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# **The Effects of ICTs on Student's Academic Writing**

**Case Study of Master Two Students at Biskra University**

Thesis submitted for partial fulfillment for requirements of Master Degree in sciences  
of language.

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## Dedication

*To the most precious people to my heart, to the ones who gave birth, meaning, and love to my*

*life, to the persons who gave me strength, encouragement, and hope.*

*To my dear father and beloved mother I dedicate this work.*

*To my brother and sisters*

*Meriem, Khawla, and Khaled*

*To my soul friends*

*Samira, Nadjwa, and Rime*

*To all my family*

*To all my classmates*

*To all those who prayed for me and besought God to help me*

## **Aknowlegements**

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## ABSTRACT

The present study aims at describing and investigating the effects of the ICTs (namely word processor, internet, and e-mail) on students' academic writing. The intention is then to determine whether the use of these ICT tools can help students to develop their academic writing. Therefore, It is by means of two questionnaires submitted to both teachers of written expression and Master students from the Department of Languages at Mohammed Khider University-Biskra that we investigated our hypothesis. The findings gathered in this study presented three main points. First, through the use of word processor during the writing stage, students can develop their academic writing by discovering and addressing their written mistakes. Second, due to the huge number of information the internet provides, students view that this ICT tool affects them negatively when writing their essays. Third, the email can contribute in helping students to receive quick feedback which in turn assists them to address their weaknesses. In brief, it has been proved that both of the word processor and email have positives effects on students' academic writing development. On the other hand, due to the students' misuse of internet and the huge number of information the internet provides, students are affected more negatively than positively by this current tool.

## **List of Abbreviations**

**ICT: Information Communication Technologies**

**SMS: Short Message Service**

**IT: Information Technologies**

**CMC: Computer-Mediated Communication**

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**ملخص البحث**

## GENERAL INTRODUCTION

For many years, humans have been used writing in order to communicate, and nowadays it is more important than ever. Since more communication takes place in the written form than in the oral form, it is not risky to consider writing as the most important technology that has ever invented. Definitely, writing is held with great importance by both English foreign language teachers and learners. Meaning, in any foreign language (academic) classes, students tend to do their efforts to seek different ways of understanding how a good academic written production looks like.

At university, foreign language students usually make paragraphs, essays, or even researches in order to reach a particular academic achievement. While making these mentioned written productions, students certainly experience different steps and changes in order to reach the final piece of writing. In fact, these changes and steps students make indicate that the act of writing is an ongoing activity that requires an ongoing progress too. Therefore, all students at university need to enhance their academic writing before start reaching any academic achievement. Since this type of writing is thought to be the most complicated skill in both learning and teaching processes, it involves a great attention chiefly in foreign language classes. That is to say, students need typically continuous practices and feedback that enable them to formulate effectively their academic written productions.

Foreign language students may use different ways to enhance their academic writing effectively. One of these is using the ICT tools. The latter has been observed to play a remarkable role in enriching students' writing proficiency. Thus, if any foreign language student wants to develop his writing level, he should be exposed to the extensive

use of ICTs namely word processor, e-mail, and internet. Through these three main tools, students will be able to effectively produce, understand, and criticize any piece of academic writing. For the sake of narrowing down the scope of this research, the present study deals with the previous three mentioned ICT tools in relationship to students' academic writing.

### **1. Statement of the problem**

Despite the special attention given to academic writing, students at university still encounter some difficulties in achieving a good academic written production. Sometimes they are unable to make a worthy content to convince and reach what the readers need. Usually students fail also in choosing the appropriate language that suits the readers too. Making well-organized structure is also one of the major difficulties that students encounter while writing academically. That is why they are frequently advised to use ICTs in order to develop their academic writing. In other words, students need to use word processor that helps them to avoid grammatical mistakes. Internet should be also exploited in order to select the appropriate resources related to the academic topic that is under discussion. E-mail can be also used after the writing process to receive a quick feedback from teachers.

### **2. Research questions**

1. Does the problem of poor achievement of academic written production occur because students do not exploit ICTs (Word processor, e-mail, and internet)?
2. Does the use of ICTs (Word processor, e-mail, and internet) help students to learn more about the academic writing process?

### **3. Hypotheses**

1. If students at university are effectively instructed to the use of word processor, e-mail, and internet, the problem of poor achievement of any academic written production will be reduced.
2. IF students use the word processor, e-mail, and internet appropriately before, while, and after the academic writing process, they will learn more about the academic writing process.

### **4. Aim of the study**

We believe that academic writing is one of the most important skills in any foreign language, especially in an academic setting. This current study deals with discovering whether the use of ICTs affects student's academic writing. Since TCTs are used incredibly at university, this investigation tries also to realize whether the use of internet, word processor, and e-mail can help students to learn more about the academic writing process.

### **5. Methodology**

#### **5.1. Procedures and data collection**

To carry out this descriptive research, one research instrument will be used to guarantee the hypothesis. Firstly, we will rely on the teachers' questionnaire as an appropriate way to know their attitudes toward the use of the ICTs in developing students' academic writing. This questionnaire will also provide us some reasons of the learners' poor achievement of any academic written production. Questionnaire will be distributed to a random sample of written expression's teachers. Then, students will also receive questionnaire to be answered in order to know whether ICTs may really help them to develop their academic writing.



## **5.2. Participants**

In this study, the sample is the master two students of Biskra University. The reason from choosing this exact sample is simply that at this level, Master two students are required to write research proposals and research papers. This means that students are certainly asked first of all to develop their academic writing, and second to start exploiting the ICTs( internet, word processor, and email.) while making their academic written productions. In addition to that, this sample of students takes the task of answering the questionnaire seriously and honestly since they are also making researches.

## **5.3. Data analysis**

After answering the questionnaires, they will be analyzed by using the descriptive analysis, and the results will be presented in tables to explain to what extent do the ICTs help the students to develop their academic writing?

## **6. Structure of the dissertation**

The current research in fact is consisted of three main chapters. The first two chapters are designed in order to define some concepts and explain the relationship between the two variables of this research study. On the other hand, the third chapter is devoted to the analysis of the results obtained from both teachers' and students' questionnaire.

The first chapter will discuss some theoretical issues related to the concept "academic writing" i.e., it includes the nature of writing, some different definitions of academic writing. It comprises also a comparison between academic writing and other writing contexts, as well as, what is meant by the Rhetorical situation. Then, we will cast the light on the term plagiarism, as well as how students can avoid it. Besides the stages of

academic writing, types of writing, characteristics of academic piece of writing are also taken into account. Finally, this chapter explores the purposes from providing feedback to learners.

The second chapter will deal with the ICT tools and their relationship to the academic writing. Therefore, it attempts to define the term Information and Communication Technology. Then, some information will be provided about the historical perspective of integrating ICTs into education. After that, a great consideration is devoted to the advantages of integrating ICTs into education. The final and most important subsection of this chapter attempts to explain how the three ICT tools namely word processor, e-mail, and internet help learners to improve their academic writing.

The practical chapter will attempt to discover the relationship between academic writing and the ICTs. This attempt will rely on the data collected through both teachers' and students' questionnaires. Thus, the chapter will first start by identifying the sample and providing the description of both teachers' and students' questionnaire; then, it will proceed with the analysis of the data we will collect. The interpretation will be drawn based on the analysis of the data.



**Academic Writing**

## **Introduction**

The first chapter discusses some theoretical issues about academic writing such as the nature of writing, some different definitions of academic writing. It comprises also a comparison between academic writing and other writing contexts, as well as, what is meant by the Rhetorical situation. Then, we will cast the light on the term plagiarism, also how students can avoid it. Besides the stages of academic writing, types of writing, characteristics of academic piece of writing are also taken into account. Finally, this chapter explores the purposes from providing feedback to learners.

### **1.1. The nature of writing**

Humans regard writing as one of the most significant tools used to reach the act of communication. For this reason, many researchers are still investigating in the complex nature of it. The purpose from this continuous investigation is to define writing clearly, effectively, and purposely. Ann Browne (1999, p. 1) states, “when thinking about writing it is helpful to make a distinction between writing as an activity and writing as a set of symbols and conventions “ this absolutely means that the term writing can be defined as a set of symbols or as an activity. Consequently, there are a number of diverse perspectives, which identify the act of writing differently.

The first definition of writing is the one that emphasizes on the linguistic perspective. The last in fact tries to explain that writing equals only a set of graphic symbols. In this respect, Hyland (2003, p. 3) regards it as “marks on a page or a screen, a coherent arrangement of words, clauses, and sentences, structured according to a system of rules”. This current definition casts the light on the linguistic perspective while determining this complex concept i.e., Hyland views that writing contains a set of graphic

symbols related and arranged according to certain linguistic rules to combine words, phrases, and clauses. Byrne mentions also that writing is “the act of forming these symbols: making marks on a flat surface of some kind” (1991, cited in Azzoui, 2009, p. 4). Meaning, he argues on Hyland’s definition of writing. Byrne emphasises that writing is the act of formulating graphic marks following certain linguistic conventions. Crystal (2006, p. 257) argues also on the previous definition in which he claims, “writing is a way of communicating which uses a system of visual marks made on some kind of surface”. By his definition, Crystal extended the limitation of writing i.e., he views that writing is not only a visual symbols arranged linguistically, but it is also a tool of communication that enables humans to exchange speech. To explain more, according to the previous definitions, it seems that writing involves the use of graphic symbols for communicative purposes.

The second definition of writing is the one that considers writing as an activity rather than as a set of symbols. That is to say, it focuses more on the function of the term writing (why writing is used) rather than on the form (how writing looks like). Therefore, Rivers and Temperley state, “To write so that one is really communicating a message isolated in place and time, is an art that requires consciously directed effort and deliberate choice in language “(1979; Cited in Azzoui, 2009, p. 5) This present definition considers writing as an activity rather than as a set of symbols. i.e., writing is not seen as just graphic symbols arranged according to certain linguistic rules, but as an activity; it involves producing meaningful segments to carry a message in the language since its main goal is to communicate. According to Vallis (2010),” speaking and writing can communicate ideas. In other words, writing is often communication” (p. 169) .Writing and speaking are equally important means of communication. Consequently, writing like speaking, is seen as a medium used to communicate, express, and discuss humans’ thoughts and ideas. Dean

declares also” A writer knows that writing can be used to articulate, rehearse, explore and consolidate ideas, concepts and knowledge. (Writing has many potential functions” (2004, p. 109). Brindley utters also” For the individual author, writing can have cognitive functions in clarifying and supporting thought.” (2005, p. 151) Consequently, from these two previous definitions, it seems that the act of writing is not used as just a tool of communication, but it provides its users with opportunities to discover, understand, explain, and negotiate ideas and thoughts. Hence, writing is an act that requires the use of certain cognitive efforts.

To sum up, writing has been defined by many scholars differently. The first perspective defines writing as just a set of graphic symbols arranged according to certain linguistic conventions (linguistically speaking). Then, some scholars such as Rivers, Temperley, and Vallis identified writing in term of its purpose (to communicate) rather than on its linguistic structure and conventions. That is to say, the emphasis here is on the act of communication resulted by writing and not on the act of forming well-structured sentences and phrases.

## **1.2. Definition of academic writing**

Generally, academic writing refers to that type of writing used by the college or university students in order to fulfill their writing assignments accurately. Stephen Bailey thinks that “Academic writing is designed for anybody who is studying (or planning to study) at English –medium colleges and universities and has to write essays and other assignments for exams or course book.”(2003, p. VI) .This current definition emphasises that academic writing is planned specially for colleges and university students; it does not concern everybody. In other word, it is a complex type of writing which concerns particular users (colleges) for specific purposes too.

Since this type of writing limits its users, this certainly means that it is not an easy type of writing which all writers can accomplish. In this respect, Stuart and April, “Academic writing is the challenging intellectual price of admission to college.” (2012, p. V). The current definition indicates that academic writing is not an easy task. It requires colleges to exploit their intellectual capacities appropriately and effectively in order to reach a particular purpose. Meaning, while making any piece of writing, colleges are certainly required to establish a particular purpose in their works including ways of how to explain, persuade, proof, and inform.

Because academic writing is not an easy type of writing, it definitely contains certain conventions and structure to be followed. Hence, Caroline Coffin and others assert, “Students may be required to produce essays, written examinations, or laboratory reports whose main purpose is demonstrate their mastery of disciplinary course content.”(2003, p. 2). Students at university are essentially required to formulate different forms of assignment during their academic studies. These assignments include writing essay, research paper, article, business report...etc. All theses mentioned written productions are referred to as “academic writing” which follows certain conventions of structure, style, and content. However, all of these different assignments have the same goal, principles, and address a specific type of audience. Gillet, Hammond, and Martala-Lockett declare, “academic writing is different from other forms of writing in its relationship with its audience – that is to say the reader” (2009; p.2) .i.e., it has an obvious audience. Consequently, the work moves from one writer to another. That is to say, there is the writer and his audience.

The academic writing has particular purposes to achieve. Stuart and April believe that “Academic writing is a process of defining issues, formulating questions, and developing sound arguments.” (2012, p.12). In other words, this type of writing gives the

student an opportunity to clearly define and investigate an issue, posing questions related to that particular issue, and presenting his / her thoughts based on the evidences of his/ her research. It paves you the way to choose what seems to you as an interesting subject; it is your own spot to stand up and convince your intended readers. Academic writing allows you to contribute to the academic debate; you evaluate the arguments of others and suggest your own.

To sum up, all of these definitions above spot the light on three main points that academic writing contains. First, this type of writing is a hard task designed for only colleges and university students. Second, any academic written production should certainly follow particular conventions of structure, style, and content. Third, academic writing has one single goal, and addresses a specific type of audience.

### **1.3. Some differences between academic writing and other writing contexts**

Academic writing differs from other writing styles. Writing for yourself, a career means that your writing is certainly non-academic. Natilene Bowker mentions, “academic writing does many of the things that personal writing does not. Firstly, some kind of structure is required, such as a beginning, middle, and end.” (2007, p. 7). This insures that in any academic written paper, students are required to follow a particular structure (beginning, middle, and end). Nevertheless, in personal writing, people can express their personal events, feelings in term of short paragraphs without making an introduction, body, and conclusion.

Unlike personal writing, before start writing an academic piece of writing, students need first to accomplish four main elements; thinking critically, understanding the rhetoric, the use of high vocabulary, and accurate grammar. Therefore, David and Liss view that academic writing involves four main elements including the critical thinking skills, an



understanding of the topic being discussed, high level of vocabulary, and well correct grammar (2006). While, personal writing is found in literal compositions such as comprising creative writings, novels, stories, playwriting, and poetry. These mentioned compositions involve simple and informal vocabulary. Jordan R.R also declares that students at university are extremely asked to use an appropriate formal style while writing academically (1999, p. 8). This means that an academic writer must follow the formula that suit any academic piece of writing. Unlike academic writing, personal one refers to the act of writing freely without spotting the light on grammar and punctuation.

Technical writing is also a type of writing that should be compared with academic writing. In other word, it is necessary to determine the boundaries between academic writing and technical writing. Smith-Worthington & Jefferson emphasized, for technical writing, although it resembles the academic writing in several ways particularly unity, coherence, style, and organization, it conforms to different other ways such as structure, target, and use. For instance, a technical essay's content may include headings, boldface characters, graphics, and lists. Alternatively, neither academic nor technical writings have the same audience (target audience); on the other hand, technical writing is used for scientific researches, enterprise reports, and technical professions. Unlike technical writing, academic one is used for educational purposes in the academic fields (Smith-Worthington & Jefferson, 2010).To explain more, the academic writing is used generally in education and philosophy. For example, discussing certain historical events, and generating different perspectives on particular topic; it is exploited for the sake of discussing and defining a particular phenomenon, while the technical writing is more complex. It is utilized in scientific researches, and it involves vocabularies that are more technical. Therefore, this complex type of vocabulary can be understood by only the members of that particular scientific field.

#### **1.4. The rhetorical situation**

The term rhetorical situation is necessary in academic writing. Therefore, any academic writer needs to understand this concept in order to accomplish the conventions of academic writing. In order to illustrate this concept, Vandermeay and others viewed that any painter needs a set of elements to draw a piece of work through which he sends a message to a certain public. His public views the artwork, and grasps the received message. Similarly, any writer should follow the same process with regard to the elements comprising it. The sender (writer), message, medium, receiver (target audience), and context determine these essential elements, and all of which build the Rhetorical Situation (Vandermeay, Meyer, Rys, & Sebranek, 2012, p.3). Writers, in the academic setting, must acquire a basic perception of the rhetoric.

Successively, this basic knowledge of the rhetorical situation helps in both the analysis (reading) and the composition (writing) of the text. Once the writer – whether a scholar, researcher, or instructor – identifies and analyzes the source material effectively, he will be able to produce writing that meets his audience’s requirements, confine his work to the academic setting, and deliver his intended message. As result, Johnson-sheehan and Pain’s textbook *Writing Today* strongly state, “before you start writing any text, you should first gain an understanding of your rhetorical situation” (Johnson-Sheehan & Pain, 2012, p. 12). This understanding comes before the writing process.

## 1.5. Defining plagiarism

Just as it is unacceptable to copy from any composition prepared by another student, so it is unacceptable to copy material from any publication, or from the internet, and include it in your own compositions without proper acknowledgement. This would be plagiarism: stealing someone else's thoughts. You must not do this deliberately; and you must take great care to ensure that you do not do it. (Barrass, 2005, p. 24)

The act of plagiarizing is strongly unacceptable in any academic piece of writing. Many researchers do emphasis on the fact that any academic writer must avoid as much as possible this academic crime. Eggenschwiler and Dotson Biggs view that an academic writer is guilty of plagiarism in case when he/she does not acknowledge ideas borrowed from others (2001, p. 145). In other words, academics- while the writing process-are extremely required to give credits to any single idea borrowed from other people.

To avoid this type of academic crime, any academic writer needs to understand it correctly first. Hence, Barrass defines plagiarism as “stealing someone else's thoughts” (2005, p. 24). Essentially, plagiarism refers to the act of taking ideas, exact words, and expressions without referring to the original author. Educators regard it as an academic crime because the written ideas and expressions are private and belong to their authentic author (Bailey, 2011, p.30). In other word, using other people's ideas is one of the most important aspects of academic writing, but academic writer must use them appropriately too. Thus, Gillett, Hammond, and Martala confirmed, “if you use another person's ideas or words, you must say where you have taken them from; if you do not, you risk being accused of plagiarism.” (2009, p. 180). To conclude, as the writer in the academic writing

is required to use other peoples' ideas, he is strongly obliged to provide the full citation of these used ideas.

## **1.6. Avoiding plagiarism**

To shun such academic crime, in any English academic settings, the writer is strongly obliged to credit properly the sources he uses to their original author. Hence, his writing becomes legitimate; citing the sources offers the audience a trust worthy information with authoritative references. In other words, the audience reinsures that the information provided is completely reliable and robust. Gillett and others believe, "The ideas and people that you refer to need to be made explicit by a system of referencing."(2009, p. 180). They state also that two main ways of citation any academic writer can follow to avoid plagiarism; (1) direct quotation or (2) by reporting (i.e., summarizing or paraphrasing) (2009, p. 181):

### **1.6.1. Direct quotation**

Refers to situation when the academic writer wants to keep the exact and precise words of another author in his / her current work (Gillett, etal., 2009). When keeping the others' exact words, the academic writer must mention the author's surname, year of publication, and page number of that particular book. This is called the in-text citation following the APA style. For instance, Gillett, Angela, and Hammond state:"You would probably accept that you have to write in different ways throughout your lives. However, why do you need to learn about academic writing?" (2009, p. xix).

### **1.6.2. Reporting**

This means reformulating other people's ideas and thoughts in your own words (Gillett,etal.,2009, p.185). Reporting ideas can be made through paraphrasing or summarising. The former is used according to Eggenschwiler and Dotson Biggs "if your

interest is in the information a source conveys rather than in the author's expression, consider paraphrasing (putting the information in your own words) rather than quoting"(2001: 146). While Fulwiler asserts, "When you condense an author's idea, you are summarizing it. "(2002: 141). Two main ways a student can follow to demonstrate that he/she has used another person's ideas in his/her written production – integral or non-integral – depending on whether the author's name occurs within the cited sentence or in brackets (Gillett, et al. 2009, 185).

#### **1.6.2.1. Integral (author as part of sentence)**

For instance, according to Watson's school experience, during his school years, he never excelled at putting his thoughts on paper (2002, p. IX).

#### **1.6.2.2. Non-integral (author in bracket)**

During his school years, he never excelled at putting his thoughts on paper (Watson, 2002, p. IX).

#### **1.6.3. Reference List**

In addition to the references within the text (in-text citation), the academic writer is required as well to give a whole list of materials that have been exploited in his/her academic written production (Gillett, 2009, p. 194). The main reason from the providence of this reference list is to supply the information required to allow the reader to find a source (Gillett, 2009, p. 194).

Principally, while the writing process in any academic setting, student should utilize other's words followed by an in-text citation as well as a list of reference. On the same time as Gillett and others emphasize, "Do not forget that the central line of argument, the main voice, should be your own. This means that you will need to comment on or evaluate any other works that you use."(2009, p. 198). That is to say, an effective academic

piece of writing is the one that contains not only other people's ideas but the writer's reflection on them too.

## **1.7. The writing process**

Since writing seems to be a difficult task, this means that it can not be accomplished at particular moment; it involves a set of stages. In this respect, McCuen-Metherell and Wrinkler reported, "Writing is typically a hard work - even for gifted writers... writing process generally occurs in three stages: prewriting, writing, and rewriting" (McCuen-Metherell & Wrinkler, 2009, pp.3-5). Indeed, writing a blank page can be intimidating for many writers. That is because writing never goes from nothing to a masterpiece in one-step, hence it is linear and much like a process. Hence Eggenschwiler and Dotson Biggs argue, "The most realistic way to view writing is not as a straight line but as a back- and-forward movement" (2001, p. 135). In other word, writing is linear.

### **1.7.1. The prewriting stage**

The pre-writing stage comes at first; it occurs before start writing. Roberts noticed that most notably, during this current stage, writers tend mainly to draw an overview about the topic by understanding the given assignment, selecting a subject, and collecting information. At this phase, students start clarifying the assignment by themselves through asking a number of questions. For example, what they already know about the topic, what they may need to find out, and why and for whom they are writing (2004, p.8). The prewriting stage is an important step for the writing process. Before start writing, student should first prepare him/her self simply by understanding the Rhetorical Situation and the main purpose from the writing process. Cotton in 1988 emphasises," students who are encouraged to engage in an array of prewriting experiences evidence greater writing achievement than those enjoined to 'get to work' on their writing without this kind of preparation" (Cited in Roberts, 2004, p. 8). During this stage, students are expected to

understand the nature and scope of the topic, the audience and purpose, and the appropriate strategy for this assignment (Roberts, 2004, p. 10). L. Brandon, and K. Brandon also found that Free writing, brainstorming, clustering, and gathering information strategies are generally grouped under the heading of the prewriting stage (2011, p. 33).

### **1.7.2. The writing stage**

The writing stage is the second step of the writing process. At this stage, the student becomes able to pick his pen and start writing. Vandermey's textbook *the college writer* explains in detail the different components of the writing stage. In the writing stage, information must be written down. In other words, this step involves writing the first draft, and this is made through a followed techniques. First, opening your draft, this includes the act of engaging your audience (grabbing his attention). Increasing your reader's curiosity can be achieved through telling a short story, provoking quotation, posing a challenging questions, or mentioning little- known facts about the topic. Secondly, the writer develops the body paragraphs (developing the middle) and this is reached by covering the main points of his thesis. This means, while developing the body, the writer should advance his main thesis, design paragraphs that suit the form of his theses (building coherent structure), and arrange supporting details. Finally, concluding your paper(ending your draft) will contain reasserting the main points, as well as urging the reader, and finishing a complete and unified message (Vandermey, Meyer, Rys, & Sebranek, 2012, p.58-67).

### **1.7.3. The rewriting stage**

The rewriting stage comes at the end. During this stage, the writer is required to have another look on his/her written production. In this respect, Vandermey and others emphasized that this stage makes the writer revise, edit, and proofread his paper work. Therefore, revising, as a first task, is taking into account the whole paper's issues such as rhetorical situation and overall approach. Revising the rhetorical situation means asking

questions such as, have you stated your idea clearly, have you supported it, do your ideas promote your purpose, and have you provided your readers the information they need. In addition, this stage involves revising not only the flow of ideas and organization, but also voice, formality, and style (e.g. punctuation, capitalization, run on, and spelling mistakes). Paragraph issues (unity, coherence...) are also a major concern. Besides, editing and proofreading could be substantial assistants as a refinement for clearance, and readiness for submission. The former involves the writer to consider style, word choice, combine sentence, and avoid sentence errors. In the latter, the writer could become a reader, or instead, he invites readers of the same subject field in order to review punctuation, grammar, and spelling issues, conciseness and simplicity (2012, pp. 71-107).

## **1.8. Types of academic writing**

According to Murray and Hughes, When reading any academic written production, the reader notices a number of different patterns organizing the text. These patterns are *definition, description, comparison and contrast, classification, cause and effect, argumentation*. The use of these different types indicates that the writer has particular objectives and functions he is trying to achieve. He might blend those patterns in longer works such as theses, dissertations (2008, p. 3). The following is a summary of these types:

### **1.8.1 .Definition**

Defining terms and ideas precisely in academic writing is very important due to several reasons. One of the main reasons is that while many writers use similar terms to mean different concepts due to context variation, clearance and preciseness of terminology is strongly recommended to avoid misunderstanding. In addition, these terms play an integral role in clarifying your thesis's main points, claims, and arguments you are using (Gillett, 2009, p. 115). Vandermeij and others emphasize, "Writers compose definitions for



a number of reasons—to correctly define a misunderstood term, to deepen or re-direct its meaning, to plumb a term’s history, or to entertain readers.” (2012, p. 232). Practically, this type of writing has three major purposes. First, it exhibits the writer’s perception of concepts. Second, it helps structuring the whole paper. Finally, it is a useful technique to advance the writing process.

### **1.8.2 .Description**

Students sometimes are required to describe something such as, an object with its component parts, a system (sequence of events), or process (Gillett, 2009, p. 117). The first one is explaining the parts, or the constituent elements of a certain object, and perhaps describing the functions of each element. The second one is describing a sequence of events, this form is often referred as chronological, which means that time sequence is used in description. Mostly, this form uses the following linking words: *before, after, subsequently, prior to, earlier, respectively, until, during*. The last form is using a series of steps to describe something in a particular order (process); for example, scholars usually explain the term research by providing its main steps such as identifying a problem, reviewing literature, stating hypothesis, collecting and analyzing data, then generalizing the findings.

### **1.8.3. Comparison and contrast**

Vandermeij and others claim that, “Writers compare and contrast subjects in order to understand their similarities and differences. Their purpose may be to stress the similarities between seemingly dissimilar things or the differences between things that seem quite similar.”(2012, p.182). This strategy compares and contrasts the similarities and differences between two subjects, objects, or more. It generally contains three methods for structuring any text. They explain also that,” Such writing is generally structured either subject by subject (first dealing with one topic fully and then the other) or trait by trait

(holding up the topics side by side, feature by feature).” (ibid, 182).i.e., first, all similarities are discussed in one block then all differences in another. Second, this is where each point is solely compared and contrasted between two items. Another structure involves putting all similarities and differences of one item in one block, then providing all similarities and differences of the other item in another block.

#### **1.8.4. Classification**

Classification is also one of the most important academic writing types students should understand. Therefore, “Classification is an organizational strategy that helps writers make sense of large or complex sets of things. A writer using this strategy breaks the topic into individual items or members that can be sorted into clearly distinguishable groups or categories.”(Vandermeij.etal. 2012, p. 200).That is to say, this process helps the writer to organize his text through decomposing its main points into manageable parts. As a result, those parts follow a logical order in order to discuss and highlight the main topic separately. Thus, writing becomes clearer. In consequence, the reader will be able to absorb a logical relation between the different components comprising the whole subject, and he will comprehend how well they are integrated to shape it. For example, music can be classified into two main categories: traditional rock music, and pop music.

#### **1.8.5. Cause and effect**

In the academic setting, writers use the cause/effect strategy in their writing remarkably to present a clear discussion of their subject to their audience. In consequence, they explain the reasons why events happened and justify the effects that go behind it. Vanedarmey and others cite,” In a cause and effect essay, the writer develops the thesis through cause and effect reasoning. That is, she or he analyzes and explains the causes, the effects, or both the causes and the effects of a phenomenon.”(2010:163). Similar to Comparison and contrast essay, the writer either:

- Discusses all causes and all effects in different paragraphs
- Sets every cause aside and then discuss its effects in the same paragraph.

#### **1.8.6. Argumentation**

Kathi Wyldeck in her book of How to Write an Essay asserts, “This type of essay focuses positively on the side the writer believes is correct, and finds fault in the opposite point of view. The writer’s job is to argue well enough to convince his readers that he is right.”(2013, p. 17). This type of writing attempts to persuade the reader to the writer's point of view. It is the most important and equally difficult strategy. To develop a good argument, this pattern of academic writing requires the least basic elements such as logic, focus, strong evidence presentation, appropriate linking words, and phrases .i.e., as Vanedarmey and others affirm, ” The writer presents the topic objectively, describes alternative positions fairly, and takes the position supported by the best evidence and strongest logic”(2010, 266). In addition, the writer has to obtain the potential of embracing a crucial and unbiased view in support of his claims. i.e., an argumentative essay requires providing evidence, facts, statistics, and demonstrations.

#### **1.9. The main characteristics of academic writing**

Student’s main purpose as academic writer is to communicate information and ideas clearly. Definitely, these ideas and information are not placed randomly in blank page. i.e., academics -while making scholarly writing- are required to follow certain conventions. Theses conventions are termed as characteristics of academic writing. The following points are some of the academic writing features that any writer needs to accomplish:

### **1.9.1. Organization**

Davis emphasizes in his book of scientific papers and presentations, “Organization and development are concepts that cannot be separated. It may be that a second point in your text will not be understood until the first point is developed.” (2005, p.26). That is to say, ideas are not put randomly in the student’s paper. He must order them in a way that avoids ambiguity. For example, when writing about the reasons that cause globalization, students need first to define what is meant by globalization, so the reader can understand clearly its main reasons. Davis views also that an academic writer can make well-organized ideas by just putting in his mind that someone is listening and asking questions such as what did you do?, how did you do it?, what do you mean?.... The answers of these continuous questions compose well-organized ideas (ibid, p.26). Eggenschwiler and Dotson Biggs Highlight too that “a paragraph should be well organized (2001, p. 163).

### **1.9.2. Relevance**

Barrass thinks that student is required to provide only information needed by the reader or by the question being discussed (2005, p.22). That is to say, while writing any composition, students should insure that all composition’s ideas are relevant to each other and to the topic too. Therefore, Davis emphasises that before the writing process, “it is vital that you select the sources that are relevant to your specific topic and reject the irrelevant or inappropriate.” (2005, p. 42). Since the topic or question is bounded, writer’s answer should be limited too. For instance, when making a particular calculation ( $2.5 \times 3.5$ ), the calculator gives the exact result (8.75) without missing or adding something else. Correspondingly, with writing, the writer should provide the reader with only the information he involves.

### **1.9.3. Clarity**

After writing your essay or dissertation as college student, your tutor(as reader) will have many dissertations to read too on the same time, therefore readers will spend only few minutes in reading your essay and this is because of time. In this case, academics are extremely required not only to attract your tutor's attention, but to state what you want to say as clearly as you can (starkey, 2004, p. 11). That is to say, the most effective academic writer is the one who makes the reader grasps the whole ideas without ambiguities. Thus Barrass stresses," Each instruction must be a complete and carefully constructed unambiguous sentence, so that the action required at each step cannot be misunderstood."(2005, p. 22). That is to say, the academic writer is not only required to provide his own thoughts but to choose the appropriate way, which in turn helps the reader to understand the written ideas without ambiguities.

### **1.9.4. Formality**

Formality is one of the most significant features of academic writing. Moreover, students are highly required to use pure and formal language when composing their written productions. Taylor declares, "Academic language need not be stuffy. Even so, the colloquialisms of conversation and the informalities of advertising copy and of certain newspapers and magazines are best avoided "(2009, p. 232). This means that academics should avoid the informal expressions (e.g. colloquialisms, jargons) that are used in English spoken form. Under the formal and informal language title, Taylor mentions three main points that should be evaded. First, Contractions such as don't, didn't, haven't, I'll, she's, should be reserved only to the informal spoken setting like talking to your friends or tutor. Second, personal pronouns such as I, We, you should be out of any academic written production because they are used only for seminar, a tutorial delivery, or a conversations with friends and tutors. Third, while using abbreviations, Taylor emphasizes that the

academic writer should write the name out in full at first mention followed its abbreviation in parentheses (2009, p. 232).

### **1.9.5. Subjectivity**

Subjectivity is one of the most important elements that the academic writer should avoid. Therefore, its definition is very significant for the writer in order to accomplish the academic writing characteristics. Toby Fulwiler emphasises that students may have the right to demonstrate their personal judgments when dealing with the interpretive disciplines like history, philosophy, and literature. While in the quantitative disciplines such as chemistry, physics, mathematics, and social sciences, writers should state their academic assertions followed by well-convinced evidences and documents (2002, p.66). To address such fact, one should avoid the use of words such as ‘I’, ‘me’, and ‘you’, and ‘I think’. i.e., it will be more appropriate for the writer to use impersonal words such as ‘it is worthwhile to consider...’ ‘the data indicates that...’ (Gillett,etal., 2009, p. 95). That is to say, when dealing with academic disciplines, the academic writer needs to focus first on the information he uses than on his own personal thoughts. Therefore, Gillett and others stress, “People reading your work want to know what you have studied and learned and how this has led you to your various conclusions. The thoughts and beliefs you express should be based on your lectures, reading, discussions and research, and it is important to make this clear in your writing.” (2009, p. 94). That is to say, through the academic written production, the writer needs to exhibit the sources he uses and explain his point of views based on these sources (evidences).

### **1.10. Feedback**

After submitting your written production to the teacher, you should not understand that the act of writing is finished. In other word, the teacher’s feedback on your written assignments consists also another stage of writing. According to Selmen, Feedback

directed to learners about their written productions is an effective procedure teachers can use to develop their learners' writing proficiency. The main purpose of feedback then is to make learners aware of what is expected from them to provide as writers .i.e., helping them to produce compositions with minimal errors and maximum clarity (2006, p.43).Also, K. Hyland, and H. Hyland view that feedback can be provided in form of written commentary, error correction, teacher-student conferencing, or peer discussion. It is considered as one of the most important tasks that teachers utilize in developing ESL writing process (2006, p. XV). Furthermore, Caroline Coffin and others affirm that teachers tend to provide feedback to learners in order to encourage learners' writing development, to teach specific academic writing conventions, and to indicate the strengths and weakness (of both content and form) of particular composition (2003, p.104).

That is to say, writing logically contains three main stages namely the pre-writing, the writing, and the re-writing stages, but in fact, one cannot assume that a student has finished his writing process until he receives his teacher's feedback on the written production he formulated. This simply means that after receiving this feedback, the learner is required to re-write his assignment once again in order to overcome the weaknesses and problems he discovered from the feedback sent by his teacher. As well as, Race stated, "When learners have tackled an assignment, feedback from tutors is much more effective if it is received while learners' thoughts on the work are still fresh in their minds. Ideally, it would be best for them to receive feedback within hours of submitting their work for assessment" (2005, p. 129). Meaning, when feedback is lately received, students may fail in linking teacher's feedback to what they wrote. As result, no progression will be noticed from the writing process.

## **Conclusion**

This chapter has involved an attempt to review the concept of academic writing as defined and discussed by many linguists. This interest in the academic writing, as an important skill in foreign language learning, leads scholars to identify its main features and understand how it differs from other types of writing. It is also shown throughout the chapter that students should acquire a basic perception of the rhetoric and avoid the act of plagiarizing. This chapter consists also of a detailed discussion of the stages that learner experiences while the academic writing process. Before experiencing these writing stages, students should determine first their goals from the writing process. Therefore, the current chapter emphasises on the fact that the use of different writing types indicates that the writer has particular objectives to reach. The last point is mainly centred in showing the purposes from providing students with feedback about their written productions.





Academic Writing and ICTs

## **Introduction**

This chapter attempts to elucidate the relationship between the main two variables. In this vein, the current section underlines the use of ICTs as a contributing factor in developing the academic writing. Thus, it focuses first on defining the term Information and Communication Technology. Second, a great consideration is devoted to providing information about the historical perspective of integrating ICTs into education. Then, some advantages of the integration of ICTs into education are listed also. The final and most important sub section of this chapter attempts to explain how the three ICT tools namely word processor, e-mail, and internet help learners to improve their academic writing.

### **2.1. Definition of ICT**

The term ICT is widely used among learners and teachers. Therefore, a great emphasis should be devoted to its definition in order to understand its benefits. Hajdini viewed that Information and Communication Technology (ICT) is the integration of both hardware (computers) and its associated software (applications and systems) to store, process, and display certain information. This data includes texts, sounds, graphics, and videos. Nevertheless, computers, networks, satellites communication, and different other equipment form the ICT. For example, a network such as Internet contains a web server(s) that utilizes particular software and systems, so that it interacts with users' computers to form a communication link. This attachment symbolizes one of the important components of ICT (2010). In other word, the term ICT includes both the use of computer (hardware) and its applications (software). The hardware includes computers, digital cameras, internet, and mobile phones, while the software contains email, word processor, videoconferencing, and searching on the internet.

An additional definition shows that ICT emphasizes the role of communication forms (SMS, email, data sharing, video-conferencing...) and the Information Technology (IT) such as telecommunication (telephone lines, wireless, satellites...), computers, mobiles, and their essential media systems (Information and communications technology, n.d.). In other words, ICT assimilates Communication into technology. For instance, email uses computer and telephone lines to establish a connection. Consequently, the user becomes enabled for not only data access and storage, but also transmitting and manipulation this data from one place to another.

## **2.2. A historical perspective of ICT-Education relevance: UK government initiatives**

The 1980s decade witnessed a crucial change in Education due to the wide spread of technology. First, the new Conservative government accompanied a program (The National Microelectronics Education Programme) to support and provide services to schools. The aim was to help pupils with difficulties and disabilities benefit from the use of technology. Second, in 1982, four Special Education Micro-Electronic Resources Centers (SEMERCs) were created through this program. They focused on providing development, software peripherals, and training to support students' needs. (Florian & Hegarty, 2004, p. 23)

Late in 1980, technology was not only important for supporting learning, but also learners became independent, and achieved exceptional potentials that were not expected before. That is to say, through technology, learners became able to get access to the curriculum independently (without teachers). ICT seemed essential; therefore, measures and efforts were taken in order to disseminate it to all teachers across the educational spectrum. In the meantime, the government placed huge financial magnitudes for research

and development concerning the use of ICT in education. As well as making technology as part of instructors' tools of teaching. (Florian & Hegarty, 2004, p. 26)

In the 1990s, the Information Technology in schools persisted until 1993, and pictured a dedication of £90 million into support and training for ICT use; however, new priorities aroused to exploit the energy of teachers. The first was creating the National Curriculum, which resulted the teachers to spend large amounts of time adapting their requirements to the new curriculum. Still, the project became a failure even after several revisions ranging from 1994 to 1997 because IT was not designated a 'core subject'. The second priority was to build an IT infrastructure where hardware and software took place in schools such as CD-ROM technology, and multimedia computers. (Florian & Hegarty, 2004, pp. 27-28)

Eventually in 1997, Dennis Stevenson, in his report, explained that despite the increasing number of initiatives (projects on using ICT in schools) the "state of ICT in our schools is primitive and not improving" (as cited in Florian & Hegarty, 2004, p.29). However, he implicitly guided a new strategy for ICT usage when he described the National Grid for Learning, one of the government initiatives, as a "mosaic of interconnecting networks." Therefore, it had three components: Infrastructure (computers, printers, and connectivity – including cabling, internal networks, and internet), Content (documents, textbooks, and resources), and Practice which involves how people helped learning in the classroom and schools. (Florian & Hegarty, 2004, p. 30).

### **2.3. The advantages of using ICT tools in education**

The integration of ICT in fact has provided both teachers and learners with a number of positive effects. The last should be therefore addressed in order to see to what extent this integration facilitates the teaching and learning processes. According to Kennewell, the term ICT becomes an important part of the modern world; many aspects of

human's life depend on this term. Its positive effects on commerce, industry, and the home were mentioned in Stevenson's report (1997) (2004, p. 14). . The last concluded that is vital for education to integrate ICT into the teaching and learning processes (Kennewell, 2004, p. 14). Kennewell & Beauchamp (2003) identified the benefits of ICT for both learners and teachers. They viewed that ICT helps learners to:

- access a wide range of up-to-date information sources from within and beyond the school;
- process information and develop high quality reports;
- produce dynamic images to represent relationships;
- hypothesise and test ideas for themselves;
- engage in activities similar to those carried out by professionals and academics in the subject;
- work together in teams;
- work independently of their teacher.

It helps teachers also to:

- access a wide range of up-to-date information sources from within and beyond the school;
- prepare high quality material for pupils to see as a class and to interact with individually;
- organise a variety of resources in advance of a lesson that can be accessed easily and rapidly for class use;
- focus pupils' attention on key concepts;
- monitor pupils' progress on tasks;
- analyse pupils' attainment and set targets for learning;

- collaborate with colleagues in other schools and at times of their choice.

(Cited in Kennewell, 2004, p.15)

From the advantages provided above, it seems that the integration of ICT tools into education serves both teachers and learners.

## **2.4. Developing academic writing with major ICT components**

As technology developed, both education and ICT became inseparable; in fact, technology has even focused on a different standard of education, which is a language form. The most important one is the writing form. It has always been the concern of not only teachers and students of the academic fields, or the higher education institutions, but also the technology-related organizations and enterprises. Therefore, several applications were developed for this concern and were distinguished according to their function, context, and purpose..., and they became the reason behind the pervasion of ICT (in education). Overall, according to Macalister and I.S.P. Nation, ICT integration comprises two notable fields: the Computer Assisted Language Learning (CALL) and the Computer-Mediated Communication (CMC). However, The CMC seems to be a sub-category of CALL (Macalister & Nation, 2012, p. 93).

### **2.4.1. Computer Assisted Language Learning (CALL).**

Is a field in applied linguistics that is specialized in using technology for language teaching and learning. After that, the field expanded and developed in parallel with the occurrence of computers, multimedia, and the internet. On the other hand, CALL comprises both English Language Teaching (ELT) software, and the web 2.0 tools (blogs wikis, podcast, forums, and word processors...) that are involved in teaching and learning. (Robinson, 2013, p.106), this diverse application of CALL has provided a number of terms

utilized to refer to the use of technological tools in the language classroom such as CMC (Robinson, 2013, p.106).

#### **2.4.1.1. Word processor**

It is the most common basic application in the rapid change in the world of technology. According to Sigafos & Green, this surprising tool superseded the traditional typewriter; it implements and executes several functions and tasks respectively. This powerful application, word processor, eradicates all problems and deficiency found in traditional tools; thus, simplifying the writing process (Sigafos & Green, 2007, p. 45). “Word processor can help you readily fulfill the conventions of academic writing and the formatting function that our instructor may insist on” (Raimes, 2012, p. 58).

Word processor is a powerful tool that makes use of editing and revising the text. It permits its users to produce professional documents. The writing process is complicated when the writer is engaged in a number of simultaneous actions. For example, choosing the needed words to get the point across, putting these words in appropriate order, spelling the letters and words, checking for grammar and punctuation....In turn, the word processor stages all these tasks making it more manageable. Moreover, it helps the student to accomplish stages in the writing process such planning (pre-writing), composition (writing), and re-writing (editing, revising, and proofread). By planning, students can use brainstorming and mind mapping software in the computer. By composition, learners can start writing directly (the first draft) without paying attention to spelling mistakes unless the draft is finished; thus, they move to the re-writing stage where the student revises, edits, and proofreads his work without re-writing the whole paper.(Galloway, 2007, pp. 55-58).

The word processor assists learners to achieve all the writing stages. Since software programs (word processor) include more complicated editing, translation, and dictionary

tools (DeVoss, 2010, p. 47). Caroline coffin and others state, "word-processing allows for extensive revision of work, and students may find the grammar, spelling and word-count tools useful" (p. 131). David L. Ferguson and others emphasize also on this point i.e., they stress that during the writing process, errors of punctuation and capitalization seem to be artifacts of handwriting. Whereas, writing through word processor tends to overcome all these mentioned errors (1992, p. 24).

VanHuss and others (2013) explained that the word processor underlines words and expressions with red and blue colors. The Red color indicates spelling errors while the blue one shows grammatical errors. (p. 107). For example, when student makes spelling mistake, the word processor automatically underlines the mistake with red color in order to show it to the writer. In this case, the student can press on the underlined mistake. As result, a window contains several correct suggestions will be exhibited. Therefore, student can choose one of these correct options. See figure 2.1 and 2.2



*Figure: 2.1: Correcting grammar mistakes*

Source: VanHuss, S. Forde , C. & Woo, D.( 2011), p.107





*Figure: 2.2: Correcting spelling mistakes*

Source: VanHuss, S. Forde , C. & Woo, D. (2011), p.107

Hence, Marilyn Cochran-Smith and others asserted, “when they write with word processing, students often produce neater, more error-free texts than they do with paper and pencil.”(1991, p. 49). Macarthur (1988) classified various functions of word processor that improve the writing process. He viewed that word processor facilitates revision by using the spelling and style checkers. In addition, this software reduces the physical demands of writing by changing handwriting with typing (cited in Montague, 1990, p. 103). Moreover, Revision is one of the most important options that word processor contains. Under the heading of these options, grammar and orthography option addresses issues that include grammar and style. In other word, this surprising tool tends to correct the existing fragments, unclear phrasing, and run ons in order to achieve clarity. In addition, it focuses on replacing colloquialisms, jargons, and first personal pronouns by other words in order to reach formality and subjectivity. Meaning, writing through the word processor assists learners to accomplish the most important academic writing characteristics.

Beins, B. (2012) mentioned, “It is easier to use your word processor to format the reference. “(p. 105). Butterfield underlines the current point; he views that managing citations and source material can be easily carried out through using the word processor (2010, p. 68). The word processor in fact helps its users to fully cite materials and avoid

plagiarism. In other word, this powerful application contains many different styles of citation such as APA, Chicago, and MLA style. Thus, student can select the required style of citation. After choosing the citation style, student should provide the needed information about the source material (e.g. book, article) to the word processor in order to formulate the in-text citation (of particular borrowed idea). Through this software, academics can also create the list of references. Consequently, writers by exploiting the word processor can evade plagiarism.

In conclusion, Ryan and Cooper stated, “The more students edit their writing, the more they learn about the writing process.” (Ryan & Cooper, 2008, p. 206). In this respect, the word processor encourages students to revise, edit, and proofread their academic written productions. Therefore, they learn more about the writing process.

#### **1.4.1.2. Internet**

The term internet is broad in fact. Hance, a great emphasis should be devoted to defining it according to the purpose of the user. Mills in his book of using the internet for active teaching and learning cited, “The Internet is a global network of networks through which computers communicate. It is an infrastructure consisting of computers, cables, wires, and other telecommunications devices plus the protocols to allow these computers to easily communicate with each other. The Internet has had a profound effect on almost every aspect of our lives, changing the way we do business, communicate, and even educate ourselves.”(2006, p. 45). Mills emphasized that this term affects all human life’s aspects especially education. In other word, the way of teaching and learning materials changes greatly through using the internet. In fact, writing is one of the most important aspects that learners attempt to enhance by using the term internet. Therefore, Mills viewed that internet should be integrated into classroom in order to support a wide range of

learning activities. One of the most important features that this integration of internet provides to learners is information resources (2006, pp. 44-45).

#### **1.4.1.2. 1. Information resources**

As it was mentioned in the first chapter, the pre-writing stage comes at first. During this stage, students are supposed to understand the topic and the rhetorical situation. Therefore, according to Lewin, majority of EFL teachers realize that the pre-writing stage of the writing process is critical for students, simply because without time devoted to thinking, planning, and brainstorming, many students will hesitate while the writing process (Lewin, 2006, p. 106). VanderMey and others emphasize that through this stage, students are required to conduct a search about the topic in order to find a writing idea that meets the requirements of the assignment; students may search the internet to collect information about a particular topic.(2012, p.34). According to Mills, "One of the greatest features of the Internet is that it offers students relatively inexpensive access to a wealth of information across a vast range of fields" (2006, p. 91). Through internet, learners can get mostly access to four main needed web sites: virtual libraries, digital libraries, encyclopedias, and electronic and online journals. These web sites provide unlimited information to learners who will select the required ones:

The virtual libraries are frequently controlled by librarians. These libraries in fact identify electronic resources referred and reviewed by professionals, particularly librarians. Some examples of these libraries include The Librarian's Index to the Internet (<http://lii.org/>) and Infomine (<http://infomine.ucr.edu/>) library. The former is a searchable, annotated subject directory that contains thousands of Internet resources chosen and assessed by librarians for their usefulness to consumers of public libraries. This directory offers a well-organized point of access for reliable and trustworthy Internet resources. While the latter is a virtual library that is concerned with the providence of online

resources that are relevant to faculty, students, and research staff at the university level. These internet resources include useful databases, electronic journals, electronic books, online library card catalogs, articles, directories of researchers, and many other types of information (Mills, 2006, p. 91).

Digital library, or digital collection tends to exploit the electronic information technologies in order to digitize primary sources, bring them together (form collections), and display them online. Some examples of digital libraries comprise The National Science Digital Library (NSDL; <http://nsdl.org>) and The Library of Congress (<http://memory.loc.gov/>). The first in actual fact consists of resource collections and services (e.g. downloading, commenting) to promote educational science at all levels. NSDL provides online sources for science, technology, engineering, and mathematics education in order to develop science literacy through access to resources. The second digital library contains over 100 collections (resources) (Mills, 2006, p. 92).

Through online encyclopedias, students can easily conduct a research on topics that seem unfamiliar to them. An example of online encyclopedias may incorporate Encyclopedia.com (<http://www.encyclopedia.com/>) and Encyclopedia Britannica (<http://www.britannica.com/>). The first encyclopedia is a good web site that helps students to begin a research on any topic. It is a free Internet service that offers more than 57,000 regularly updated articles from the Columbia Encyclopedia (sixth edition). Each article is provided with links to newspaper, magazine articles, pictures, and maps. The second encyclopedia helps students to have free access to articles by using keyword search (writing your keywords), by browsing alphabetically, or by choosing a subject (Mills, 2006, p. 94).

Students can also rely on electronic journals when they are asked to write assignments. Mills explained that these online journals embrace journals, magazines,

newsletters, and any other type of sequential publication that is available on the World Wide Web. There are a number of electronic journals that are accessible presently, and new others are always being added (Mills, 2006, p. 96).

Cotton in 1988 emphasises, "students who are encouraged to engage in an array of prewriting experiences evidence greater writing achievement than those enjoined to 'get to work' on their writing without this kind of preparation" (Cited in Roberts, 2004, p. 8). In this respect, internet can be exploited in order to read and discover more things about the topic being discussed. Therefore, Fowler emphasized "consulting the Internet may be all the research you need do, in the early stages of writing." (2006, p. 167). When students read more about the topic, they will be able to formulate their own ideas, illustrate them, and provide resources to support their own thoughts.

Also, Ronald T. Kellogg viewed that students during the writing process are involved mostly to maintain certain cognitive operations. The last include collecting information, planning ideas in the realm of personal symbols. (1994, p. 16). This means that the academic writing process certainly does not rely only on the writer's own thoughts, but it involves also the providence of further information. As it was showed in chapter number one, most of the academic writing's types involve the use of other people's ideas. The last can be easily collected through the use of the four mentioned web sites (internet). In other word, student through this range of web-sites can develop his own find ability of information, think critically, and decide which appropriate information should be included. That is to say, learners can effectively produce well academic written productions if they possess more information about the topic being discussed.

### **2.4.1.3. Email**

Over the past ten years email has become a vital element of our business and personal lives and few of us could now operate without it. Indeed, for most organizations it is the primary method of communication because of its speed and the ability to send almost any size of information, anywhere in the world at any time. In addition, email makes it easy to retain, copy or discard a record. (Seeley and Hargreaves, 2003, p. xiii).

Email is a medium of communication used incredibly especially between learners and teachers. This tool of communication in fact plays great role in developing learner's academic writing. As it was mentioned in chapter one (page 18), teacher's feedback helps learners effectively in discovering their productions' strengths and weaknesses. Therefore, the focus here is on how email can help learners to receive feedback on their written work easily, quickly, and inexpensively.

In order to make learners better understand and effectively exploit teacher's feedback, the tutor should provide students with quick feedback. Moreover, Race stated, "When learners have tackled an assignment, feedback from tutors is much more effective if it is received while learners' thoughts on the work are still fresh in their minds. Ideally, it would be best for them to receive feedback within hours of submitting their work for assessment [...] Email of course be much faster."(2005, p. 129). However, when feedback is lately received, students may fail in linking teacher's feedback to what they wrote. As result, no progression will be noticed from the writing process. Brown and others consider email as the best tool teachers may use to provide students with rapid feedback rather than waiting till teacher and students return to the class(to the next session)(2005, p. 109) . That is to say, using email to send quick feedback when learners' thoughts on the task are still

fresh helps them to understand their weaknesses and find ways to overcome them immediately.

In addition, Phil Race mentioned, “It can be much quicker to compose email replies to individual learners than to annotate their written work. It is also quite easy to give feedback on work submitted electronically, for example using the ‘track changes’ function in Microsoft Word. Even without such sophistication, you can add your comments and notes in upper case or italics to distinguish them from the original work, or (if your system permits this) by using a different colour or an alternative font for your feedback” (2005, p.109). This consequently encourages learners to write their productions through the word processor. The written productions can be then easily sent through email to teachers. The last can make comments, notes on the same work and give it back to students directly. Receiving quick feedback through email pushes learners to correct their mistakes and address their weaknesses immediately since they are still mentally involved in the writing process.

In case when learners write assignments through emails, Brown and others acknowledged, “many email systems support spell-check facilities, which can allow you to type really fast and ignore most of the resulting errors, then correct them all just before sending your message. This also causes you to re-read each message, which can be very useful for encouraging you to add second thoughts that may have occurred to you as you went further in your assessment of the task.”(2005, p. 127). See figure 1.3

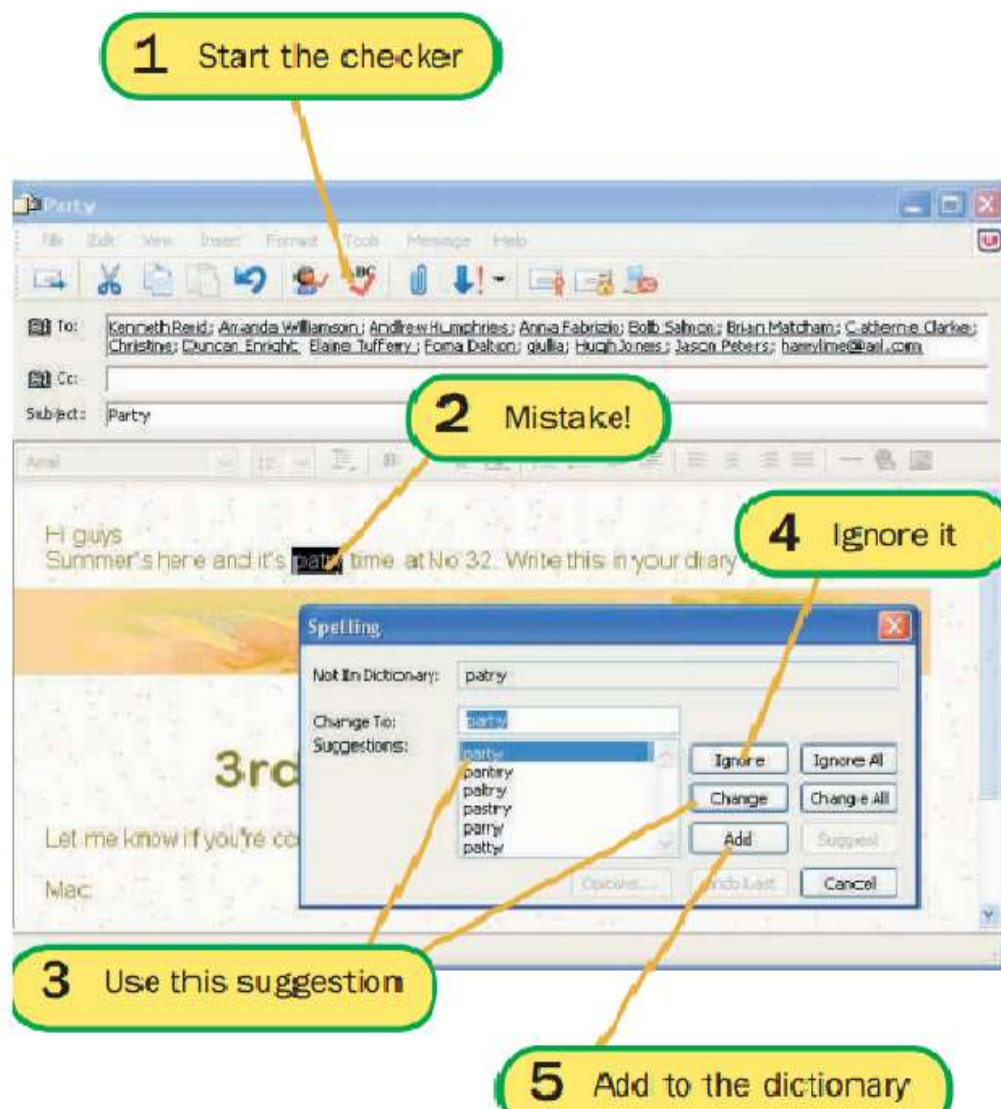


Figure 2.3: the spell Checker of E-mail

Source: McBride, 2006, p. 85

In other word, like the word processor, email also helps its users to avoid spelling mistakes using the spell-check. This option encourages also learners to read more their messages before sending them. As result of this re-reading, learners may add, delete, or adjust ideas (i.e., experiencing the prewriting stage; revising, editing, and proofreading).



## **Conclusion**

This chapter emphasized on the point that students should understand that the writing process does not refer just to the act of having paper, pen and start writing down directly some ideas about any topic. Therefore, the current section has involved an attempt to provide an insight about academic writing growth through ICTs particularly word processor, internet, and e-mail. In other word, students can utilize word processor to avoid grammatical mistakes and plagiarism. Internet can be also exploited in order to select the appropriate resources related to the academic topic that is under discussion. E-mail can be as well used after the writing process to receive a quick feedback from teachers. The last therefore should work on making students use these ICT tools while the writing process instead of using pens and papers.

## Data Analysis and Interpretation

## **Introduction**

The present chapter is devoted to the analysis of both teachers and students questionnaires. In the first section of this chapter, we will deal with the students' questionnaire and in the second section of the same chapter, we will analyze the teachers' questionnaire. The analysis of the students' questionnaire will enable us to understand to what extent the ICTs ( internet, word processor, and E-mail) help students in writing their academic written productions (i.e., its effects on students' academic writing). In addition, the collected data and the obtained results from the teachers' questionnaire will help us to encounter the difficulties and weaknesses that students share when writing their academic written productions. They assist us also to discover the teachers' attitudes towards the use of internet, word processor, and email by the learners before, while, and after the writing process as a solution to develop students' academic writing.

### **3.1. The students' questionnaire**

Master two students were asked to answer this current questionnaire in order to discover whether the use of Word processor, internet, and email help them to learn more about the academic writing.

#### **3.1.1. The sample**

The students who responded to the questionnaire were chosen randomly among the total number of the Master two students population , at Mohamed Kheider University, Biskra. The choice of the master two students was based on the consideration that at this level, master two students are required to write research proposals and research papers. This means that students are certainly asked first of all to develop their academic writing, and second to start exploiting the ICTs(specially internet, word processor, and

email.) while making their academic written productions. In addition to that, this sample of students takes the task of answering the questionnaire seriously and honestly since they are also making researches. The questionnaire was handed in by the researcher. 30 questionnaires were returned from the 37 initially planned and this represents our sample.

### **3.1.2. Description of the Questionnaire**

The questionnaire involves 17 questions divided into two sections. The questions include close-ended questions and multiple choice questions where students have to explain and justify their choice.

#### **3.1.2.1. Section One: The academic writing (Q1 to Q6)**

This section aims at getting the students' opinions about the time devoted to learning practicing, and developing the academic writing (Q1), and whether they need to extend the practices even outside the class (not only inside the class) (Q2). (Q3) tries to understand what is/ are the most important components that master students need to focus on when writing their assignments. This section also aims at understanding why students tend some times to repeat ideas or provide worthless ones (Q4) and discovering what is the most difficult writing stage for students and for which reason (Q5). The current part tends as well as to determine students' opinions about importance of the teacher's feedback on students' written productions (Q6).

#### **3.1.2.2. Section Two: Developing academic writing through ICTs (Q7 to Q14)**

The main objective of this section is to ensure that students use the three main ICT tools namely internet, word processor, and e-mail (Q7). It seeks also to understand for which purpose students use the internet (in order to collect information) and which type(s) of web sites they exploit (Q8). As well as, this current section tends to discover students' opinions about the importance of reading about the topic that they will be asked to discuss later on (Q9) and whether the use of internet is needed during the pre-writing stage in order

to formulate the primary outline (Q10). Since master two students are asked to use the word processor in typing their academic written productions, this part of questionnaire tries to realize whether students prefer to write through this software directly or use pen and papers when formulating their essays (Q11). It attempts also to ensure whether students notice that this software helps them in correcting their written mistakes or not (Q12), and how they learn from this help (Q13). This section tries to encounter students' attitudes towards the use of word processor when modifying their own ideas (Q14), and whether students do exploit the applications of this software when citing the sources they use. (Q15). It focuses as well as on discovering what kind of feedback students prefer to receive (quick/ or late) (Q16). Finally, this part aims at finding out students' opinions about receiving teachers' feedback through e-mail (Q17).

### **3.1.3. Analysis of the Results**

#### **3.1.3.1. Section One: The academic writing**

- 1. Do you think that two hours a week are enough for understanding and receiving more practices about the academic writing process?**

Options	Number	%
Yes	4	13%
No	26	87 %
Total	30	100%

**Table 3.1: Students' Opinion about Time devoted to understanding and practicing the academic writing**

As it is noticed in the table, 87% of the respondents consider that the time allocated to learning and receiving practices on the academic writing process is insufficient in order to cover most of the aspects needed to develop their academic writing skills, while 13% of the participants view that two hours a week are enough to understand and receive more

practices about the academic writing process. These results show that students should be given enough time to work at ease and to avoid working under pressure in order to develop their writing abilities.

**2. Does the act of writing involve ongoing practices both in and outside the classroom?**

Options	Number	%
Yes	30	100%
No	0	0 %
Total	30	100%

**Table 3.2: Writing involves ongoing practices both inside and outside the class.**

In the table above, the correspondents revealed total agreement on the point that academic writing requires continuous practices both inside and outside the classroom, and this simply because the time devoted to practices inside the class is insufficient. Therefore, students need (are required) to expand the time of practices even when they become outside the class in order to learn more about the academic writing process.

**3. In the academic writing, what is/ are the most important component(s) according to you ( case Master 1 /2) ?**

Options	Number	%
A	0	0
B	0	0
C	0	0
D	0	0
E	0	0
F	27	90
AE	1	3
ABC	1	3
ABCE	1	3
Total	30	99

**Table 3.3: Students' Opinion about the most important aspects of academic writing**

From Table 3.3, we see that the majority of students (90%) emphasized that all of content, vocabulary, grammar, punctuation, and spelling are very important. This means, when formulating any academic written production, student should take into account all these mentioned aspects. In the other hand, one student said that only content and vocabulary are very important. As well as, only one mentioned that content, vocabulary, and grammar are the most significant aspects that should be correct, while another student declared that content, vocabulary, grammar, and spelling are supposed to be very significant.

**4. Sometimes students tend to repeat ideas / or fail in providing worthy content when writing essays , and this is due to:**

Options	Number	%
A	10	33
B	17	57
a+b	3	10
Total	30	100

**Table 3.4: students' reasons towards the providence of worthless ideas**

Some students (33%) view that the main reason from repeating ideas or providing worthless content is due to the lack of information of the topic being discussed. In the other hand, the great majority of the students (57%) of the correspondents explained that sometimes they do have the ideas and information on the topic under discussed, but they are unable to express them appropriately and effectively. Only three students (10%) who chose both of the suggestions i.e., they do fail in providing worthy content due to the lack of information and the inability of expressing their thoughts appropriately. From the results above, it seems that students need to read more about the topic (that will be discussed) before start writing about it. As well as, they need also more time to express their thoughts appropriately.



**5. What stage(s) of the writing process is most difficult for you?**

Options	Number	%
A	24	80%
B	1	3%
C	5	17%
Total	30	100%

**Table 3.5: the most difficult stage of writing**

From Table 3.5, we see that the majority of students (80%) emphasized that generating ideas and writing an initial draft is the step in the writing process that gives them most difficulty. Only five students (17) who said that editing seems difficult to them and one single student claimed that revising seems the most difficult stage. That is to say, although revising and editing are crucial in the writing process, they do not seem to cause much difficulty for the majority of the students.

In this question, students in fact were asked to justify their answers. Therefore the following reasons explain their choices:

- Students who chose (a) due to:
  - The lack of the information on the topic.
  - The poor reading contributes to the poor ability to generate ideas.
  - It involves much more time and efforts.
- Students who chose (b) due to:
  - No justification.
- Students who choose (c) because:

- Editing involves changing ideas and correcting grammatical mistakes (it includes the whole stages).

- It involves much more time.

**6. Do you think that teacher's feedback on your assignments plays a crucial role in developing your academic writing level?**

Options	Number	%
Yes	29	97%
No	1	3 %
Total	30	100%

**Table 3.6: Students' attitudes towards the importance of the teacher's feedback in developing their academic writing**

As it is noticed in the table, 97% of the respondents said that the teacher's feedback on their written assignments plays a crucial role in developing their academic writing. This absolutely means that students need to receive the teacher's feedback on every single academic written production they formulate.

**3.1.3.2. Section two: Developing academic writing through ICTs**

According to your experience in writing your dissertation:

**1. What do you use when writing your dissertation?**

Options	Number	%
A	0	0%
B	0	0%
C	0	0%
A+B	12	40%
D	18	60%
Total	30	100 %

**Table 3.7 : Students' use of the ICTs**

According to the table 3.7, we insured that the majority of master two students (60%) use all of the internet, word processor, and e-mail. This automatically will help us to discover their attitudes towards the benefits of these used ICT tools during the academic writing process (when writing their dissertation). On the other hand, 12 students (40%) use only the word processor and internet and this simply because they do not send their written assignments through e-mail (i.e., they do not contact their supervisors through e-mail).

**2. Do you rely on the internet (e.g.: using online libraries, encyclopedias, and electronic journals) when collecting information?**

- **If “Yes”, what kind(s) of web-sites you have used?**

Options	Number	%
Yes	30	100%
No	0	0 %
Total	30	100%

**Table 3.8: the purpose from using the internet**

The data provided in the table 3.8 helped us to insure that students do use the internet in order to collect information and read more about the topics they discuss. That is to say, students will be able to explain to us to what extent the internet helped them in formulating their academic written productions (their dissertations).

Under this question, students were asked also to determine which type(s) of web-sites they use. The results are showed as following:

Options	Number	%
1	2	7
2	1	3
3	5	17
4	17	56
1+3	5	17
Total	30	100

**Table 3.9: types of web-sites students use**

The graph above insured to us that the majority of students use all online libraries, encyclopedias, and electronic journals which in turn help them to generate ideas and understand more about the topic they discuss. This result will help us later on to discover whether students do support the use of internet (using such web-sites) during the pre-writing stage since they have already dealt with it when formulating their academic written productions (dissertation).

- 3. If students collect and read more information about the topic being discussed, they may produce worthy content when writing their essays.**

Options	Number	%
Strongly agree	22	74%
Agree	7	23%
Disagree	1	3%
Strongly disagree	0	0%
Total	30	100%

**Table 3.10: Students' opinions about the effectiveness of reading and collecting information about the topic before start writing**

The graph above shows that the majority of the correspondents (74%) strongly agree on the positive effects of collecting and reading more information about the topic before start writing. That is to say, students strongly agree that they may produce worthy content if they understand and read more about the topic (before writing). On the other hand, some students (23%) agree on the previous point but not necessarily. That is to say, reading and collecting information about the topic are not the only sources that may help students to provide worthy content i.e., they may need only much more time during the pre-writing stage in order to think more and determine their prior knowledge on the topic being discussed. Only one single student disagreed with this point. This means that he/she views that reading about the topic (being discussed) is not an important step that enables him/her to provide worthy content.

- 4. According to your experience in writing your dissertation, do you think that the use of internet (reading online libraries, encyclopedias, and electronic journals) during the pre-writing stage can help you to generate your ideas and formulate your primary outline when writing your essay?**

Options	Number	%
Yes	9	30%
No	21	70%
Total	30	100%

**Table 3.11: Students' attitudes towards the use of internet during the pre-writing stage**

Based on the data exhibited in the table number 7, it is noticed that only some of the correspondents (30 %) agreed that exploiting the internet during the pre-writing stage can help them to generate ideas and formulate the primary outline easily and effectively. On the other hand, the majority of the students (70%) disagreed on this point. This means

that the use of the internet is not an important strategy that assists students to generate ideas and provide worthy content. Students who answered by “No” justified their answers.

First, the use of internet provides students with huge number of ideas which in turn can confuse them in choosing the appropriate ones. Second, using the internet during the pre-writing stage leads them to make plagiarism. Third, after borrowing ideas from the internet, students face difficulty in re-formulating these ideas in their own words. Fourth, students view also that time (devoted to the writing process) is the only reason that prohibits them from generating ideas and formulating primary outline effectively. Finally, one student stated that the internet is not a necessary technique learners need to exploit when writing an essay. (i.e., writing an essay does not require much more information).

**5. After using the word processor in writing your dissertations, do you think that writing through the word processor directly is better than using pen and paper?**

Options	Number	%
Yes	23	77%
No	7	23%
Total	30	100%

**Table 3.12: Students’ attitudes towards the use of word processor during the writing process**

According to the data showed in the table, it seems that majority of the correspondents (77 %) prefer the use of word processor rather than the use of pen and papers when formulating their academic written productions. In contrast, few students (23%) said that they favor the use of pen and paper rather than the word processor.

**6. Does the word processor help you in correcting your written mistakes (grammar, spelling, punctuation...)?**

Options	Number	%
Yes	30	100%
No	0	0%
Total	30	100%

**Table3.13: The word processor helps students in correcting mistakes**

As it is noticed in the table, the correspondents revealed total agreement (100%) on the point that the word processor helps them in correcting their written mistakes. This absolutely insured to us that students do notice that this software helps them in correcting their written mistakes during the writing process. Therefore, students will be able to explain to us whether they learn from the word processor's help or not during the writing process (the next question).

**7. Do you learn more about the mistakes you make when the word processor helps you in correcting them?**

Options	Number	%
Yes	28	93%
No	2	7%
Total	30	100%

**Table 3.14: learning from the word processor's feedback.**

The data provided in the table shows that majority of the correspondents (93%) who use the word processor learn from the mistakes that this software corrects. Students were asked to explain how they learn from this correction. Therefore they provided some points. First, the word processor's correction makes students more cautions in writing since

it constantly corrects their mistakes (it trains them to correct their mistakes each time) (learning through training). Second, it helps them in discovering the mistakes that they cannot discover when using pen and paper. Third, it assists them to learn from the suggestions and alternatives the word processor provides them with when correcting any mistake. Fourth, the suggestions and choices the word processor provides students with lead them to think, analyze, and choose the appropriate solution. Fifth, it helps them to learn from their mistakes in short time and without waiting the teacher's feedback (it provides them permanent feedback). Sixth, it is easier than checking other printed sources such as dictionary (no time consuming).

On the other hand, only two students said that they do not learn from the word processor's correction. Only one student provided his/ her justification. First student stated that he/ she used to ignore what is the mistake that the word processor highlights or, he/ se directly chooses from the options (that the word processor provides when correcting any mistake) without analyzing them. The second student mentioned that the word processor does not address all types of written mistakes.

**8. If you want to modify your own ideas, do you prefer to use:**

Options	Number	%
A	22	73%
B	8	27%
Total	30	100%

**Table 3.15: students' attitudes towards the use of word processor when modifying their own ideas**

According to the results exhibited in the table number 9, most of the students (73%) said that they prefer to use the word processor when modifying their own ideas (i.e., making the required modifications) rather than re-writing the whole paper through pen and



paper. In contrast, few students (27%) mentioned that they prefer to re-write the whole paper through pen and paper when modifying their own ideas.

**9. Do you exploit the word processor in formulating both the in-text citation and the bibliography of the sources you use?**

Options	Number	%
Yes	19	93%
No	11	7%
Total	30	100%

**Table 3.16: Exploiting the word processor in citing the used sources**

As it is showed in the table above, 93% of the correspondents admitted that they use the word processor when they come to cite the sources they use. This consequently means that the software (word processor) facilitates the act of formulating both the in-text citation and the bibliography of the sources (so students avoid plagiarism). In the other hand, a few students (7%) said that they do not exploit this software when citing the sources. Therefore they provided some reasons. First, they prefer to use pen and paper. Second, they do not know how to use the application (the word processor contains) that enables them to cite the sources. Third, the application involves much more efforts.

**10. After submitting your written production to your teacher, do you prefer to receive Quick or late feedback?**

Options	Number	%
Quick feedback	24	80%
Late feedback	6	20%
Total	30	100%

**Table 3.17: the type of feedback students prefer to receive**

The table number 11 demonstrates that most of the students (80%) prefer to receive permanent feedback. In other word, students favor to receive feedback within hours of

submitting their work simply because their thoughts on the work they did are still fresh in their minds. In contrast, 20% of students prefer to receive late feedback and their reason towards this answer was to insure that the teacher took his total time in reading the students' written productions (Only two students who provided their justifications).

**11. Do you prefer to receive immediate feedback from your teachers through e-mail?**

Options	Number	%
Yes	21	70%
No	9	30%
Total	30	100%

**Table 3.18: students' attitudes towards receiving the teachers' feedback through e-mail**

As it is noticed in the table, 70% of the respondents said that they prefer to receive immediate feedback from their teachers through E-mail. On the other hand, few students (30%) disagreed with this current point i.e., they favor to meet the teacher and make direct interaction with him/her. Their disagreement in fact was followed by two main justifications. First, through direct interaction (face to face), students can express their intentions clearly and convince their teacher. Second, students do not check their e-mail constantly.

### **3.1.4. Interpretation of the results**

The section about the academic writing shows that the great majority of students (87%) are not satisfied about the time given to the module of writing because, it does not provide them with enough practices and sufficient time to write. This section also reveals total agreement on the point that academic writing involves ongoing practices both inside and outside the class. That is to say, students need to expand the time devoted to practices even when they become outside the class. As well as, the analysis of the first section from the students' questionnaire shows that most of the students view that

concentrating on content, grammar, punctuation, and spelling at the same time is much more difficult. In addition, this current part confirms that majority of the students fail in providing worthy content simply because they are unable to express their thoughts appropriately. Therefore, students in this section emphasize that the time devoted to the pre-writing stage (when generating ideas) should be expanded. They insist also on the point that the teacher's feedback plays crucial role in developing their academic writing.

The analysis of the last section – Developing academic writing through ICTs- confirms that the majority of master tow students (60%) use the ICTs (namely word processor, internet, and e-mail). It also provides us with total agreement on the point that students use the internet in order to collect information and read more about the topics they discuss. Through the analysis of this section, it has been proved that most of the correspondents (74%) strongly agree on the positive effects of collecting and reading more information about the topic before start writing i.e., Students confirmed that they may produce worthy content if they understand and read more about the topic (before writing). In the other hand, and according to the students' answers, it seems that due to the misuse of internet, students agree that the internet affects negatively on their academic writing. In addition, most of the correspondents (77 %) preferred the use of word processor rather than the use of pen and papers when formulating their academic written productions.

The analysis revealed as well as a total agreement (100%) on the point that the word processor helps students to discover and correct their written mistakes. Therefore, the correspondents provided us with examples to illustrate how they learn from this software. Most of the students (73%) emphasized that they prefer to use the word processor when modifying their own ideas (i.e., making the required modifications) rather than re-writing the whole paper through pen and paper. They proved also that this software (word processor) facilitates the act of formulating both the in-text citation and the bibliography of

the sources (so students avoid plagiarism). Students showed as well through this section that they favor to receive feedback within hours of submitting their work (quick feedback) simply because their thoughts on the work they did are still fresh in their minds. For this reason, it has been proved that most of the students prefer to receive immediate feedback through e-mail.

### **Conclusion**

The obtained results show that the writing skill is a complex activity that requires much more time and practice (inside and outside the class) from the learner's side and a lot of feedback and guiding from the teacher's side. Therefore, this chapter has mainly focused on discovering the effects of the ICTS (word processor, internet, e-mail) on students' academic writing. Moreover, the findings reveal that the majority of students do emphasize on the point that the word processor helps them to discover and learn more about their written mistakes. It assists and encourages them also to modify their own ideas without re-writing the whole paper. On the other hand, students assert that the use of internet during the pre-writing stage provides them with much more ideas which in turn make them unable to choose the appropriate ones. In other word, the internet can be one of the strategies that assist students to generate ideas, but it affects more negatively on their academic writing. They also need to expand the time devoted to the pr-writing stage. As the results showed also, students favor to receive feedback within hours of submitting their work (quick feedback) simply because their thoughts on the work they did are still fresh in their minds. That is to say, using the e-mail to receive immediate feedback from their teacher after the writing process can help them to learn more about the writing skill.

## **3.2. Teacher's questionnaire**

Like students, teachers were asked also to answer the questionnaire in order to discover their attitudes towards the effects of ICTs on students' academic writing.

### **3.2.1. The sample**

The teachers who responded to this questionnaire are teachers who teach written expression at the Department of English, University of Biskra. Eight questionnaires were handed in by the researcher and all the questionnaires were returned. Therefore, eight represents our sample.

### **3.2.2. The description of the questionnaire**

The questionnaire contains 18 questions divided into two main sections. The first section includes 6 questions, while the second section includes other three sub-sections. The questions include close-ended questions and multiple choice questions; through these collected questions, teachers of written expression will explain their answers by giving justifications.

#### **3.2.2.1. Section One: The academic writing (Q1 to Q6)**

The first section aims at getting the teachers' opinions about the time devoted to teaching writing and developing students' academic writing (Q1), and whether they need to extend the students' practices even outside the class (not only inside the class) (Q2). (Q3) attempts to discover what the most difficult writing stage is for students (according to the teacher) and for which reason. The current part tends as well as to determine the types of mistakes students make when formulating their written assignments (4). Through this part, teachers will determine to what extent the practices can help students to learn about the writing process (5). It focuses also on establishing teachers' attitudes towards the importance of their feedback in developing students' academic writing.

### **3.2.2.2. Section Two: Developing academic writing through ICTs (Q7 to Q18)**

#### **3.2.2.2.1. Internet**

This sub-section (the internet) tends to get some information from the teachers to understand why students do fail in providing worthy content (Q7). It seeks also to discover the teachers' opinions about the importance of using the internet during the pre-writing stage (Q8) and whether the use of internet can help students to avoid the repetition of some ideas (Q9).

#### **3.2.2.2.2. The word processor**

The second sub section concerns the effects of the word processor on students' academic writing. Therefore, it attempts to understand teachers' attitudes towards the use of the word processor (by students) during the writing stage (Q10). It emphasizes also on discovering whether teachers do believe that the word processor helps students to modify in their own ideas during the re-writing stage (Q11). The next question will help us to understand whether teachers agree that editing through the word processor helps students to learn more about the writing process (Q12). This sub-part seeks to understand also whether the word processor assists students in developing their academic writing (style and grammar) (Q13).

#### **3.2.2.2.3. Email**

This sub-section tries to show the importance of sending quick feedback (to students) in developing students' academic writing (Q14). It emphasizes also on discovering the teacher's attitudes towards the benefits of using e-mail to send quick feedback to students (Q15). It tries as well as to understand whether the teacher's feedback sent through e-mail can help students to learn more about their weaknesses and develop their writing (Q16). The next question attempts to realize if teachers do believe that the use

of the ICTs (word processor, internet, and e-mail) can provide learners with more practice outside the class (Q17). The last question is designed in order to discover any further suggestions concerning the current topic (Q18).

### 3.2.3. Analysis of the Results

#### 3.2.3.1. Section one: the academic writing

1. Do you think that two hours a week are enough for helping students understand and receive more practices about the academic writing process?

The resulted presented in the table shows the teachers' answers.

Options	Number	%
Yes	1	12.5
No	7	87.5
Total	8	100

**Table 3.19: teachers' opinion about time devoted to teaching and practicing the academic writing**

As it is noticed in the **table 3.18**, 87.5% of the teachers consider that the time allocated to teaching and providing practices to students is insufficient in order to cover most of the aspects needed to develop their academic writing skills, while 12.5% of the participants view that two hours a week are enough to teach and explain every single aspect related to the academic writing process. These results show that teachers require enough time to work at ease and address most of the aspects needed to develop students' academic writing skills.

**2. Does the act of writing involve ongoing practices both inside and outside the classroom?**

Options	Number	%
Yes	8	100
No	0	0
Total	8	100

**Table 3.20: The act of writing involves ongoing practice both inside and outside the class.**

In the table above, the correspondents revealed total agreement on the point that academic writing requires continuous practices both inside and outside the classroom, and this simply because the time devoted to practices inside the class is insufficient. This means that teachers require students to expand the time of practices even when they become outside the class in order to learn more about the academic writing process.

**3. What stage of the writing process is most difficult for your students?**

Options	Number	%
A	7	87.5
B	0	0
C	0	0
B+C	1	12.5
Total	8	100

**Table 3.21: the most difficult stage(s) of writing for students**



**From Table 3.20**, we see that the majority of teachers (87.5%) emphasized that generating ideas and writing an initial draft is the most difficult step in the writing process that students face. Only one teacher (12.5%) who said that revising and editing seem difficult to students. According to this results, although revising and editing are crucial in the writing process, they do not seem to cause much difficulty for the majority of the students.

Like students, teachers in this question in fact were also required to justify their answers. Therefore the following reasons explain their choices:

- Teachers who chose (a) view that students
  - have limited background knowledge, and the absence of reading culture.
  - spend more time in revising and editing rather than generating ideas.
  - do not know how to use the strategies of generating ideas.
- The teacher who chose (a+b) views that
  - Most learners do write but still they do not know how to revise and edit.

**4. What type(s) of mistake students make when formulating their written productions:**

Options	Number	%
a	0	0
b	0	0
c	0	0
d	7	87.5
b+c	1	12.5
Total	8	100

**Table 3.22: Types of mistakes students make during the writing process**

As it is noticed in the table 3.21, five teachers (87.5%) said that all of grammatical, punctuation, and spelling mistakes students make when formulating their written essays. Only one teacher (12.5%) who said that students most of the time make mistakes of spelling and punctuation.

**5. The more practices students receive, the more they learn about the writing process**

Options	Number	%
Strongly agree	8	100
Agree	0	0
Disagree	0	0
Strongly disagree	0	0
Total	8	100

**Table 3.23: students learn more about the writing process if they receive more practices**

In the table above, the correspondents revealed total agreement on the point that academic writing requires more practices. This means that teachers emphasize that the more practice students receive, the more they learn about the academic writing process. Therefore, students need to obtain more practices when learning the writing process.

**6. Do you think that teachers' feedback plays a great role in developing students' academic writing?**

Options	Number	%
Yes	8	100
No	0	0
Total	8	100

**Table 3.24: the importance of the teacher's feedback in developing students' academic writing**

As it is noticed in the table, all of the correspondents (100%) thought that the teacher's feedback on students' written assignments plays a crucial role in developing their academic writing. This absolutely means that teachers emphasize on providing students with feedback about every single academic written production students formulate.

### 3.2.3.2. Section Two: Developing academic writing through ICTs

#### 3.2.3.2.1. Internet

7. Sometimes students tend to repeat ideas / or fail in providing worthy content when writing their essays, and this is due to:

Options	Number	%
A	1	12.5
B	0	0
C	7	87.5
Total	8	100

**Table 3.25: teachers' opinions about the providence of worthless ideas by students**

From Table 3.24, we see that the majority of teachers (87.5%) claimed that students do sometimes provide worthless content or repeat some ideas due to two main

reasons; the first includes the difficulty of generating ideas and the lack of information students have about the topic they discuss; while the second reason refers to the students' inability of expressing their thoughts appropriately. On the other hand, only one teacher who said that the main reason from repeating ideas is the lack of information students possess about the topic.

- 8. Students need to use the internet during the pre-writing stage (i.e., understanding the topic through the use of online libraries, encyclopedias, and online journals) in order to facilitate the step of generating ideas, so they produce worthy content.**

Options	Number	%
Yes	3	37.5
No	5	62.5
Total	8	100

**Table 3.26: teachers' opinions about the students' use of internet to facilitate the step of generating ideas.**

According to the data provided in the **table 3.24**, majority of the teachers (62.5%) viewed that the use of internet cannot help students to facilitate the step of generating ideas. That is to say, teachers of written expression emphasized that internet cannot be considered as a tool to help students in generating ideas. In this question, the correspondents who answered by NO were asked to justify their answers.

They view that sometimes the internet presents all the ideas to students about their topic even those (ideas) which have no relation to the purpose of the essay. In this case, some students may take the ideas which do not serve the topic. As well as, the use of

internet can really help students to generate ideas and understand more things about the topic they discuss, but in our case, majority of students tend to use the internet in order to borrow ideas about the topic (copy paste) and not to understand the topic. Also, using the internet during the pre-writing stage leads to plagiarism. One teacher stated that Students may produce worthy content if they exploit the time appropriately.

On the other hand, some teachers (37.5%) agree on the point that the use of internet by students during the pre-writing stage can help them to understand more about the topic they discuss. Therefore, it helps them to provide worthy content. Two teachers who answered by 'Yes' gave a notes. First, Internet can help students to develop their limited background knowledge (increase their reading culture), but they should know how to avoid plagiarism. Second, the use of internet can be used before start writing. In other word, there should be a session devoted to reading where students can use the internet to read more about the topics they will write about later on.

**9. Does the use of internet help students to avoid the repetition of some ideas?**

Options	Number	%
Yes	3	37.5
No	5	62.5
Total	8	100

**Table 3.27 the internet helps students to avoid the repetition of some ideas**

**From Table 3.25**, it seems that majority of the correspondents (62.5%) agreed on the point that the use of internet does not assist students to avoid the repetition of some ideas. Theirs answers in fact were followed by justifications. First, sometimes some ideas are presented many times but differently; some students are not able to check this. Second,

although the internet provides huge number of ideas, but students tend to repeat the ideas they use when writing their essays; they are unable to avoid this repetition. Third, the internet does not help students to avoid repetition, but it helps them to borrow ideas (copy / paste). Fourth, internet cannot be a monitor or a guide. It is just a kind of library.

In contract, the rest of the teachers (37.5%) agreed on the effects of the internet in helping students' to avoid the repetition of some ideas. This simply means that the internet provides learners with much more information which in turn leads students to formulate their own ideas without repeating them.

#### 3.2.3.2.2. Word processor

**10. Since the word processor corrects mistakes (grammatical, spelling and punctuation) and contains translation and dictionary tools, do you think that this software can help students during the writing process to produce well academic written productions and learn more about their mistakes(errors-free texts)?**

Options	Number	%
Yes	5	62.5
No	3	37.5
Total	8	100

**Table 3.28: the word processor helps students to produce errors-free texts**

According to the data provided in the **table 3.26**, majority of the teachers (62.5%) viewed that the word processor can help students to learn more about their written mistakes. It helps them also to produce errors- free texts. In contrast, only some teachers (37.5%) disagreed with this current point. That is to say, they emphasized that the use of

word processor does not help students to learn from their written mistakes. Therefore, the teachers who answered by ‘No’ provided us with some reasons to justify their answers. First, students will rely more on this device and ignore the self correction which is very helpful to develop their writing (specially the structure).Second, the word processor makes students passive in correcting their written mistakes. Third, the word processor is a helpful tool that is used by most learners to discover their written mistakes, but they should not rely much more on it. Learners have to master their self correction.

**11. Through the word processor, students can modify their own ideas rather than rewriting the whole paper, or using the corrector pen.**

Options	Number	%
Strongly agree	3	37.5
Agree	4	50
Disagree	1	12.5
Strongly disagree	0	0
Total	8	100

**Table 3.29: The word processor helps students to modify their own ideas**

Depending on the results exhibited in the **table 3.27**, most of the correspondents (50%) agreed that students can modify their own ideas through the word processor rather than re-writing the whole paper through pen and paper. This means that teachers do emphasize on the point that when students write through the word processor, they can easily make the necessary modifications in their ideas when they read their written productions repeatedly through this software. The last allows students to read their assignments several times, so they can modify their ideas without re-writing the whole

paper which can lead them to forget the ideas they want to add or omit. As well as, three teachers (37.5%) strongly agreed on this current point. While, only one teacher (12.5%) disagreed with this idea. In other word, he/she viewed that the word processor does not help students in modifying their own ideas; he/ she stated (as remark) that students need to re-write the whole paper when modifying their ideas in order to learn more about their writing.

**12. The more students edit and modify their own work through the word processor, the more they learn about the writing process.**

Options	Number	%
Strongly agree	1	12.5
Agree	5	62.5
Disagree	2	25
Strongly disagree	0	0
Total	8	100

**Table 3.30: Students learn more about the writing process if they edit and modify their own ideas through the word processor**

**From Table 3.28**, most of the teachers (62.5%) agreed that the more students edit and modify their own written productions through the word processor, the more they learn about the writing process. That is to say, since this type of software facilitates the process of modifying ideas (as it was proved in the previous question), students will be encouraged to read again their assignment (without re-writing it wholly) in order to correct their mistakes (that are underlined by the word processor) and modify their own style. In addition, one teacher (12.5%) strongly agreed on this current point. In contrast, only two



teachers (25%) disagreed on this idea. In other word, they viewed that the word processor does not help students to learn more about the conventions of the academic writing.

**13. Do you think that the word processor can help students in developing their academic writing (style and grammar)?**

Options	Number	%
Yes	6	75
No	2	25
Total	8	100

**Table 3.31: the word processor helps students in developing their academic writing (style and grammar)**

According to the data showed in the table above, the great majority of teachers (75%) consider that the word processor can help students in developing their academic writing (style and grammar). That is to say, the use of word processor assists students to discover more about their grammatical mistakes and learn more about these mistakes. As well as, since it facilitates the processes of modifying and editing their ideas, this facility will encourages students to read their written productions several times before submitting them. As result of this repeated reading, students will be able to develop their style of writing and minimize their written mistakes.

On the other hand, only two teachers (25%) declared that the word processor cannot help students to develop their academic writing. This assumption was based on certain reasons. First, the word processor has nothing to do with style. Students need to read more in order to develop their style (the word processor develop students' academic writing but to certain extent).Second, when students use this software, they may rely on it much more.

### 3.2.3.2.3. Email

**14. If students receive quick feedback about their written assignments, they can understand perfectly their strengths and weaknesses since their thoughts' are still fresh on the topic they are writing about.**

Options	Number	%
Strongly agree	6	75
Agree	2	25
Disagree	0	0
Strongly disagree	0	0
Total	8	100

**Table 3.32: receiving quick feedback helps Students to understand their weaknesses**

The table number 3.30 demonstrates that most of the teachers (75%) strongly emphasized that if students receive quick feedback about their written assignments, they can understand perfectly their strengths and weaknesses since their thoughts' are still fresh on the topic they are writing about. As well as, two teachers (25%) agreed also on this current idea. In other word, when feedback is lately received, students may fail in linking teacher's feedback to what they wrote. As result, no progression will be noticed from the writing process.

**15. Do you prefer to send an immediate feedback (some remarks) to your students about their written productions through E-mail (rather than waiting until the next session) in case when you insure that your students use the Email?**

Options	Number	%
Yes	4	50
No	3	37.5
No answer	1	12.5
Total	8	100

**Table 3.33: teachers' opinions about the use of e-mail to send immediate feedback**

As it is noticed in the table above, (50%) of the respondents said that they prefer to send immediate feedback to their students through E-mail. One of the teachers who answered 'yes' commented on this current question. He/she said that E-mail gains time. On the other hand, half of the correspondents (37.5%) disagreed with this current point i.e., they favor to meet their students and make direct interaction with them. Their disagreement in fact was followed by two main justifications. First, the best way to teach writing is by doing it face to face. Second, students write the essay in class and I try to provide a timely feedback in class.

**16. Do you think that teacher's feedback sent through e-mail can help students to learn more about their weaknesses and develop their writing (in case when your student use e-mail)?**

Options	Number	%
Yes	6	75
No	2	25
Total	8	100

**Table 3.34: the effects of feedback sent through Email on students' academic writing**

According to the data showed in the **Table 3.32**, most of the teachers declared that the feedback that is sent through e-mail affects positively on students academic writing. In other word, teacher’s comments on the written assignments of students help learners to learn more about their mistakes and style. As well as, this quick feedback pushes students to correct and address their weaknesses (both grammar and style) since their thoughts are still fresh on the topic they are writing about. Only two teachers who said that the feedback sent through e-mail cannot help students to develop their academic writing. Their answers therefore were followed by these reasons:

- “I am one of the teachers who prefer using papers, hand written productions, and correct students’ mistakes using pen and blackboard”.
- “I prefer to face my students’ while their thoughts are still fresh”.

**17. Do you think that through the use of ICTs, teachers can provide learners with more practices even outside the classroom (regarding the limited time devoted inside the class)?**

Options	Number	%
Yes	8	100
No	0	0
Total	8	100

**Table 3.35: the use of ICTs provides learners with more practice even outside the classroom**

Based on the results exhibited on the table above, the correspondents revealed total agreement on the point that the use of ICTs (word processor, internet, and e-mail) provides learners with more practice even outside the classroom. As it was proved in the question number (2) (the act of writing involves practices both inside and outside the class), students through the use of these mentioned ICTs can expand the practices of writing even outside the class, so they can learn more things about the writing process.

**18. Any further suggestions about the use of ICTs (the internet, word processor, and E-mail) to develop students' academic writing (and expand the time devoted to teaching and practicing this difficult type of writing even outside the class).**

- It should be added to every written expression one devoted to reading (using internet in the class). With reading, students can develop their academic style.
- The word processor should be exploited by Master One students when formulating their written assignments in order to prepare themselves for master Two.

### **3.2.4. Interpretation of the Results**

Like the interpretation of the results of the students' questionnaire, The first section about the academic writing ( in the teachers' questionnaire) shows that the great majority of teachers (87.5%) are not satisfied about the time devoted to the module of written expression because, two hours do not provide students with enough practices and sufficient time to write. This section also reveals total agreement on the point that academic writing involves ongoing practices both inside and outside the class. That is to

say, students need to expand the time devoted to practices even when they become outside the class. As well as, most of the teachers view that generating ideas is the most difficult stage students face during the writing process simply because they do not possess a lot of ideas about the topic as well as, they are unable to express their thoughts appropriately. Through the analysis of the teachers' questionnaire, it has been proved also that majority of students make all types of mistakes (grammar, punctuation, and spelling) when writing their essays. In addition, through the first part of the questionnaire, all teachers admit that the more practices students receive the more they learn about the writing process. That is to say, students can learn several things about the writing process if they expand the time devoted to practices. Teachers insist also on the point that their feedback plays crucial role in developing students' academic writing. This means, students after writing their essays need also to know their teachers' feedback in order to discover their weaknesses and address immediately.

The analysis of the first sub-section – the Internet- confirms that the majority of teachers (87.5%) viewed that students fail in providing worthy content because of two main reasons. The first reason includes the lack of information students possess about the topic, while the second one refers to the students' inability of expressing their thoughts appropriately. Due to the students' misuse of internet and the huge number of information the internet provides to students, most of the teachers through this part of questionnaire emphasized that the use of internet during the pre-writing stage affects negatively rather than positively on students' academic writing. This result in fact is similar to the students' answers too. On the other hand, majority of teachers insist that the internet does not help students to avoid the repetition of ideas. That is to say, although the internet provides huge number of ideas, but students still repeat the ideas they use when writing their essays without consciousness.

Through the analysis of the second sub-section- Word processor- of the questionnaire, it has been proved according to the teachers' answers that students' use of word processor during the pre-writing stage can help them to discover and learn more about their written mistakes (grammar, spelling, and punctuation); It helps them also to produce errors-free texts since it contains translation and dictionary tools. Teachers emphasized as well as on the point that if students write through the word processor, they can easily modify their own ideas because they read them repeatedly through this software. Meaning, the word processor allows and encourages students to read their assignments several times, so they can modify their ideas without re-writing the whole paper (which can lead them to forget the ideas they want to add or omit). As result of this advantage (the word processor provides), majority of teachers (75%) highlighted the importance of editing and modifying in developing students academic writing. In other word, the more students edit and modify their own ideas, the more they learn about the writing process. Teachers also agreed on the role of this software to develop students' academic writing (grammar and style).

While in the analysis of the last sub-section, majority of teachers (75%) strongly said if students receive quick feedback about their written assignments, they can understand perfectly their strengths and weaknesses since their thoughts' are still fresh on the topic they are writing about. As well as, most of the teachers viewed that the use of email to send feedback is very interesting tool to gain time. According to the analysis of this questionnaire, nearly all teachers declared also that the feedback that is sent through e-mail affects positively on students' academic writing. In other word, teacher's comments on the written assignments of students help learners to learn more about their mistakes and style. As well as, this quick feedback pushes students to correct and address their weaknesses (both grammar and style) since their thoughts are still fresh on the topic they

are writing about. Above all, it has been proved that the use of ICTs (word processor, internet, and e-mail) provides learners with more practice even outside the classroom (since the act of writing requires ongoing practices).

## **Conclusion**

The results obtained from the teachers' questionnaire insist that the writing skill is a difficult activity that requires much more time and ongoing practice (inside and outside the class) from the learner's side and a lot of feedback and guiding from the teacher's side. Therefore, the chapter has mainly focused on determining the effects of the ICTS (word processor, internet, e-mail) on students' academic writing. Moreover, the findings reveal that most of the teachers do insist on the positive effects of the word processor. That is to say, this software helps students to discover and learn more about their written mistakes from the options and dictionaries it provides. It assists and encourages them also to modify their own ideas without re-writing the whole paper. Like students' answer, teachers disagree also on the point that the use of internet during the pre-writing stage can help students to generate ideas. Meaning, due to the students' misuse of internet, it seems that the internet affects more negatively on students academic writing development. As the results showed also, teachers' insist that students can address their weaknesses immediately if they receive feedback within hours of submitting their work (quick feedback). This is simply because the students' thoughts on the work they did are still fresh in their minds. Meaning, the use of e-mail to receive immediate feedback after the writing process can help students to learn more about the writing process.

## **Recommendations**

Some Recommendations can be drawn on the basis of the findings in this current research. First, as it was suggested by some teachers, there should be a session



devoted to reading where students can use the internet to learn more about the topics they will discuss later on. Second, since both students and teachers agree on the positive effects of the word processor on students' academic writing, students can exploit this software when formulating their essays especially outside the class. Third, it should be recommended that teachers of written expression could use the e-mail to send immediate feedback to students. This can help teachers to gain time and students to receive quick feedback. Teachers could also ask students to send their written essays through e-mail in order to expand the time devoted to practice. On the other hand, students should be instructed to the use of internet appropriately. As well as, students can use the e-mail to send their written productions to teachers. To sum up, Since the ICTs can provide more practice to students even outside the class; teachers could exploit these tools with students in order to increase the time allocated to practice even outside the class. So, they can make students learn more about the writing process.

## **GENERAL CONCLUSION**

Learning to write in second or foreign language is extremely a hard task. The main reason from this assumption is simply because even at university level, students are still unable to formulate great and correct academic piece of writing in their first language. Therefore, the act of writing in language that is not your first language seems to be difficult too. Moreover, this current research was carried out in order to help students (at university)

to develop their academic writing level whatever techniques and methods we use to reach such aim. Since the ICT tools are used incredibly by students at university, the present study was undertaken in order to discover the effects of these tools (ICT) on students' academic writing. In other word, it focused on understanding whether the use of ICT during the writing process can help students to enhance their academic writing. That is to say, it tried to show the importance of the internet in facilitating the process of generating ideas and producing worthy content; it attempted also to underline the role of word processor in helping students to discover and correct their written mistakes and modify their own ideas (style); as well as, it intended to determine the effect of receiving quick feedback through e-mail on students' academic writing development.

According to the results obtained from both teachers' questionnaire and students' questionnaire, it seems that the act of writing in second language is hard task that requires much more time and practice to enhance. The results confirm also that receiving quick feedback from teachers plays crucial role in developing students' academic writing. They have shown as well as that the use of word processor while the writing process can help students to discover and learn more about their written mistakes; this software encourages students to modify their own ideas through the permanent reading of their written productions. In addition, the obtained data confirm that receiving immediate feedback through email can assist and encourage students to discover and address their weaknesses immediately since their thoughts are still fresh on the topic they are writing about. Moreover, the results obtained confirm partly our hypothesis which says that if students use the word processor, e-mail, appropriately before, while, and after the academic writing process, they will learn more about the academic writing process. Above all, depending on the currents results, the hypothesis that says that if students at university are effectively instructed to the use of word processor and e-mail, they will enhance their academic

writing seems to be correct. On the other hand, it has been proved through this present study that the use of internet before the writing process leads students to plagiarism. That is to say, it affects negatively on students' academic writing. Therefore, based on the gathered data, the hypothesis that says that if students at university use the internet before the writing process, they will learn more about the writing process seems to be rejected.

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## **APPENDICES**

## APPENDIX 01

### The Students' Questionnaire

Dear students,

You are kindly requested to fill in this questionnaire to express your attitudes towards the academic writing process, and how the ICT tools, particularly word processor, internet, and e-mail help you in writing your academic assignments (your dissertations). Your answers dear classmates are very important for the validity of the research we are undertaking. As such, we hope that you will give us your full attention and interest.

Please, mark (√) the appropriate box (es) or give full answer(s) on the broken lines.

I thank you in advance for your cooperation and the time devoted to answer the questionnaire

Gender: Male  Female

#### **Section one: the academic writing**

7. Do you think that two hours a week are enough for understanding and receiving more practice about the academic writing process?

Yes

No

8. Does the act of writing involve ongoing practices both in and outside the classroom?

Yes  No

If "No", please, explain why

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**9.** In the academic writing, what is/ are the most important component(s) according to you?

- a- Content
- b- Vocabulary
- c- Grammar
- d- Punctuation
- e- Spelling
- f- All together

**10.** Sometimes students tend to repeat ideas / or fail in providing worthy content when writing essays , and this is due to:

- a. the lack of information about the topic
- b. the inability of expressing their thoughts appropriately

**11.** What stage of the writing process is most difficult for your?

- a- Generating ideas and writing the first draft
- b- Revising
- c- Editing

Explain your answer please.

**12.** Do you think that teacher's feedback on your assignments plays a crucial role in developing your academic writing level?

- a- Yes
- b- No

## Section two: Developing academic writing through ICTs

According to your experience in writing your dissertation:

1- When writing your dissertation , do you use :

a- Internet

b- Word processor

c- E-mail

d- All of them

2- Do you rely on the internet (e.g.: using online libraries, encyclopedias, and electronic journals) when collecting information?

Yes

No

- If “Yes”, what kind(s) of web-sites you have used:

1. Online libraries

2. Encyclopedias

3. Electronic journals

4. All of them

- If “No”, please, explain why

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 .....  
 .....

3- If students collect and read more information about the topic being discussed, they may produce worthy content when writing their essays.

Strongly agree  Agree  Disagree  Strongly disagree

4- According to your experience in writing your dissertation, do you think that the use of internet (reading online libraries, encyclopedias, and

electronic journals) during the pre-writing stage can help you to generate your ideas and formulate your primary outline when writing your essay?

Yes                      No

If No, please explain why

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5- After using the word processor in writing your dissertations, do you think that writing through the word processor directly is better than using pen and paper?

- Yes                       No

6- Does the word processor help you in correcting your written mistakes (grammar, spelling, punctuation...)?

- Yes                       - No

7- Do you learn more about the mistakes you make when the word processor helps you in correcting them?

Yes                       No

If No, please explain why.

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8- If you want to modify your own ideas, do you prefer to

- Re-write the whole paper again through pen and paper
- Use the word processor, so you change only some ideas

9- Do you exploit the word processor in formulating both the in-text citation and the bibliography of the sources you use?

- Yes

- No

10- After submitting your written production to your teacher, do you prefer to receive:

- quick feedback

- Late feedback

11- Do you prefer to receive immediate feedback from your teachers through E-mail?

-Yes

- No

If 'No', please explain why.

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**Thank you**

## **APPENDIX 01**

### **The Teachers' Questionnaire**

The current research is carried out in order to discover the effects of the ICT tools (word processor, Internet, and E-mail) on students' academic writing. Therefore, this questionnaire aims at finding out the teachers' opinions about teaching students to

use the ICTs particularly word processor, internet, and e-mail before, while, and after the writing process .

For each item, please tick the right box or write in the space provided.

I extremely appreciate your collaboration.

### Section one: the academic writing

19. Do you think that two hours a week are enough for helping students understand and receive more practices about the academic writing process?

Yes  No

20. Does the act of writing involve ongoing practices both in and outside the classroom?

Yes  No

21. What stage of the writing process is most difficult for your students?

- a- Generating ideas and writing initial drafts
- b- Revising
- c- Editing

22. What type(s) of mistake students make when formulating their written productions:

- a- Grammatical mistakes
- b- Spelling mistakes
- c- Punctuation
- d- All together

23. The more practices students receive, the more they learn about the writing process

Strongly agree  Agree  Disagree  Strongly disagree

24. Do you think that teachers' feedback plays a great role in developing students' academic writing?

Yes  No

### Section Two: Developing academic writing through ICTs

#### Internet

25. Sometimes students tend to repeat ideas / or fail in providing worthy content when writing their essays, and this is due to:

- A. the difficulty of generating ideas and the lack of information about the topic
- B. the inability of expressing their thoughts appropriately
- C. Both of them

26. Students need to use the internet during the pre-writing stage (i.e., understanding the topic through the use of online libraries, encyclopedias, and online journals) in order to facilitate the step of generating ideas, so they produce worthy content.

Yes  No

27. Does the use of internet help students to avoid the repetition of some ideas?

Yes  No

If No, please explain why.

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#### Word processor

28. Since the word processor corrects mistakes (grammatical, spelling and punctuation) and contains translation and dictionary tools, do you think that this



software can help students during the writing process to produce well academic written productions and learn more about their mistakes? (errors-free texts).

Yes                      No

If No, please explain why.

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**29.** Through the word processor, students can modify their own ideas rather than rewriting the whole paper, or using the corrector pen.

Strongly agree  Agree  Disagree  Strongly disagree

**30.** The more students edit and modify their own work through the word processor, the more they learn about the writing process.

Strongly agree  Agree  Disagree  Strongly disagree

**31.** Do you think that the word processor can help students in developing their academic writing (style and grammar)?

Yes                       No

- If No, please, explain why.

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**Email**

- 32.** If students receive quick feedback about their written assignments, they can understand perfectly their strengths and weaknesses since their thoughts' are still fresh on the topic they are writing about.

Strongly agree  Agree  Disagree  Strongly disagree

- 33.** Do you prefer to send an immediate feedback (some remarks) to your students about their written productions through E-mail (rather than waiting until the next session) in case when you insure that your students use the Email?

Yes  No

- If No, please, explain why.

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- 34.** Do you think that teacher's feedback sent through e-mail can help students to learn more about their weaknesses and develop their writing (in case when your student use e-mail)?

Yes  No

If No, please explain why.

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- 35.** Do you think that through the use of ICTs, teachers can provide learners with more practices even outside the classroom (regarding the limited time devoted inside the class)?

Yes  No

If No, please explain why.

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36. Any further suggestions about the use of ICTs (the internet, word processor, and E-mail) to develop students' academic writing (and expand the time devoted to teaching and practicing this difficult type of writing even outside the class).

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**Thank you**

### ملخص البحث

بما أن أدوات تكنولوجيا المعلومات والاتصال أصبحت تستخدم من قبل طلاب الجامعة بشكل لا يصدق، تم إجراء هذه الدراسة من أجل توضيح أثر هذه الأدوات على الكتابة الأكاديمية لدى الطلاب، بمعنى آخر تركز هذه الدراسة على فهم

ما إذا كان استخدام الإنترنت و معالج النصوص بالإضافة إلى البريد الإلكتروني قبل وأثناء و بعد العملية الكتابية تساعد الطلاب على تحسين كتاباتهم الأكاديمية، لذلك حاولت هذه الدراسة على إظهار أهمية شبكة الإنترنت في تسهيل عملية توليد الأفكار وإنتاج محتوى مستحق و دور معالج النصوص في مساعدة الطلاب على اكتشاف وتصحيح الأخطاء المكتوبة وتعديل أفكارهم الخاصة (نمط) بالإضافة إلى توضيح أثر تلقي محتوى التغذية الرجعية السريعة من خلال البريد الإلكتروني على تطوير الكتابة الأكاديمية لدى الطلاب.

بغية التحقق من صحة فرضيتنا المطروح من قبل هذا البحث قمنا بتوجيه استبيانين أحدهما لأساتذة، و الآخر لطلبة سنة الثانية ماستر شعبة اللغة الانجليزية بقسم اللغات الأجنبية بجامعة محمد خيضر – بسكرة. بعد أن تم تحليل الاستبيانين، توصلنا إلى نتائج تخدم جزئياً الفرضية التي انطلقنا منها، و تتلخص في أن استعمال معالج النصوص أثناء الكتابة يساعد الطالب على اكتشاف و تصحيح أخطائه المكتوبة، بالإضافة إلى أن استعمال البريد الإلكتروني لتلقي التغذية الرجعية السريعة المرسله من طرف الأساتذة تساعد الطالب على اكتشاف و معالجة نقاط الضعف الخاصة به بشكل آني ، لكن بالرغم من الكم الهائل من المعلومات التي توفرها الإنترنت إلا انه قد ثبت من خلال هذه الدراسة أن الإنترنت تؤثر سلبي على الكتابة الأكاديمية للطلاب .