	1.24	average
12	E-learning provides authentic tasks that develop the students' critical thinking.	3.38	1.21	average
3	E-learning is an interesting platform to enhance English writing skills.	3.34	1.26	average
1	E-learning encourages students to work collaboratively with their classmates.	3.31	0.86	average
16	E-learning encourages students to use writing as a means of communication with teachers and classmates.	3.31	1.12	average
13	E-learning provides authentic tasks that develop the students' creativity.	3.25	0.84	average
9	E-learning improves the students' attitudes towards writing.	3.25	1.16	average
6	E-learning enhances student's responsibility over their learning.	3.19	1.33	average
4	E-learning increases interaction with teachers.	2.97	1.15	average
15	E-learning gives students' the chance to receive an immediate feedback from teacher.	2.97	1.38	average
2	E-learning engages students in the learning process more than the traditional learning.	2.91	0.82	average
10	E-learning enhances the students' knowledge about writing.	2.66	1.07	average
	<b>Total degree of the domain</b>	<b>3.32</b>	<b>0.48</b>	<b>average</b>

2. The means and the std. deviations of the students' attitudes towards the effects of e-learning on the English writing skills (Arranged by their importance/the control group):

	<b>Item #</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>degree</b>
16	E-learning helps me to have a better organization for my writing.	4.03	1.20	high

18	E-learning helps me to improve my language accuracy.	3.72	1.11	high
1	E-learning helps me to develop my vocabulary reservoir.	3.69	1.26	High
14	E-learning helps me to develop my ability to revise my writing.	3.69	1.15	High
15	E-learning helps me to develop my ability to edit my writing.	3.66	0.97	Average
10	E-learning helps me to develop my discourse awareness.	3.50	1.02	Average
12	E-learning helps me to brainstorm my ideas before writing.	3.50	1.19	Average
2	E-learning helps me to achieve better cohesion and coherence in my writing	3.41	1.04	Average
8	E-learning helps me to develop my capitalization awareness.	3.38	0.94	Average
17	E-learning helps me to develop my ability to write introductions and conclusions.	3.31	1.03	Average
13	E-learning helps me to plan my writing.	3.28	1.05	Average
11	E-learning helps me to develop my morphological awareness.	3.06	0.88	Average
9	E-learning helps me to develop my verb form and tense awareness.	3.00	1.11	Average
6	E-learning helps me to develop my spelling skills.	2.97	1.18	Average
3	E-learning helps me to achieve better language flow in my writing.	2.94	1.08	Average
7	E-learning helps me to develop my stylistic awareness.	2.91	1.09	Average
4	E-learning helps me to develop my syntactic awareness.	2.63	1.29	Average
5	E-learning helps me to develop my punctuation awareness.	2.50	1.05	Average
	<b>Total degree of the domain</b>	<b>3.29</b>	<b>0.51</b>	<b>Average</b>