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Title

Investigating the Main Factors That Affect Handwriting

The Case of First-Year English Classes at Guechi El Bachir

Middle School in Magra, M'sila.

A Thesis Submitted to the Department of English as Partial Fulfillment of the
Requirements for the Degree of Master in Sciences of Language

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Declaration

I, MEBARKI AHLAM....., do hereby declare that this submitted work is my original work and has not previously been submitted for any institution or university for a degree. I also declare that a list of references is provided forward indicating all the sources of the cited and quoted information. This work was certified and completed at Mohammed KHEIDER University of Biskra.

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Dedication

I would like to dedicate this modest work to:

My beloved father Ismail and my mother Dahma

for their supports, care, love and prayers.

My grandfather: dada Hocine

My brothers: Saleh, Krimo, Bako, Nouro, Badro, and Abdo

My sisters: Fairouz, Hassina , Samira, Karima, and Amel

My aunts: Aouatef and Lynda for their love and support

My beloved friends: Rim, Cherifa, Ilhame, Rania , Aicha, and Kenza for their
encouragement and help.

I am truly blessed for having real friends like them.

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Abstract

Most of the Algerian EFL middle school pupils face the problem of poor handwriting in English. This mainly influences their written productions and impacts on their learning achievements. Therefore, this study aims to explore the main factors that affect handwriting skill. Accordingly, it is assumed that legible handwriting is crucial for middle school pupils, and it is affected by numerous factors. To confirm the validation of this assumption and to answer the research questions, a descriptive study has been conducted. Moreover, in order to gather the necessary data, two data collection tools were used. First, a questionnaire was designed for middle school teachers (a sample of 19 teachers selected randomly from different middle schools) so as to gain their insights and points of view about their personal experience with pupils' handwriting problems. In addition, a classroom observation was conducted with one class of first year pupils (27 pupil) at Geuchi Elbachir Middle School in Magra, M'sila during the academic year 2021-2022. The aim was to check the main factors that affect the pupils' handwriting during their English sessions. The findings revealed that there are particular factors that affect pupils' handwriting skill when writing in English and hinder their academic performance. In fact, there are extrinsic factors which is divided into: environmental factors like :lighting ,distance from the blackboard and amount of handwriting expected of the learner ;in addition , ergonomic such as :pencil grip, pressure applied to the writing tool and table height. The findings indicated that: the majority of participants consider handwriting as an important skill which must be mastered by middle school pupils, less emphasis has been found to be given by instructors to teaching handwriting skills in middle school, there are particular factors can lead pupils to produce poor handwriting which affected their educational achievement. Recommendations were suggested

Keywords: handwriting skill, handwriting factors, legible handwriting, academic performance, middle school pupils, extrinsic and intrinsic factors

List of Abbreviations and Acronyms

EFL: English as a Foreign Language

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المُلخَص

General Introduction

Introduction

English language learning cannot be completed without mastering its four skills, particularly the writing skill. It is one of the basic skills and has a great importance in the learning and teaching processes. Mastering this skill will pave the way for performing well in many academic works like succeeding to answer tests and exams questions. Moreover, learners transform oral language to the written one in order to record it and then use it in their communication. So writing is considered as a vehicle to transcribe oral thought into written one. However, the transmission of information may depend on the quality of a person's handwriting. In fact, a nice and legible handwriting will be understood and well interpreted whereas a bad or illegible handwriting leads to incomprehension or misunderstanding. Thus, the quality of handwriting has a significant impact on learners' quality of written productions and, thus, affects their grades.

Hence, learners, since young ages, are taught how to shape letters and words in order to write legibly. Moreover, it is a fact that handwriting differs from a person to another. Some are quite skilled and possess legible handwriting while others struggle to shape correctly words and have an illegible handwriting. This is due to some factors that affect this skill.

Therefore, this study attempts to shed the light on the factors that affect handwriting skill. Indeed, it aims at exploring the main factors (intrinsic and extrinsic) that influence the quality of middle school handwriting in particular.

1. Statement of the Problem

Handwriting is an important skill that must be learnt in early age in primary schools. It is a primary method of communication between a teacher and the students. Learners use their hands to realize written compositions or to answer questions. However, handwriting does not only remains an important skill in primary education, but the act of writing is a also necessary skill in advanced middle, secondary and tertiary education. Learners need it for the accomplishment of their assignments, written productions, assessments, interaction, etc. (Vangalen, 1991) states that writing by hand is a skill that should be acquired in the first stage of education due to its influence on academic performance. Thus writing by hand remains one of the most important skills that children learn in primary school (Asher, 2006). Therefore the quality of pupil's handwriting has a crucial role in the assessment of their writing products by their teachers.

Furthermore, teachers do not implement handwriting tasks in teaching English, and they do not give much attention to this important skill because they think that pupils have already learned how to handwrite the letters in primary school with the French language which is similar to English language. What made the situation worse is the spread of the Covid 19 pandemic these recent years. Teaching hours have been greatly reduced and more focus has been put on covering the entire syllabus in due time. Consequently, less focus has been given to teaching and improving pupils' handwriting. Therefore, pupils' results have been affected as the teacher had difficulties to understand their handwriting.

Therefore, teachers need to help pupils improve their handwriting so as to make them produce legible writing. They have first to identify and understand the factors that affect pupils' handwriting in order to know how to fix the problem.

2. Significance of the Study

The present study spots the light on handwriting, one of the crucial and most ignored aspects of writing skill. More specifically, it highlights some of the main factors that affect learners' handwriting legibility. Therefore, this study is significant to teachers as it advises them to put more focus and attention on middle school pupils' difficulties to handwrite legibly. It also helps them select the appropriate strategies which are used in the treatment of learners' handwriting.

Moreover, this research work is significant to learners because it helps them understand the factors that affect their handwriting and explains how to ameliorate it in order to better achieve in class.

3. Research Aims

This research mainly aims to:

- ❖ Investigate the relationship between poor handwriting and handwriting factors.
- ❖ Establish knowledge of the factors influencing handwriting development among middle school learners.
- ❖ Determine the effects of poor handwriting on pupils' academic performance.
- ❖ Determine the importance of legible handwriting in middle school.
- ❖ Spotlight teacher's attitudes towards their pupils' level in handwriting.
- ❖ Determine a cutoff point at which handwriting skill can be considered dysfunctional in terms of legibility for middle school pupils.
- ❖ Select the appropriate strategies to be used by teachers to improve handwriting.

4. Research Questions

The current study raises the following questions:

Q 1: What is the importance of legible handwriting in education?

Q 2: What are the teachers' attitudes towards their pupils' level in handwriting?

Q 3: What are the factors that affect learners' handwriting?

Q 4: How can teachers implement the appropriate strategies to treat learners' poor handwriting?

5. Research Assumption

This study is based on the assumption that

- Legible handwriting is a crucial determinant for middle school learners' achievement; it is affected by numerous factors.

6. Research Methodology

6.1. Choice of the Method

A descriptive method has been used in this research to describe and analyze facts about the situation and to determine the numerous factors that affect English middle school pupils' handwriting. Moreover, the aim was to seek connection between our two variables: Handwriting as an independent variable, and the factors that affect handwriting as a dependent variable.

The descriptive method is beneficial for this research as it offers a wide range of data collection tools as well as it provides a qualitative perspective for the analysis of data.

6.2. Population and Sampling

The case study of this research is Guechi Elbachir Middle School first year EFL classes representing a population of seventy (70) first year pupils. However, it dealt with a sample of twenty seven (27) pupils who were chosen randomly. They constitute one class out of three.

In addition, nineteen 19 middle school teachers have been selected randomly from different middle schools to collect their opinions and attitudes about how can handwriting affect pupils' handwriting. Indeed, their teaching experience would help understand the issue and deduce effective strategies to fix it.

6.3. Data Gathering Tools

The data gathering tools that are used in this study are a teacher's questionnaire and a classroom observation in order to collect helpful data for the completion of this research. First, the teachers' questionnaire was directed to middle school teachers of English who would give insights and attitudes about the topic under investigation. Second, a classroom observation was used as with one group first year pupils in Guechi Eelbachir- Magra Middle School during their English classes in order to know the numerous factors that affect their handwriting.

7. Structure of the Study

This dissertation is divided into two parts. The first part, including two chapters, is dedicated to the explanation of the aspect of handwriting, showing its importance for middle school pupils'. In addition, it includes the investigation of the numerous factors that affect pupils' handwriting. The second part, however, is devoted to the analysis and discussion the results and the findings.

Chapter One:

Handwriting

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Introduction

Writing is a crucial skill for learning and teaching a language. It is considered the foundation stone of the academic field. Moreover, writing is the skill that is used by students to express their ideas, points of views, and knowledge and communicate with others. Students use their hands to write their ideas and share them. In this chapter, we will deal with a general overview of writing which includes the definition of writing skill and its importance. Additionally, we will spot light on handwriting skill: its definition and importance, and we will cover its types and the effect of poor and good hand writing on pupil's writing.

1.1 General Overview of Writing

Writing is a productive skill that is used to transform and express knowledge and information into language. It is essential for every student, teacher or researcher to express his/her thoughts in all domains of human interest. However, it is classified as one of the most difficult skills to be mastered (Suyanto, 2008, p. 68).

Many researchers and educators defined the task of writing First of all; writing means the skill or activity of producing words on a surface (Cambridge Dictionary, 2022). Moreover, it is an integral part of a large activity where the focus is on something else such as language practice, acting out or speaking (Harmer, 2007, p. 33). White (1986) defines writing as “the process of expressing the ideas, information, knowledge, or experience and understand the writing to acquire the knowledge or some information to share and learn.” (p.10). In other words, writing is a tool used for communication and sharing ideas and thoughts.

Hyland (2009, p. 2) asserts, “Writing is used as aid memoire or practice tool to help students practice and work with language that they have been studying”. Moreover,

Tarigan, (1994, p. 3) defines writing as an “activity to produce or draw graphic symbols which represent a language that is understood by peoples, so that other peoples can read the graphic symbols presented” .

According to Harmer (2001), writing is one of the four skills learned in English that is closely bound up with receptive skills work and which the students have to produce their own language by themselves (Harmer, 2007). He adds, “Writing is used for wide variety of purposes it is produced in many different forms”. (p .4)

1.1.1. Writing as a System

Writing as a system is more than producing symbols and letters to represent the sounds of certain language used in communication (Bayrne, 1979). Furthermore, Seddik (2017) proved that:

Writing as system does not only imply encoding language using symbols ,but also involves the rules which govern those symbols so that they effectively represent language in a visible form, this means that there is a kind of convention that written forms of language are arranged in. (p.11)

1.1.2. Writing as a Skill

Writing as a skill entails the ability and knowledge about producing and expressing ideas through written word used in communication and sharing ideas and knowledge between people (Indeed, 2021).

1.1.3. Writing as a Process

Writing as process is described as a series of physical and mental actions that people take when they produce any kind of text by using physical and digital tools like pencils,

keyboards, etc. Furthermore, Nunan (1999) considered writing as a complex, cognitive process that demands sustained intellectual effort over a specific period of time. Alues (2008) proved that process writing may be “a more effective method of teaching writing as it helps students to focus on the process of creating text through the various stages of generating ideas, drafting, revising and editing.”(p. 05).

1.1.4. Writing as a Genre

Writing is considered by many researchers as a genre. This involves that there are different forms of writing; each form has its specific vocabulary and grammar features. Harmer (2007) explains that students have to take into consideration in writing with specific genre the various factors; they need to have knowledge about the subject and context in which they writing.

1.2. Importance of Writing

Writing is a crucial skill for today’s society because it is an essential means of communication. Learners can express themselves, discuss and share their ideas trough it. Carroll (1990, p. 1) states, “Without doubt, the most important invention in human history is writing, it provides a relatively permanent record of information, opinion, beliefs, feeling, arguments”. Additionally, Graham (2018) claims that writing is a complex tool used to achieve the success of students in school and work and it does not develop naturally but by rather practice and training. Moreover, Cumming (1954, p. 148) stated, “The main importance of writing in that level is that it helps students to learn new words and structures help students to remember them; and as writing is done more slowly and carefully than speaking, written practice helps to focus student’s attention on what they are learning”.

Generally speaking, writing plays a crucial role in academic activities; it is considered as the tool of communication and exchanging ideas and knowledge.

1.3. Writing Aspects

1.3.1. Grammar

Grammar is an important aspect that generally all EFL students concentrate on during the writing process. Knowledge about grammar allows learners to correct their mistakes and improve their written work as far as they lead them to communicate with clear manner. However, many students do not master the grammatical rules; this may affect their writing negatively and lead them to produce poor writing productions. (Harmer, 2007)

1.3.2. Spelling

Spelling has a great value among writers; it is defined as a complex written language skill, which entails a learner to possess a number of language abilities including visual memory skills, morphological, phonological, semantic relation as well as adequate knowledge of spelling rules. (Staden, 2010).

Correct spelling is an essential activity for learners to understand written production and convey the written message because correct spelling achieves the coherence and unity of the foreign language written productions. (Costa et al, 2021)

1.3.3. Vocabulary

Vocabulary is an important aspect in learning and teaching English as a foreign language because without knowing enough about the appropriate and sufficient knowledge, learners face obstacles in understanding or expressing their knowledge. For that, Viera (2016) asserts, “Vocabulary knowledge is viewed as an essential tool for

mastering any language; it also contributes to the understanding of written and spoken texts.” (p. 90)

However, Vocabulary is more than learning new words; it is about knowing their functions in different contexts and situations to be used in the right time and place. In another hand, the lack of vocabulary leads learners to lower their writing performance (Rodrogo, 2016).

1.3.4. Handwriting

Handwriting is an important skill needed by learners to share their knowledge and ideas and use it in communication. Harmer (2007) considers it as a “personal issue, students should not all be expected to use exactly the same style.” (p. 324). Graham et al (1986) state that it is the ability to communicate one’s feelings and ideas effectively in written forms, and it is one of the most important elements in academic success.

1.4. Writing Difficulties

Writing difficulties are about the obstacles that face students in writing their own productions. Thus, Solgha (2013) defines, “the term writing difficulties is used when talking about students who do not have the qualification in order to be able to write in the way that is expected of the students, due to their age.” (p. 04). According to Graham & Harris (1993), writing might be affected by numerous factors like the lack of knowledge about the subject content and the lack of proficiency in text production skills which include errors in spelling and wrong use of punctuation.

Furthermore, Ericson (1999) agrees with this and states that Some students want to write but they write the words as they are pronounced, other students do not understand structure of the texts .Additionally, DrMel (2002) pointed to a number of difficulties

learners face in their writing: memory problems; i.e., poor vocabulary and grammar errors, higher order cognition problem; i.e., trouble generating ideas or elaborating on them and difficulty developing and organizing ideas. Also, spatial ordering problem which is about the poor use of lines on the paper, many misspelled words.

1.5. Overview on Handwriting

1.5.1. Definition of Handwriting

Handwriting is the way that someone forms the letters when he/she writes with a pen or pencil (Cambridge Dictionary, 2022). From that, handwriting is the person's finger print and it is personal and unique and is differing from a person to another.

Accordingly, handwriting is a process that coordinates multiple skills (fin motor skills, language knowledge and academic readiness) to produce and transcribe letters to form words and sentences to form texts (Graham, 1996). In another hand Rachid et al (2020) indicate that “handwriting is a skill that required for full participation in school activities since children spend up to half of their classroom time engaged in paper and pencil tasks daily.” (p. 70).

Donica (2009) talks about the use of handwriting in educational discipline: in writing numbers, recording assignments, taking notes, spelling words, etc. Moreover, Berninger (1992) defines handwriting as the lower level of writing skill and it is a fundamental skill for beginning writers when they express their ideas.

In the same view, Schneck & Amundson (2010, p. 555) say, “The functional skill of handwriting supports the academic task of writing and allows students to convey written information legibly and efficiently while accomplishing written school assignment in a timely manner.”

All in all, handwriting is one of the principal skills in the educational discipline. Clearly, it comes under the writing skill process which is considered as a tool of communication, retention of information, and sharing knowledge.

1.6. The Importance of Handwriting

Even with the development of technology and the spread of the advanced technological communication and learning tools like smart phones, digital whiteboards, and smart digital panels which help learners to write, handwriting is still the most dominant and crucial skill that is used in educational and daily life. In the same sense, Zachry (2016, p. 1) states, “even with the growing popularity of technology, handwriting remains an important skill for young pupils to master because handwriting demands tack up a significant portion of school day.”

In the educational discipline, handwriting skill is a tool through which students share their ideas. Fader (2007), reports that handwriting is described as a language by hand and it is the mirror through which students reflect their abilities and creativity. He adds that it is a means of communication and a necessary skill that builds the child’s self-esteem and raises the success at school.

In the same vein, Sassoon (2006) views handwriting as an important tool for creativity and it is still needed for certain important tasks. Moreover, Feder (2007, p. 313) asserts, “Handwriting is often judged and seen as a reflection of individual’s intelligence or capabilities”. For example, several studies show that lower marks were assigned to students with poor handwriting and higher marks given to students with legible handwriting.

Graham (2010) proves that early handwriting instruction improves students’ writing: not just legibility but also its quantity and quality.

To sum up, handwriting plays a crucial role in educational contexts; it is the measure of the student's educational success.

1.7. Literacy and Handwriting in Education

Literacy is defined as the ability to understand and produce written text (Juel, 1989). Literacy skill includes the knowledge about the letters (i.e. the ability to name letters) and how to handwrite them (Suggate, 2018). There are indicators that show the one's inability to write in different languages from his/her native language (i.e. English speaking people are usually illiterate in Arabic language). Some children are unfamiliar with the writing process; this is consequence of their young age or illness. Another indicator is the lack of practice on control of the movement of writing instruments (Heardrick, 2018).

Moreover, the opinions of researchers concerning the literacy and handwriting were divided into two aspects each side supported its point of view with logical evidence.

Mclarney et al. (2013) pointed that automaticity is a sign of literacy; they stated that as automaticity develops in school children, working memory is devoted to compositional writing tasks instead of focusing on handwriting mechanics. Tucha et al. (2008) claimed that there is much concentration on the aspects handwriting skill like neatness and legibility and not enough focus on the automaticity of handwriting which is the real characteristic of a person who is controlled in handwriting performance.

1.8. Handwriting Styles

1.8.1. The Cursive Style

Cursive is one of handwriting styles which are defined as joined and connected symbols and letters to help students to write. Cambridge Dictionary (2020) refers to cursive writing

as written with rounded letters that are joined together. In addition, Schwellnus (2012) defines cursive as linked and typically slanted letters.

In this meaning, Wann (1987) pointed that cursive writing is produced by the creation and the linking of straight and curved lines. In addition, Zachry et al (2016) points out that cursive writing is easier than print one: “Because cursive requires a more continuous movement and pencil is not picked up from the page as often as with printed work, it is possible that the use of cursive over print may decrease fatigue in a writer.” (p. 6)

Cursive is considered faster than the print and easier for students because the letters are connected. They lift their pen less frequently, which cuts down on time spent forming the letters.

1.8.2. The Print Style

The print is one of handwriting styles which are defined as separate letters to form word or sentence. Schwellnus (2012) defines manuscript as the individual unlinked or ball and stick letters. Moreover, Lexicon (2022) defines the meaning of print in English as a style of handwriting which uses simple enjoined letter forms, resembling printed lettering. The print style is used to write official forms like books, lectures when using computer devices. It is the much used in the age of technological development (digital keyboards, tablets, etc.)

Additionally, in the educational domain, children first learn transcribing print writing than move to cursive writing. The reason behind teaching print style in schools is that all educational instruments use printing; e.g. books, lectures, stories, etc.

In the same vein, Montgomery (2007) states, “because children’s stories and reading schemes were in print script, it encouraged teachers to teach it in reception and then

introduce joining as soon as a neat print had been achieved” (p. 37). Furthermore, Blot (1993) suggests that the print is the appropriate style for the children with severe writing problems because it is more stable and has a simpler discrete movement.

During the 20th century, many countries like USA and UK have implemented the print style in the school syllabus and rejected the cursive one. According to a 2013 study by the American National Pool, it has been revealed that 59% of 612 elementary schools in the United States provided the print writing in their curricula, indicating that instruction in cursive handwriting is on decline. In North America, the print style was employed in a large number of systems and introduced in US schools around 1920 and in the 1980's. The majority of schools still teach it before they teach cursive style, because the strokes involved are simpler and less varied. (Haralson, 2018)

1.9. Component of Handwriting

1.9.1. Legibility

Many researchers and educators provided various definitions for the term legibility. Each conveyed a piece of information from his/her own perspective. Legible handwriting refers to handwriting that can be read/deciphered easily (The Macquarie Dictionary, 2004). Moreover, according to Graham (2006), legibility means the space between words and letters, the quality of being clear enough to read. In the same vein, Caravolas, et al (2020) defined handwriting legibility as the ability to write clearly.

In addition, Graham (1992) claims that legible handwriting is a crucial factor in the academic success for children and it is an important component for performance in handwriting. In addition, Mulanya (2011) explains that handwriting legibility is constructed by some variables that are the shape and size of letters or numbers, dexterity in letters or words formation, and coherence of the conventional symbols of letters/words. For

example, some learners produce small, very small or very large letters. This affects their handwriting legibility because they struggle with the lack of letter formation; consequently, their pieces of writing are affected negatively.

To sum up, legible handwriting is described in terms of five key components: letter formation, sizing, spacing, alignment and slant with letter formation and legible handwriting.

1.9.2. Speed

Handwriting speed is a crucial aspect of handwriting performance; it is measured as the average number of letters written per minute or the amount of text produced within a specific limited period of time (Graham, 1998).

Furthermore, Proverly (2006) proves that handwriting speed is important in the writing quality of adults. Written work requires the ability to quickly record the ideas being generated before they are lost. For example, slower handwriting adults may face problems with producing long tasks, essays, lecture, or notes with good quality. Similarly, Mulanya (2011) indicates in her study that there is a large gap between the written and the spoken ability, and learners with speed problems will face problems when they take handwritten notes. This situation is compounder when teachers resort to the dictation of the notes, so learners leave space or skip words or sentences. Moreover, Sassoon (2006, p. 07) claims that speed in handwriting is important for middle school pupils to achieve their educational needs. She states, “when children start secondary school they will need a fast handwriting for note tacking and increased home work [...] those pupils who demonstrate the most difference between their levels of handwriting indicate that they are the most flexible and efficient making best use of available time”.

1.9.3. Neatness

Neatness is one of the important components of handwriting. Sassoon (1990) indicates, “People present themselves to the world through their handwriting and are inevitably judge by it. From our earliest school days, success and failure are often measured in term of neat handwriting.”In other words, neat handwriting is essential to achieve success in handwriting tasks, and it is the scale used to determine how far we can achieve handwriting performance. Moreover, teachers encourage and assess children’s neat handwriting in the early age of their school education.

Neatness is described as “an esthetic property” relating to the “beautiful appearance” of handwritten documents (Adak, 2017). Chaotic handwriting may still be able to be read (i.e. legible) but may be regarded as unfavorable to the reader or writer. Similarly, previous research has indicated that teachers gave lower marks to school students’ test answers when handwriting is messy, compared to handwriting which has an attractive esthetic appearance and yet contains the same content (Morris, 2014)

1.10 Legibility versus readability

The principal goal of handwritten information is to express a message from the writer to the reader in a real world context so as to realize readability. The written message has to be clear and written with simple or selected words to facilitate the reading it. In this sense, Hadelly (1996) asserted that writers do not need to write all written works with best handwriting but with a clear and simple way. Nevertheless, all writers care about the readability and legibility of their handwriting when their written production is intended to be read by others.

When coming to differentiate between the two variables readability and legibility, they may seem similar and interrelated, but Lieberman (1968) explained, “legibility is based on

the ease with which one letter can be told from the other.” (cited in readability matters “legibility versus readability”, 2021, para 2). He added, “readability is the ease with which the eye can absorb the message and move along the line.”In other words, legibility is concerned with how to differentiate between one letter from another whereas readability is about how a reader can obtain the whole meaning of a text.

Oxford English Dictionary (2022) defines readability as “the quality of being legible or decipherable.” In accordance with that, readability is viewed as the main aim at which a reader can reach better comprehension of the elements of a given written piece. Also, readability of text is considered as the main criterion which should be taken into consideration while selecting a text, so in order to build a comprehension for a reading text, it should take readability as a main focused area.

1.11 The Role of Handwriting Automaticity

Handwriting is a key element that helps students to produce well- structured texts; it is a perceptual –motor skill and a tool used to learn and remember letters, names and sounds.

Automaticity is defined as “the ability to recall information from memory quickly accurately and effortlessly.” (Schneider & Shriffrin, 1977 as cited in Christen). This means that it is the process that is used to retrieve the storing brain data easily. Moreover, the translation of ideas into written text relies heavily on the writer’s ability to retrieve alphabet letters in memory and produce these letters automatically. For that, handwriting automaticity assessed by the alphabet tasks requires the “retrieval of letter forms from long term memory with planning and execution of fine –motor movements under time limited conditions.” (Berninger, 1999, p. 103). If handwriting is not automated, the child will struggle with remembering and retrieving numbers, names and grammatical rules (Olive et al., 2009)

Automaticity in handwriting has a great role in the production of high quality written texts; we can say that handwriting automaticity in early age plays an important role in the development of literacy. Kim & colleagues (2011) suggest that handwriting may support the spelling and writing proficiency of beginning writers. Furthermore, their findings indicated that oral language, spelling, and letter writing automaticity were positively and uniquely related to the writing fluency of beginner writers in the United States.

1.12. The Effect of Poor and Good Handwriting

Handwriting affects positively or negatively the learner's educational achievement and performance. It is the mirror that reflects their abilities. Teachers can evaluate their students' through their written documents or assignments. Asher (2006) agrees with this and claims that the aim behind using the handwritten assignment by teachers is to evaluate their students and what these latter have learned, so in case of students struggling with poor handwriting, this may affect negatively their educational achievement.

In the same vein, Graham (2001) proved that poor handwriting has a negative impact on the evaluation of the content of written documents: readers cannot understand what the writer writes; he proposed that the obstacles with handwriting might also impact the writing abilities and the development of the children in their childhood schooling. Moreover, Rashid et al (2020) explains,

Poor handwriting may also lead to lower academic attainment; children who find handwriting more difficult and effortful may become fatigued more quickly than their peers and may be less able to demonstrate their knowledge and comprehension through written assignments. (p. 01)

In addition, Feder (2007) observed that children with poor handwriting problems face obstacles in the writing process; for example, difficulty in spelling can lead to the difficulty

in note taking or expression of ideas. Similarly, Sassoon (2008) points, “poor spellers may often appear to write badly.”(p. 86)

To sum up, poor handwriting influences negatively the educational achievement and leads the students to lower performance.

In another hand, legible and neat handwriting has a positive impact on the educational achievement among students. The findings of Redriguez (2016) revealed that children with good handwriting skill are better performers than the children with poor handwriting skill. In addition, good handwriting is a vehicle to impress pupils’ writing in the mind of the evaluator; for example, pupils who write neat and legible paper will see their academic performance improve.

Conclusion

The current chapter has shown that writing is an important skill in the teaching and learning processes. It is used by pupils to share their ideas and knowledge. To realize the writing skill, pupils use their hands; for this reason, handwriting is a crucial skill in recording and writing knowledge. However, some pupils struggle with handwriting and have difficulties to write legibly. This is due to various factors that are presented in the next chapter.

Chapter Two

Handwriting Factors

Chapter two: Handwriting Factors

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Introduction

Several research studies have been conducted to investigate the factors that affect handwriting performance and may contribute to handwriting difficulties. Those factors are divided into two main types which are external and internal factors. In this chapter, we present the definition and the types of both factors: external and internal. We also spotlight on how dysgraphia and affective factors affect handwriting. In other hand, we focus on the assessment of handwriting and the teacher's perspectives on handwriting.

2.1.Types of Factors Affecting Pupils' Handwriting Quality

Handwriting is a complex process because it requires a series of processes that pupils go through while writing by hand. In the same time it is concerned with “synthesis of cognition, visual perception, motor skills, integration of memory, problem solving, organization, reading and language ability, ideation and graph –motor function (Tennyson, 2006 as cited in Al-Ghabra, 2015). However, the intrinsic and extrinsic cause handwriting problems.

2.1.1. Extrinsic Factors Affecting Handwriting

The Extrinsic factors refer to the external problems that may affect handwriting performance referring to environmental and biomechanical problems. They include sitting position, chair /table height, the used writing instrument and its placement on the table, environmental lighting and noise, blackboards distance while copying, and volume of handwriting the child is predicted to complete (Feder, 2007).

Specifically, there are ergonomic factors that play a great role in handwriting performance, but a little attention is paid to them. The ergonomic factors include writing position, pencil grip, the positioning of the pencil and paper (Rosenblum et al., 2006).

2.1.1.1 The ergonomic factors

a- Writing posture

Body posture is a crucial factor that influences directly pupils' handwriting. Sassoon (2006) defines writing posture as the pupils' setting and the way they hold the pen and how the paper is put. Those materials are essential for legible and neat handwriting. Furthermore, Mulanya (2011) describes body posture as "the movement largely covered letter orientation or angle of inclination, sitting style, degree of tire, pencil grip, position of the pencil in index finger and pressure on the writing materials."(pp. 58-59). In the other hand, wrong body posture can lead to poor handwriting and put stress on pupils' muscles. This can cause fatigue to them and decrease their ability to complete fine motor skills (children's support by life works, 2012) .

According to Erhardt & Mead (2005), good posture entails: "... Sitting with hips at 90° angle and feet stabilized on the floor, good pelvic and spinal alignment, cervical control for downward visual gaze and shoulder for arm and hand control." (p.199). For Benbow (1992), the ideal posture for a child requires seating with feet flat on the floor, hips and low back supported against the chair back, knees flexed about 90° and elbows barely flexed with to rest easily at the desk surface. The following figure illustrates the ideal sitting position for writing.

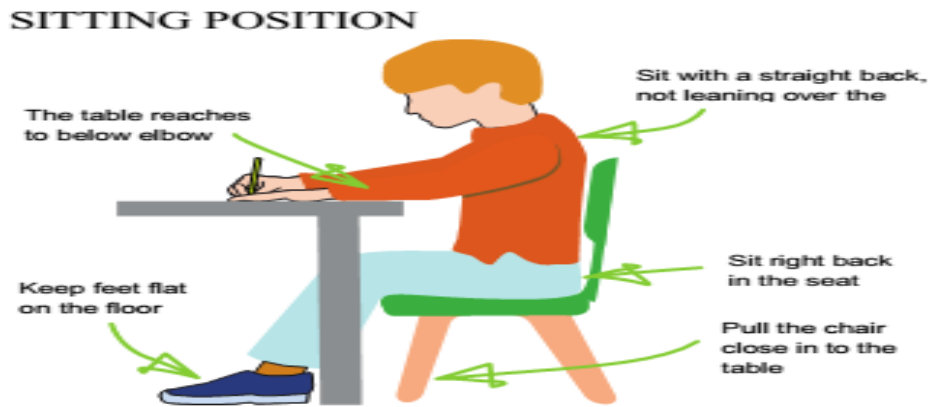


Figure2.1: the appropriate setting position (adapted from <https://www.bramhopeprimary>)

b- Pencil Grasps

There are various factors that cause poor handwriting. One of those factors is how an individual holds his /her writing tool which is attributed to a pencil grasp. Schwellnus (2013) defines, “pencil grasp is a term used to describe the position of the fingers involved in grasping pencil.” (p. 03) Additionally, Sassoon (2006) proves that the way of holding the pen affects the individual’s handwriting. Similarly, Henderson (2006) states, “letter production skills can be influenced by the way the writer grips a writing tool.” (p. 330)

Therefore, the pencil grasps are assorted according to the position of the thumb, the number of fingers on the barrel of the pencil, and finger joint position. Schwellnus (2013) points, “For a pencil grasps to be functional for writing, it must offer the user the ability to efficiently create a legible written product for the required duration, and children must be able to write long enough to keep up with class work.” (p. 219)

According to this, there are several types of grasps among which there are some of that promoted functional grasps like the dynamic tripod , quad iPod and adaptive .

- **The Dynamic Tripod Grasp**

The dynamic tripod is promoted as one of the efficient grasps. In addition, the dynamic tripod is the optimal pencil grasp because it allows fine dexterous movement of the finger to write letters (Elliot & Cannoly, 1984). In the same vein, the findings of Ziviani (2008) assert that the dynamic tripod improves hand grip among children between the age of seven and fourteen years old. Donica (2018) provides a description to the tripod as follows:

Forearm resting on table with localized finger movement and wrist movement for Horizontal and vertical strokes, pencil held with wrist slightly extended and Fourth and fifth fingers fixed into palm, pencil held against radial side of third Digit by thumb in full opposition and index finger placed in the top of shaft.

(p. 414)



Figure 2.2: the dynamic tripod (adapted from Schwellnus, 2012, p. 5)

- **The Quadruped Grasp**

The Quadruped grasp is considered as an efficient pencil grasp which helps pupils with poor handwriting to improve this skill. Alley (2002, p. 2) provides a description to the quadruped as follows: “the pencil is held with the tip of the thumb, index finger, and third finger and rests against the side of the fourth finger. The thumb and index finger form a circle.”



Figure2.3: the dynamic quadrupod (adapted from Schwellnus, 2012, p. 5)

- **The Adaptive Grasp**

The Adaptive grasp is one of the mature and efficient grasps used by pupils to increase their handwriting performance. According to Alley (2002), the pencil is held between the index and third fingers with the tip of the thumb and index finger on the pencil. The pencil rests against the side of the third finger near its end.



Figure 2.4: adaptive tripod (retrieved from <https://www.medbridgeeducation.com>)

c- Pen hold

Pen hold is an important element that affects pupil's handwriting. Sassoon (2006) considers pen hold as one of the most important and ignored issues in the classroom as well as in the home; teachers and pupils give little attention to it. In addition, the pen hold

can impact negatively on pupils' handwriting: When the pen is held in a wrong way, this might affect inefficient pencil grasps which lead pupils to difficulties in their writing

d- Paper position

Paper position has a great significance in handwriting. Hadley (1996) says that the typical and best paper position deliver opportunity to the writer to see her/his writing clearly. Amundson (1992) describes the paper position as typical writing surface that turned into maximum normally placed horizontally on a table, but the vertical surfaces may be useful for people with perceptual difficulties on vertical floor standards of up and down; they are perceptually accurate, not towards and away from a child. The paper has to be positioned consistent with the hand the child makes use for writing. It should be tilted slightly; this permits the pupil to look his work and stop the ink smudging. Sassoon (2003) explains, "right -hander need their paper over to the right side ,and more importantly ,left -hander need their paper over to their left side." (p. 32). A tape on the desk can be used to remind the child of the paper position. The non writing hand

should usually be used to stabilize the paper when writing this allows assisting the body, permitting the writing arm to move freely and develop writing skill.

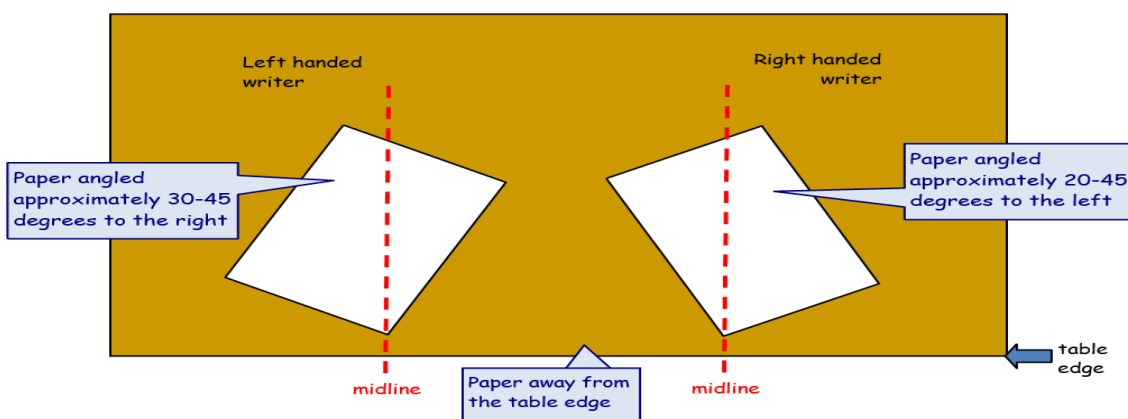


Figure 2.5: the right paper position (adapted from HertsSpLD)

e- Spacing

Spacing is an important aspect to realize handwriting legibility; it is concerned with margin, words and lines. Accordingly, Smith(1954,p. 814), illustrates, “ spacing includes many different kinds of arrangement: the distance between lines, single strokes, letter, syllables, sentences, paragraphs, margins, quotes, commas, bars, etc”. Similarly, Morris (2000, p. 95) states that relative spacing is divided into four parts: (1) between words, (2) between the name and initials in a signature, (3) between letters within a word, and (4) between lines of writing in an extended body of writing.

In addition, smith (1954) states that inappropriate spacing may be the consequence of illegible handwriting.

To sum up, handwriting entails appropriate spacing in order to achieve legible handwriting

2.1.1.2 Orthographic factors

Orthography is the graphic representation of spoken language and graphic forms in alphabetic orthography and contains phonological units (Frost, 2005).There are three orthographic effects coordinated to handwriting: Letter knowledge, orthographic knowledge, and syllable –size processing units (Sut, 2020).

a- Letter knowledge

Letter knowledge is the children’s familiarity with letter shapes, names and corresponding phonemes. In fact, letters in alphabet should be learned by children before starting learning writing (Foulin, 2005). In addition , Piasta & Wanger (2009) introduce five letter knowledge issues, namely: (1) letter-name knowledge, (2) letter-sound

knowledge, (3) letter–name fluency, (4) letter-sound fluency, and (5) letter writing. When pupils have difficulties in knowing letters, this lead them to write wrong words and phrases and can cause them poor handwriting problems.

b- Orthographic coding

Orthographic coding refers to the ability to improve an intact representation of letters of alphabet and rapidly and accurately encode and reproduce them for memory (Weintraub & Graham, 1998). Similarly, Berninger et al. (1984) define orthographic coding as retrieving letters from memory to write. Furthermore, Medwell & Waray (2007) assert that orthographic coding “is the ability to call to mind and write letters shapes, groups of letters and words efficiently and effectively without allocation of cognitive attention.” (p. 12). In other words, orthographic coding explains how students store and retrieve letters forms from memory when writing.

Students have to master this skill to produce good handwriting and concentrate on other writing processes like planning, organizing and producing texts (Medwell & Waray, 2007). Moreover, the ability to efficiently motor plan leads to accurate stroke formation and automatic symbol use. Therefore, students have to be able to motor plan how to produce letters and words on paper in order to being able to recall letters forms from memory (Press et al., 2009).

2.1.2. Intrinsic factors affecting handwriting

Intrinsic factors refer to the child’s actual handwriting capacities. They may include fine motor skills (in- hand manipulation, bilateral integration and motor planning), VMI, visual perception, kinaesthesia, sensory modalities and sustained attention (Feder, 2007). They are crucial in developing the capability to control the writing tool and allowing for good handwriting (Cornhill,1996).

2.1.2.1. Fine motor skills

Fine motor skills play a great role in handwriting. They refer to finger movements coordinated with muscle movements in the wrist, elbow, and shoulder to control a writing tool in order to produce a written text (Sut, 2020). Fine motor skills require the small muscles of the body that allow the functions of writing, grasping small objects and in handwriting.

The findings of Cameron (2012) prove that fine motor skill is a skill that helps children for better performance and learning; it increases child's chances for fine motor learning experience. Cameron (2012, p. 12) also indicates, "children with high fine motor skill have better automaticity which means he/she can easily perform basic motor tasks like getting to write letters on pieces of paper." In addition, fine motor skill enables children to demonstrate good handwriting legibility. According to the findings of a study conducted by Seo (2018), the fine motor skills are factors that influence handwriting legibility, and they have a positive effect on handwriting performance.

To sum up, fine motor skills are vital in handwriting skill because they consist of small muscles needed in writing. Also, they affect positively the legibility and handwriting performance.

2.1.2.2. Visual –motor Integration (VMI)

Visual-motor integration is an important variable in handwriting performance, especially in copying or transforming from text to cursive or manuscript writing. In the same quest, Amundson (1992) describes visual integration as the ability to coordinate visual information with a motor response, promote the child to produce letters and numbers. Accordingly, Weintraub & Graham (2000) define visual-motor integration as the ability to coordinate visual information with a motor response and is the predictor of handwriting legibility. Furthermore, Haynes (2019) defines VMI as it is "the degree to

which the eyes work with the muscles of the rest of the body to complete activities.” (p. 1). In addition, Tanskanen et al. (2006) demonstrate that there is a strong relation between visual perception and the production of handwriting; VMI underlines the involvement of the human primary motor cortex in the continuous action and perception coordinates of an individual interacting with his/ her environment.

Visual closure is an area of visual perception in which the child identifies which letters have been formed completely whereas position in space influences a child to discriminate between similar letters or words for example (b/d, i/t, was/saw) and may also influence handwriting (Feder, 2007). Therefore, poor visual memory leads to handwriting difficulties (Kurtez, 1994). Furthermore, Kaiser et al. (2009) findings suggested that hand-eye coordination associated with VMI predicts handwriting quality.

2.1.2.3.Kinaesthesia

Kinaesthesia refers to the awareness of movements in the body, and perception is the sense through which persons perceive the position of joints in their body; it has a great importance in obtaining handwriting legibility (Laszlo, 1984)

Laszlo (1984) defines kinaesthesia as “the sense of position and movement of limbs and body [...] through which we monitor the speed, extent and force of our movement, and how the success or failure of our movement is evaluated” (p. 208). Additionally, Cornhill (1996) coordinates kinaesthesia to the level of pressure applied to writing tool. Moreover, kinaesthesia has a great significance in handwriting ability; it affects handwriting by affecting the pencil grip. Furthermore, kinaesthetic information plays a great role in the acquisition and performance of motor skills; it has two functions. The first one, it provides ongoing error information, and it is stored in memory to be recalled while the skilled movement is repeated. In, the second function, error information leads to error corrective

program generated its own kinaesthetic input which is responsible for the improvement in the skill with practice (Laszlo, 1984).

All in all, children face problems with writing and will be unable to improve their performance through practice when they cannot use kinaesthetic information.

2.1.2.4. In hand manipulation

In - hand manipulation plays an important role in handwriting improvement. It refers to the process of adjusting objects within the hand during handwriting tasks to help the student to move the pencil from the palm to the fingers, make adjustment to the pencil for writing, and turn the pencil from writing to erasing with one hand (Weintaub et al., 2000). Furthermore, there are two main types in hand manipulation task: the first one is translation which is “the ability to move an object from the finger to palm or palm to finger pads.” (Exner CE, 1989, p. 235) while the other task in hand manipulation is rotation, which “involves movement of the pencil around an axis and it is essential for turning the pencil from grasp position to placement for writing.”(Exner CE, 1989, p. 259). Hence, which means that both types of in hand manipulation are essential in the process of writing.

2.1.2.5. Bilateral integration

Bilateral integration is another essential element of fine motor and motor planning influencing handwriting. Handwriting composes of asymmetrical movements as the child must stabilize the paper with non-preferred hand while holding the pencil with the preferred hand (Fader, 2007). Moreover, Exner (1989) defines bilateral integration as the ability to perform asymmetrical movements of the body during an activity. Children with bilateral integration difficulties can face problems in symmetrical and asymmetrical movement of the upper extremity required in handwriting.

2.1.2.6.Cognitive Factors

Cognitive factors play a vital role in performing handwriting. There are numerous cognitive components that conducted at distinct levels during the writing and composing processes (Hayes & Berninger, 2014). Moreover, working memory, long-term memory, and working memory capacity (executive attention) are three cognitive components which are closely interrelated during the performance of complex skills like handwriting (Feder & Majnemer, 2007).

2.1.2.6.1.Working memory (WM)

Working memory (WM) refers to the small amount of information that can be held in mind and used in the achievement of cognitive tasks. It works with complex tasks such as handwriting (Tindle, 2016). According to Baddeley (2000), WM “is a limited capacity system allowing the temporary storage and manipulation of information necessary for such complex cognitive tasks ” (p. 418)

In other hand, Baddelly (2012) differentiates between WM and short term memory. He defined short- memory as the storage and of information whereas working memory as the storage and manipulation of information. However, pupils with poor working memory face problems of organizing and integrating information in the brain.

2.1.2.6.2.Long – term memory

Handwriting is a skill that requires the generation of letter representation but also the retrieval of representation. In the same vein, Berninger et al., (1997) assert, “handwriting also draws on letter knowledge which involves being able to attach a verbal label (name) to a letter form, having an accurate, precise representation of the letter form in memory, and being able to access that letter form in memory and retrieve it from memory” (p. 653).

In addition, poor memory leads the pupils to forget what they learn. This may influence their performance in retrieving and writing letters and phrases and, thus, leads to poor memory as well as poor writing development.

2.1.3. Dysgraphia

Some students suffer from a kind of disabilities like dysgraphia that may have an effect on their handwriting performance. Dysgraphia is characterized through problems inside the manufacturing of legible writing in retaining the fine and velocity of writing demanded in elegance or both (Schwellnus, 2013, p. 218) .

Moreover, Dan George (2020) defines dysgraphia as “specific learning disability or difficulty with writing; it is affected directly writing so causes problems with spelling and organizing words [...] dysgraphia is a neurological disorder that generally appears when children are first learning to write” (p. 12). That means, some persons struggle with a difficulty in the brain which leads them to face handwriting problems such as spelling and word organization.

Furthermore, a person with this particular getting to know incapacity may additionally face issues with writing portions with incorrect grammar and punctuation as well as with recognized issues such as omitting phrases and the incorrect use of verbs and pronouns. In this example, they want a lot time in forming letters in order that they spend more time in writing (George, 2020, p. 13).

Similarly, Richards (1998, p. 15) mentions some results about the learners who struggle with dysgraphia produced such as : Misuse of line and margin, bad employer at the page, add wrist body posture, paper position, and illegible writing .

Dysgraphia may be categorized into five subtypes. The first type is phonological dysgraphia, which is “writing and spelling disturbances in which the spelling of unfamiliar words are impaired.” (George, 2020, p. 1). In this kind, students have a trouble in spelling with the aid of sounds and rely on visible components of letters.

Another type is the semantic or grammatical in which “students have difficulty with how words can be joined to make complete phrases.”(Crouch & Jakubey 2007, p. 05). Also, there is motor dysgraphia which is due to deficient exceptional motor competencies, negative dexterity, and bad muscle tone (Crouch & Jakubey 2007). Additionally, there is spatial disability caused by an illness inside the knowledge of area of illegible written paintings with ordinary spelling and velocity (George, 2020). This means that when the learner has a difficulty in the understanding of space and has illegible spontaneously written or copied work (George, 2020) .

The last type of dysgraphia is the mixed dysgraphia which refers to learners having trouble with mixing up letter formations and having trouble with spelling tasks. (Cruch & Jakubey, 2007, p. 5).

To conclude, instructors should be aware of their pupils with dysgraphia and should encourage them by using certain strategies to develop their handwriting .

2.1.4.Affective factors

Affective factors are those emotional relevant characteristics of the individual that influence how he/she will respond to any situation (Malyana, 2011, p. 62). Furthermore, Cheng (2004) states that there are numerous factors that influence pupils’ handwriting like anxiety, which is defined as the actions or behaviour to avoid something or someone who feels anxious toward something. In another hand, (Cheng, 2004) demonstrates that handwriting is complex and multifaceted in nature, so the relationship between learners’

writing anxiety and their composing process may be reciprocal (Lee & Krashen, 2002). In other words, the cause for anxiety may be the complex and arduous writing process or vice versa.

Self-esteem is another affective factor that can influence the handwriting of an individual. Smith (2010) defines self-esteem as the evaluation, which the individual makes and customarily maintains with regard to himself; it expresses an attitude of approval or disapproval and indicates the extent to which an individual believes himself to be capable, significant, successful and worth. In fact, the ability to master handwriting as a complex task is related to individual's self-esteem and self-worth (Laszlo & Sainsbury, 1993).

However, problems in handwriting can influence a pupil's success at school and decrease his/her self-esteem (Graham, et al., 2000). Moreover, handwriting can be affected by individual's self-esteem; pupils with low self-esteem can face problems while they handwrite. This can lead them to obtain poor handwriting; hence, they get lower scores and vice versa.

To sum up, we can say that affective factors like anxiety and low self-esteem are all causes of poor achievement of handwriting skill.

The following pictures summarises the factors that affect learners' handwriting:

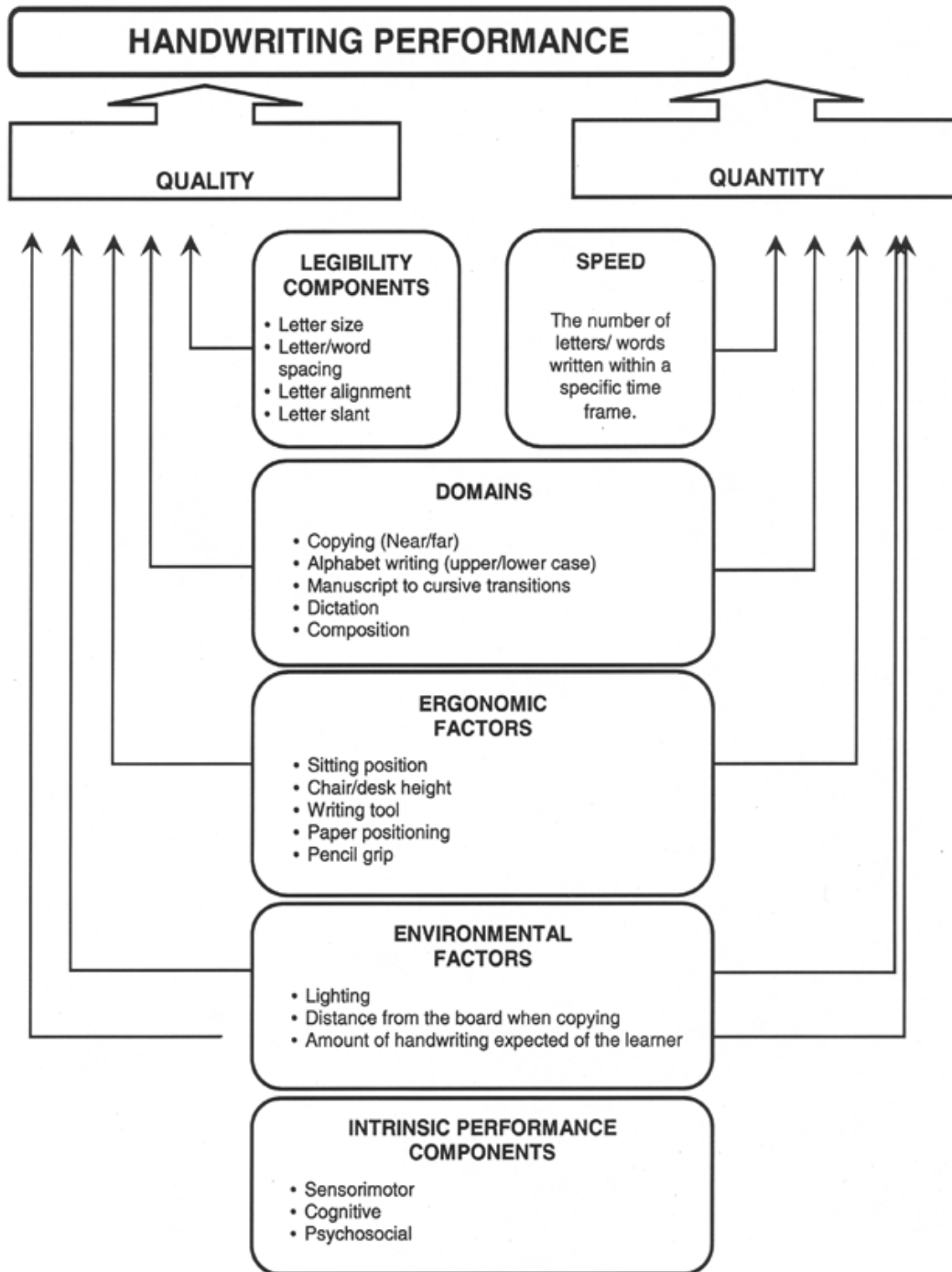


Figure 2.6: factors impacting on handwriting (adapted from Merwe, 2011, p. 02)

2.1.5. Teachers' perspective on handwriting instruction

Teachers do not really give importance to teaching handwriting to children at young age; therefore, little is known about how handwriting is taught to young, developing writers (Asher, 2006). In addition, Graham (2008) reports that the lack of time in teaching handwriting is a major cause teachers can face in teaching handwriting classes .

Hammerschidt & Sudsawad (2004) conducted a study exploring the importance of handwriting instruction. They found that 80% of teachers surveyed from grades one through four, asserted that handwriting instruction was either important or very important to them; they believe that handwriting is a crucial aspect of academic performance.

Among teachers, there appears to be little consensus on how handwriting should be taught (Benson et al., 2010). Factors that contribute to inconsistencies among teachers and classrooms include curriculum choices, instructional methods, materials and resources, and teachers' experience (Edgar, 2002). For example, there are a multitude of curricula, various teaching methods, and a variety of writing instruments and papers available.

The amount of time that is dedicated to direct instruction differs from one class to another and to one school to another (Ediger, 2002). Currently, teachers do not receive special instruction on how to teach handwriting effectively (Kiss, 2007). This highlights the need for an interdisciplinary approach to teach handwriting (Ediger, 2002).It is important for teachers to assist young students in developing adequate skills through providing opportunities for repetitive engagement in activities that focus on fine motor skill development (Rule & Stewart, 2002).

2.1.6 Handwriting Assessment

Handwriting is considered as crucial area for the learners' assessment .As one as ,it is complicated skill in teaching and learning .Handwriting evaluation is an important instructional part during teaching handwriting which is used to assess the pupil's writing skill .In this case ,Hadley defines assessment as "a part of record keeping but it is also constructive in helping the pupil to move forward whatever the subject being assessed ." (p.17) .It can be said that assessment is the principal point which helps the teachers to know their pupils' skills .It is essential to consider how teachers assess learners' handwriting abilities ,they are in charge of recognizing handwriting difficulties and enhancing their pupils performance .But ,due to the time restrictions and teachers frequently do not perform specific assessment to rate the various handwriting components ,they focus on readability , correct letter structure and appropriate spacing are the elements of readability that teachers frequently mention (Hammerschidt &Sudsawad ,2004).

However ,to assess a learners' handwriting teachers used to follow a particular criteria that based on two principal tips which are :

- Use a classroom observation to mark the students' performance during a handwriting tasks or activities; accordingly, Asher (2006) states that :
 - Observe the student during a handwriting activity within the classroom ,scoring as many items as possible .
 - Use the comments section to record the difficulties noted in the students' performance
- Working on a classroom observation through using a classroom individual testy session to highlight the learners' weaknesses and needs, as well as to remediate it by a certain helpful strategies.

Conclusion

This chapter presented a review of the available researches describing the factors that seem to influence young learners' production of handwriting including: the extrinsic factors which are the ergonomic factors including writing posture, pen hold, paper position, spacing as well as orthographic factors (letter knowledge, orthographic coding). In another hand, we dealt with the intrinsic factors that may influence the handwriting skill such as the fine motor skills (in- hand manipulation, bilateral Integration and motor planning), gross motor skills, visual motor skills, and cognitive skills .

This chapter also highlighted that the affective factors and dysgraphia may influence the production of poor handwriting.

Chapter Three:
Fieldwork and Data
Analysis

Chapter Three: Fieldwork and Data Analysis

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Introduction

This chapter presents the practical part of our study that aims at covering the effects of the factors that influence handwriting quality. Furthermore, it combines the description of the designed instruments and the aims that served them. It also involves the analysis of the data that is collected from both tools: the questionnaire and the classroom observation, which were used to enrich our study with needed information.

This chapter, then, clarifies the research design in terms of the aims, the administration and the description of tools. Moreover, it contains the analysis of teacher's questionnaire and classroom observation.

3.3.1. Teachers' Questionnaire

3.3.1.1. Aim of the Questionnaire

The Teacher's questionnaire was mainly designed to diagnose the teachers' points of view about the importance of writing as well as the handwriting skill on middle school pupils. It also aimed to gather their attitudes, experience, knowledge about how to cope with poor handwriting and its effects on their pupils' writing quality and grades.

3.3.1.2. Description of the Questionnaire

The questionnaire was elaborated for middle school teachers of English to explore their opinions about the topic under investigation. The questions included in this questionnaire are either closed –ended or open-ended questions. First, in close –ended questions, teachers are supposed to provide “yes” or “no” answers, to choose among a list of options, or to indicate the frequency of occurrence of a particular behavior. Furthermore, open-ended require full answers from the parts of participants. All in all, the questionnaire consists of twenty one (21) questions divided into three sections: Section one (Background

Information) aims to gather general information about the teachers' qualification and experience in teaching the English language. Section two (Writing Skill) is devoted to investigate the teachers' views and insights about the writing skill; it consists of four (04) questions. Finally, section three (Handwriting) intends to provide extra information about handwriting, its importance, and the factors that influence handwriting skill.

3.3.1.3. Administration of the Questionnaire

We have administered the questionnaire to nineteen (19) middle school teachers of English from different middle schools in M'sila. These were selected randomly. It is worthy mentioning that only three (3) EFL teachers work in the school were the sample of pupils has been selected. In fact, considering that the number of teachers was very small, we have decided to contact further participants from other different schools to obtain more data so as to present more validity and reliability to the findings. The administration of questionnaire was through Google form was and posted in English facebook groups of different middle schools to facilitate the process of collecting data.

3.3.1.4. Analysis of the Questionnaire

Section One: General Information

Q 1.What is your qualification?

Table 3.1: Teachers' Qualification

Options	Respondents	Percentage
a. License	2	10%
b. Master	16	85%
c. Magister	0	0%
d. Doctorate	1	5%
Total	19	100%

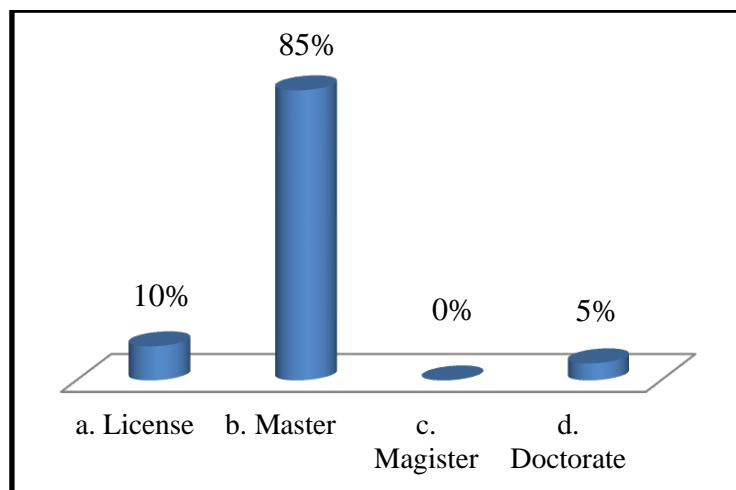


Figure 3.1: Teachers' Qualification

From Figure 3.1 that represents the participants' qualifications, we can clearly deduce that the majority of teachers (85%) have master degree while (10%) have license degree, and one participant (5%) has a doctorate degree.

Item 2.How long have you been teaching English in middle school?

Table 3.2: Teachers' Experience

Options	Respondents	Percentage
a. 1-5 years	13	68%
b. 5-10 years	4	21%
c. More than 15 years	2	11%
Total	19	100%

This question aims at determining the participants' experience as EFL middle school teachers.

Findings reveal that the majority of teachers (68%) have been teaching English for 1-5 years while (21%) have an experience of more than 10 years. The rest of participants (11%) stated that they have been teaching English for more than 15 years.

These results indicate that the majority of participants are novice teachers and only few of them have a wide experience in teaching English in middle school.

Item 3. Are you a full-time teacher or a part-time teacher?

Table 3.3: Teachers' Working status

Options	Respondents	Percentage
a. a full time teacher	12	63%
b. a part time teacher	7	37%
Total	19	100%

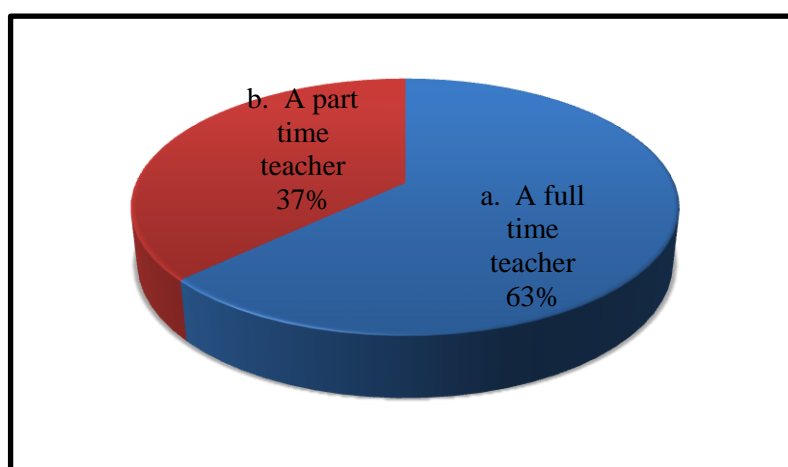


Figure 3.2: Teachers' Working status

The figure 3.2 shows that almost of teachers are full time teachers (63%) and the rest (37%) are part time teachers.

Section Two: Introduction to the Writing Skill

Q 4. According to you, which skill is the most difficult to be mastered by students?

Table 3.4: The skill that needs more focus

Options	Respondents	Percentage
a. Listening	3	16%
b. Speaking	8	42%
c. Reading	0	0%
d. Writing	8	42%
Total	19	100%

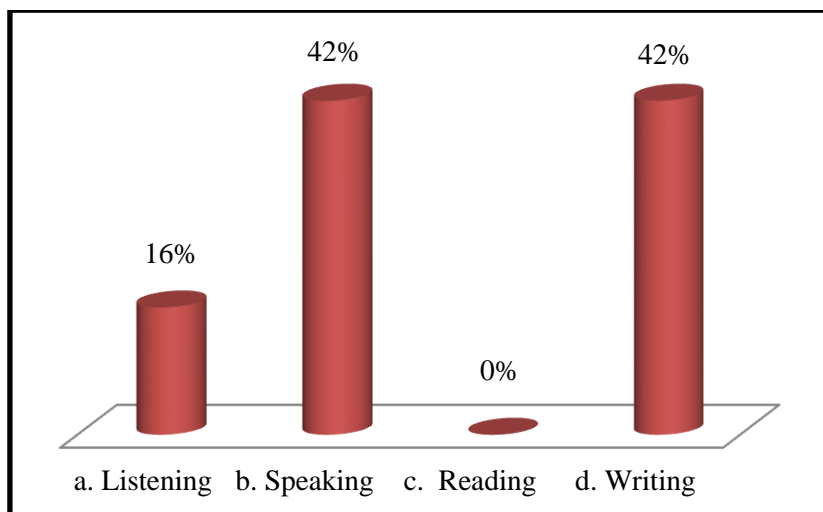


Figure 3.3: The skill that needs more focus

The proposed question aims to discover the teachers' views about the skill that teachers need focus on in teaching. According to what is illustrated in the above table and figure, teachers believe that both speaking and writing are the most difficult skills (42%) among their pupils. In the other hand, some teachers reported that listening skill (16%) is the one pupils find the most difficult. However, no one referred to reading as being difficult.

From the previous results, we can deduce that writing skill is one of the most difficult skills that pupils have to master for completing their language production and performance.

Q 5. How many sessions you devote for writing skill per sequence?

Table 3.5: Number of Sessions Devoted to Writing Skill per Sequence

Options	Respondents	Percentage
a. One session	4	21%
b. Two sessions	11	58%
c. More than two sessions	4	21%
Total	19	100%

The table 3.5 presents the number of sessions that are devoted to the writing skill per sequence. The obtained results show that most of the teachers (representing 58% of the

sample) use two sessions per sequence for teaching the writing skill. However, 21% of participants devote only one session into teaching this skill. Similarly, 21% of respondents revealed teaching writing more than two sessions per sequence.

Generally, the distinction between teachers' teaching writing sessions per sequence refers to the limit number of the available sessions in educational curriculum, or is referring back to the specific need of their pupils to this fundamental language skill.

Q 6. Do you think that the time devoted to teaching written expression is sufficient to cover most of the aspects required to improve the writing skills of the pupils?

Table 3.6: Teachers' Opinion about the Time devoted to Teaching Writing

Options	Respondents	Percentage
a. Yes	1	5%
b. No	18	95%
Total	19	100%

This question sought to clarify the teachers' attitudes towards the time devoted to teaching written expression as being sufficient or not in covering all the aspects required to improve pupils' writing skills. The majority of the teachers (95%) insisted on the fact that the time devoted to teaching written expression is not enough to tackle all the necessary aspects to develop the writing skill. They justified their answer stating the following:

- Writing is the most complicated and difficult skill to be mastered since it needs other mastered aspects like grammar and vocabulary. So, much time should be devoted to teaching writing in order to cover the aspects required to improve this skill.

- The writing process needs drafting once and twice and requires writing and re-writing to enable the students to arrive at that phase of creating a clean, refined, and accurate piece of writing.
- Writing is a skill, not only a module, so learners won't master that skill without providing much time to practice it is like speaking.
- Students need to be familiar with the details of the writing process in order to produce more accurate, well-organized, and more creative texts. They should be taught how to use certain aspects of the text, the grammar of the language, the lexical items, and other factors in addition to the way these interact for an effective written text. So, more time is needed for developing more effective writing for the EFL student.
- Time devoted to English in middle school is insufficient to teach any skill in a good way. 2 or 3 hours are too short to cover or master a skill whatever its kind is.
- I think that our students could benefit from extra sessions to learn more about the writing process and the different techniques in order for them to be able to free write in any topic they want. Moreover, the more knowledge about writing that they gain, the more confident in their writing production they will be. In addition, we need to see that confidence in our students in order for them to pass the exams.
- Writing is the production phase in which the students use their acquired knowledge in a specific way; therefore, they need enough time to learn the strategies to do so.
- Learners need plenty of time to write a piece of writing as they need guidance to succeed in accomplishing every step related to the essay they write.
- Writing skill needs more than four hours for a situation of integration to be taught.

On the other hand, only one respondent (5%) views that time is quite sufficient to teach fully the written aspects of the language because, according to him/her, pupils are already familiar with the topic.

Q 7. Do you teach the writing skill for.....?

Table 3.7: Teachers' Purpose behind Teaching Writing Skill

Options	Respondents	Percentage
a. Increasing students' vocabulary	3	16%
b. Language development	2	11%
c. Developing writing as a skill	14	73%
Total	19	100%

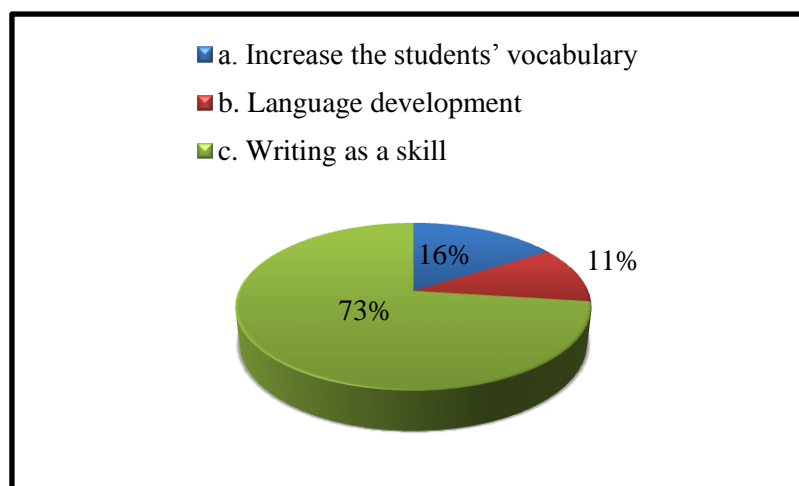


Figure 3.4: Teachers' Purpose behind Teaching Writing Skill

This question intends to explore teachers' views about the reasons behind teaching writing for beginner learners at middle schools. Findings show that the majority of teachers (73%) teach the writing to develop this skill among learners. In another hand, (16%) of teachers argued that the goal of teaching writing skill is to increase the pupils' vocabulary. Besides, the rest of teachers claimed that the aim of teaching writing skill is to make pupils develop the language successfully.

It can be deduced that teachers focus on teaching writing as a skill to enhance their pupils' writing performance and build their proficiency.

Q 8. How do you find teaching and assessing writing?

Table 3.8: Teachers' Opinion about Teaching and Assessing Writing

Options	Respondents	Percentage
a. An easy task	2	11%
b. A hard task	17	89%
Total	19	100%

This question attempted to cover the teachers' opinions about teaching and assessing writing. As shown in the tables 3.8, (89%) of the informants find that teaching and assessing writing is a hard task. Yet, (11%) of them consider them as an easy task.

In fact, the difficulty of teaching and assessing writing is mainly based on the pupils' level and proficiency. This is clearly stated in the participants' justifications: On the one hand, teachers who see assessing writing an easy task explained that they follow certain criteria to do so. Moreover, others tend to follow a pattern in both teaching and assessing their students' writing. Furthermore, some teachers follow a step by step program because they find it appropriate to their students' level. In addition, one teacher explained that he/she would like to start by teaching pupils the basics of writing from brainstorming, then to writing a topic sentence and supporting sentences, and finally to writing a whole paragraph or a short essay. Each step is in accordance with topics they deal with in their program. In assessment, another teacher follows a standardized sheet that he/she alters based on his/her pupils' level and the content of their program. The assessment sheet that is used usually contains the following standards: format, relevance, coherence, punctuation and language use.

On the other hand, teachers who consider assessment a hard task, argued as follows:

- As writing is the hardest skill to be mastered, it's also hard to be taught and assessed.
- Assessing writing demands correcting spelling, grammar, punctuation, vocabulary, coherence and cohesion.
- It takes time, effort and patience. Assessing and conducting remedial sessions is the hardest part.
- Writing is the most difficult productive skill; it needs to be taught carefully because as teachers we have to teach vocabulary, grammar, punctuation, etc.
- Taking into consideration suitable vocabulary, ideas, chronological order, spelling, and handwriting, the teacher should be fair when dealing with all those aspects.
- The syllabus lacks detailed guidelines on the best teaching practices for teaching the writing skill. Time is another hurdle.
- You struggle with the writing style, the tenses, the vocabulary, the coherence and cohesion, the hand writing.
- It is difficult in terms of the pupils' adaptation to the rules of the new language.
- The students' level is not good enough, and they generally don't have sufficient amount of vocabularies.
- Sometimes, I cannot even read what is written.
- Writing is hard because it is based on the mastery of grammar as well as the creativity concerning the content.
- It's so hard because of the short time devoted to it; otherwise, it would be easy.

Q 9. Do you find unreadable passages when correcting your pupils' exam sheets?

Table 3.9: Unreadable Passages When Correcting Exam Sheets

Options	Respondents	Percentage
a. Yes	19	100%
b. No	0	0%
Total	19	100%

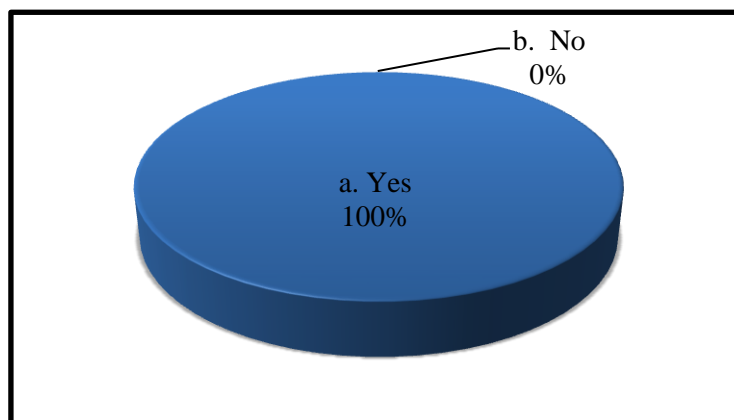


Figure 3.5: Unreadable Passages When Correcting Exam Sheets

This closed-ended question targets to see if teachers find unreadable passages when correcting their pupils' exam sheets. Results show that all the teachers stand in unreadable passages when correcting their pupils' exam sheets. Consequently, this raises a serious challenge for teachers when they come to assess the pupils' production paper.

Therefore, the issue of poor handwriting has to be seriously considered and solutions have to be found in order to facilitate the teachers' job on one hand as well as to help learners improve the quality of their writings and, thus, obtain good results in assessments.

Q 10. Does the students' handwriting matter for you when giving the final score?

Table 3.10: Teachers' Consideration of Students' Handwriting when Giving Final Scores

Options	Respondents	Percentage
a. Yes	16	84%
b. No	3	16%
Total	19	100%

The objective of this question is to see whether the students' handwriting matters for teachers when these latter correct their works and have to give the final score.

As it stated on the table, (84%) of the sample indicated that pupils' handwriting is a principal element that should be counted in assessing their level. Besides, a minority (16%) view that giving the final score to a pupil has no relationship with his/her handwriting.

Therefore, it is has been emphasized that handwriting has a close relationship with pupils' scores. Indeed, pupils' get mediocre grades when they have a poor/illegible handwriting as the teacher cannot understand the content. However, when handwriting is legible, it is easier for the teacher to read the answers and correct fairly.

Q 11 .What do you exactly do when finding unreadable exam sheets?

For this open-ended question, participants had been asked to clarify what they exactly do when they find unreadable exam sheets. Their answers were put in the following points:

- I try to decipher what is written and if I fail to do so, I just don't put the mark and advise that student to improve his/her handwriting at home.
- I do not correct it.

- I try to decode it and when I fail, I just move on.
- I try my best to read the clear words.
- I cross it.
- Either I try to guess the words written, or I skip scoring this part until I ask the student about the exact word used.
- Actually, I try hard to read what is written, but it affects the score.
- I try to understand the meaning of the sentence.
- I ask the students to read them for me if possible. Otherwise , I would simply give the mark according to the parts I understood.
- I try to read the words and give them the mark.
- I assess whether their handwriting overlap with what their ideas on the paper.
- I hold the student responsible for his/her handwriting by addressing him/ her privately.
- I look to the passage as a whole.
- I try to understand the most readable words and correct the wrong ones.
- I usually ask the writer to read his /her piece of writing to be fair.

Based on teachers' responses, we can conclude that the majority of them do their best in trying to comprehend and interpret what their pupils write. On the contrary, a minority does not try to decipher their pupils' handwriting and directly cross the illegible wor(s) or do not correct it at all.

Q 12. Do you think that having a good/legible handwriting style is a gift, learned or both?

Table 3.11: Teachers' Attitudes towards Legible Handwriting Style

Options	Respondents	Percentage
a. A gift	2	11%
b. Learned	4	21%
c. Both	13	68%
Total	19	100%

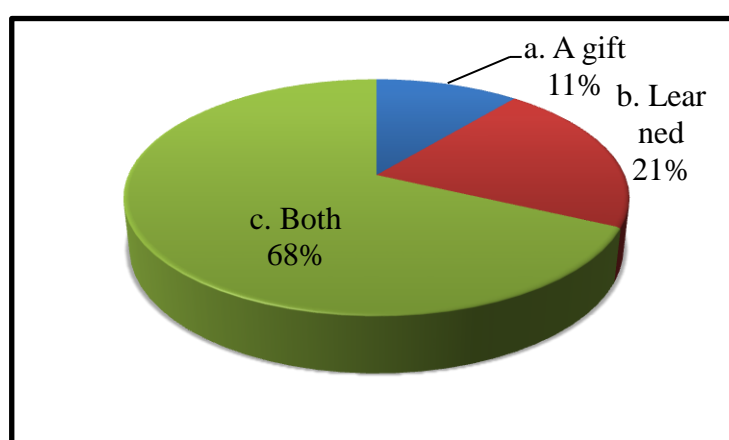


Figure 3.6: Teachers' Attitudes towards Legible Handwriting Style

The intention of this question is to discover teachers' attitudes towards legible handwriting style as being a gift or rather a learned skill. As attested by table 3.11 and Figure 3.6, (11%) of the respondents determined that having a good/legible handwriting style is a gift. According to them, it is something people are born with and appears since the childhood (in primary school specifically).

However, (21%) of participants aforementioned that handwriting is a learned skill. According to them, learning the formation of letters leads to a legible handwriting. They added that anyone can learn anything; gifted people are lucky for sure, yet hard working ones are the most talented because they keep trying and practicing. In addition, they explained that handwriting is learned and mastered since primary school.

On the other hand, the majority of teachers (68%) corroborate that that having a good/legible handwriting style is a combination between both gift and learned abilities. They explained that some students just have a good handwriting even when they are writing in a hurry. Others announced that this skill is demonstrated up to the students' ability and desire. Moreover, many students practice long and hard to keep a good handwriting. Indeed, some people are born with good handwriting while others need to improve it by practicing through writing intensively as Practice makes perfect. All in all, most teachers agreed on the fact that handwriting might be a gift, if not; it can be learnt and developed with hard work. Many sustain that it depends on the way the student used to write when s/he was in primary school, and it is the duty of both teachers and parents to discover children's difficulties in handwriting and to follow their progress.

Q 13. Do you think that teaching pupils how to develop their handwriting is important/not important?

Table3.12: Teachers attitudes toward the Importance of teaching Handwriting

Options	Respondents	Percentage
a. Important	18	95%
b. Not important	1	5%
Total	19	100%

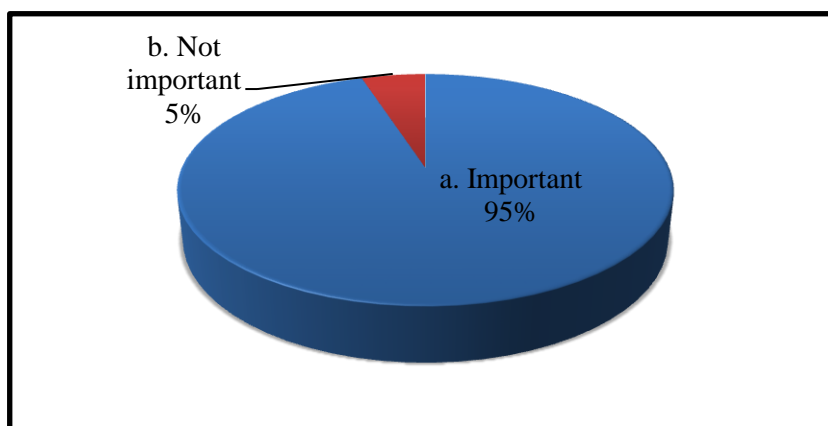


Figure 3.7: Teachers' Attitudes towards the Importance of Teaching Handwriting.

The goal behind this question was to seek the importance of developing handwriting skill based on the teachers' insights. Regarding the results obtained, the major number of the informants (95%) insisted on the importance of teaching pupils how to develop their handwriting. The rest of the sample (5%) made an exception by asserting the opposite. i.e., that developing handwriting is not important.

It can be deduced that it is better to work on developing handwriting skills to ensure a good quality of writing and obtain satisfactory scores. Teachers should also aware their pupils for its importance and the positive effects on the writing skill performance.

Q 13. If it is important, is that because.....:

Table 3.13: Reasons behind the Importance of Developing Handwriting skills

Options	Respondents	Percentage
a. It gives a positive first impression to the reader	0	0%
b. It affects' readers' motivation to read	0	0%
c. It puts teachers at ease when correcting	0	0%
d. It affects pupils' final score	1	6%
e. It affects pupils' academic progress	0	0%
f. More than one reason	8	44%
g. All of them	9	50%
Total	18	100%

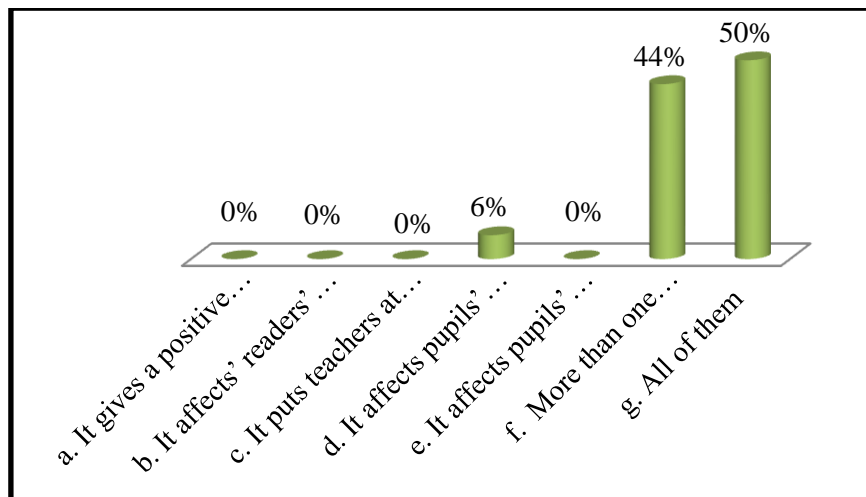


Figure 3.8: Reasons behind the Importance of Developing Handwriting skills

This subsequent question came to identify the reasons why it is important to develop handwriting skills. As shown in the table and the figure, one of respondents declared that developing Handwriting skills can affect pupils' final scores. The highest rate (50%) of the participants, however, chose all of the suggested options, thus, stating that the reasons for developing pupils' handwriting are giving a positive first impression to the reader, affecting readers' motivation to read, putting teachers at ease when correcting, and affecting pupils' final score or academic progress. Moreover, (44%) of the sample affirmed that there are more than one reason behind the need to develop handwriting skills. In the same quest, participants have proposed other reasons as follows:

- Helping pupils gain self-confidence.
- Ensuring their academic achievement.
- Using the language for real life purposes.
- Writing may be a step towards having a special career.
- It teaches students some values like organization in their life/ the importance of being clean, etc.

Q 14. Is there any part of the current syllabus that focuses on handwriting?

Table 3.14: Handwriting as Part of the Syllabus

Options	Respondents	Percentage
a. Yes	4	21%
b. No	15	79%
Total	19	100%

Regarding the remarkable results in the table 3.14, the vast number of teachers (79%) demonstrated that there is not any part of the current syllabus that focuses on handwriting. On the other hand, only (21%) of teachers asserted that there is a part of the current syllabus that focuses on handwriting.

It can be deduced that handwriting is a skill ignored by syllabus designers who give little if no importance to it. In fact, all participant teachers shared similar points of view when they had to justify their answers. They argued the following:

- Handwriting must be included plenty of time as a skill by its own and must be improved and considered as one of the important skills.
- It would be great to include hand writing as part of "how to study" subject just to highlight the importance of having a readable handwriting for students.
- Handwriting is still the most important means of communication even though the new technology spread; pupils need the most handwriting.
- So we can assess their piece of writing without struggling with reading.
- To learn a language, we need the four skills as they complete each other. So we can't teach English without focusing on writing as a skill. Handwriting is not less important than grammar or any other skill.

- Yes, we should include handwriting development in the syllabus design because surely the pupils/students need it in their tests and exams.(help teachers decode what they've written).
- It is needed just for the final exams.

Q 15. From your experience as a teacher of English language, what are the main strategies that can be used for enhancing middle school pupils' handwriting?

In this question, all the teachers have suggested the strategies they use to enhance their middle school pupils' handwriting. They are mentioned in the following:

- I just ask them to write texts at home and give them to their parents or teachers to be corrected.
- Practice makes perfect.
- For each session, they should have homework to write about anything they like.
- Repetitive writing of short and long passages, maybe.
- More instructions and intervention as well as using better assessment and feedback to enhance students' skill.
- Just practice more writing at home.
- Reading and summarizing books, short stories, etc.
- Dictation for young pupils.
- Having students with poor handwriting to get up and write on the board
- Addressing students with poor handwriting privately to raise their awareness
- More reading and writing
- Use a board with lines to work on how to write letters.

- Give texts and make pupils re-write them; this would help to develop their handwriting.
- Free topics, Cooperative techniques, Workshops
- Giving notes that help the learners to imply and use the language in which the learner uses cohesive devices and link the ideas. Finally, learners feel that they able to write not fail from the first ink drop.
- Ask them to write texts at home/ punishing them by rewriting a word, for example, more than 20 times.

From the strategies suggested, we can deduce that teachers strive to provide means/ways to facilitate the process of handwriting among their pupils in order to help them overcome the problem of poor/illegible handwriting.

Q 16. When finding some students' poor handwriting, do you encourage them to develop or to ameliorate their handwriting?

Table 3.15: Teachers' Attitudes towards their Pupils' Poor Handwriting

Options	Respondents	Percentage
a. Yes	18	95%
b. No	1	5%
Total	19	100%

Table 3.15 reports the teachers' attitudes towards their pupil's poor handwriting. According to the results, (95%) of the participants asserted that they do encourage their pupils with poor handwriting to develop their handwriting skill. On the contrary, (05%) demonstrated that they do not encourage their pupils to ameliorate their handwriting skill.

Clearly, teachers are aware of the importance of good and legible handwriting; they make efforts to skip the obstacle of poor handwriting among their pupils.

Q 16. If yes, what do you suggest for them?

In relation to what has been discussed above, this sub-question came to target those teachers who encourage their pupils to ameliorate their handwriting. Here, the aim was to identify the teachers' strategies. Indeed, teachers suggested numerous ways that help pupils with poor handwriting to develop their handwriting.

- To read and try to write by themselves.
- Writing at home.
- To focus and pay attention when pupils write.
- Make pupils write many texts so that it helps them develop their handwriting.
- Re writing full passages at home and many sentences at home .
- Ask them to write texts at home/ punishing them by rewriting a word for example more than 20 times....
- Have one family member check on their progress
- Taking enough time to write certain words that they like and really getting creative with it
- Trying calligraphy as an art"
- Try to work on primary school handwriting copybooks
- To respect the spaces
- I ask them to use proper pens, to check out the letters writing standards.
- I advise them to read a lot and summarize their readings.

Q 17. Which of the following signs/symptoms that is likely to appear on learners with handwriting difficulties? (You may choose more than one sign).

Table3.16: The Main Signs/Symptoms of Learners with Handwriting Difficulties

Options	Respondents	Percentage
a. They usually do not complete assignments	2	11%
b. They do not complete their assignments in time	2	11%
c. They do not take notes	0	0%
d. They have poor class attendance	1	5%
e. More than one symptom	11	59%
f. All of them	3	16%
Total	19	100%

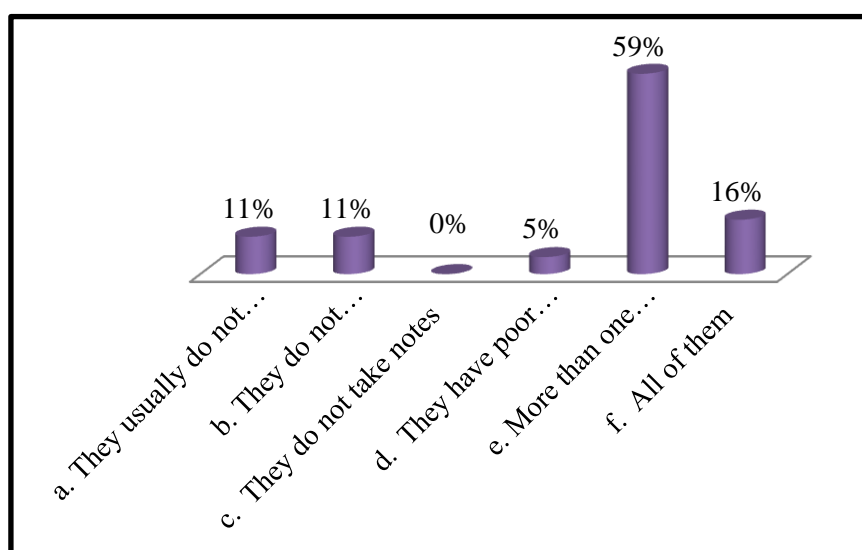


Figure3.9: The Main Signs/Symptoms of Learners with Handwriting Difficulties

The aim of this question was to identify the main signs that are likely to appear on learners with handwriting difficulties. Results reveal that (05%) of teachers reported that poor class attendance is a sign related to learners with handwriting difficulties. In the other point, the highest rate (59%) of teachers affirmed that there are many indicators for learners with handwriting difficulties. Besides, (16%) of the sample chose all of the different signs (They usually do not complete assignments ,They do not complete their assignments in time, They do not take notes and They have poor class attendance) . However, (11%) of informants stated that pupils usually do not complete assignments. Also, (11%) of them declared that pupils do not submit their assignments in time. In

another hand, a number of respondents added other signs/symptoms that is likely to appear on learners with handwriting difficulties like the fact that

- Pupils leave gaps or they answer half answers.
- They also score badly on exams. They do not retain enough vocabulary items.
- Bad memory to retrieve what they needs to copy.

- They write in a hurry and commit a lot of mistakes.
- They constantly lose or forget their copybooks.
- They dislike writing on the board or being the center of the classroom (lack motivation to learn).
- They are very shy to write on the blackboard.

Q 18. According to you, which of the following personal factors greatly affect(s) learners’ handwriting quality? (You may choose more than one factor).

Table 3.17: the Main Personal Factors Affecting Learners’ Handwriting Quality

Options	Respondents	Percentage
a. Learners’ attitude towards writing and handwriting	1	6%
b. The fine motor (skills that require coordination of small muscles to control small ,precise movements in the hands)	0	0%
c. Learners’ vision difficulties	0	0%
d. Visual-Motor Integration (It is the process that links what the eye sees to what the hand produces)	0	0%
e. Perception/spatial requirements (direction, size, shape, slope, and positioning)	0	0%

f. The proper pen/pencil grasp	0	0%
g. All of them	3	16%
h. More than one personal factor	15	78%
Total	19	100%

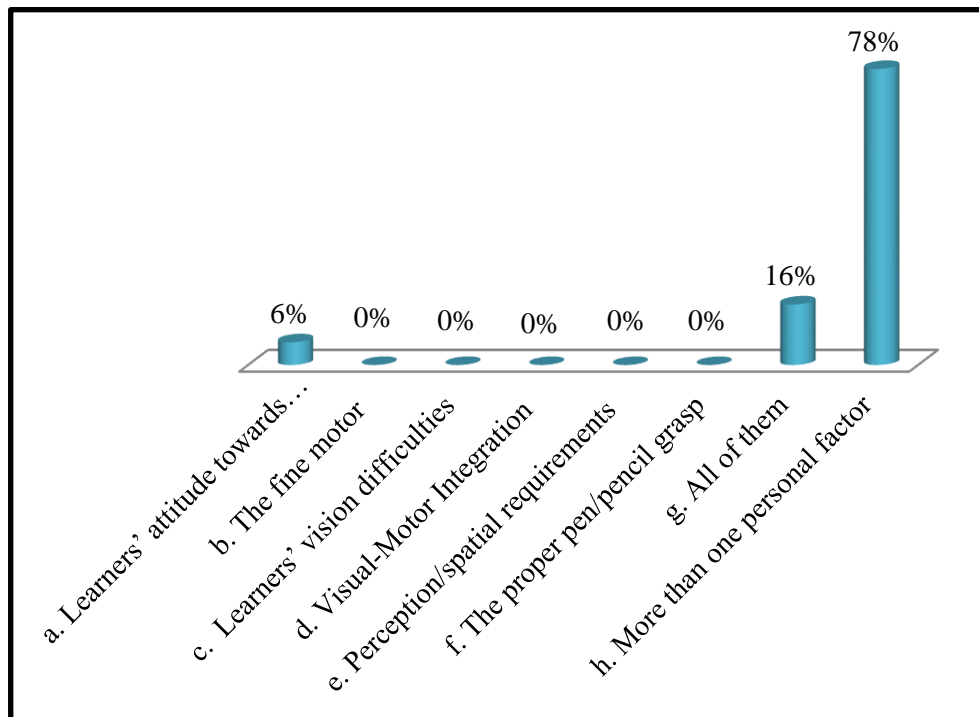


Figure 3.10: the Main Personal Factors Affecting Learners' Handwriting Quality

Via posing the question 18, we intended to potentially reveal the most influential personal factors behind the learners' handwriting quality. We noticed that only one of the participants claimed that the most influential personal factor on learners' handwriting quality is the learners' attitude towards writing and handwriting. Otherwise, the highest rate (78%) has chosen more than one factor. Moreover, the rest of the sample (16%) asserted that all the mentioned factors mainly influence learners' handwriting quality. In the same quest, the participants provided other factors which can impact on the pupils' handwriting qualities such as mood and other handwriting disorders that haven't be diagnosed yet.

Item 19.According to you, which of the following external factors greatly affect(s) learners' handwriting quality? (You may choose more than one factor).

Table 3.18: the main External Factors Affecting Handwriting Quality

Options	Respondents	Percentage
a. The environment	1	6%
b. Lack of curricular and/or extracurricular handwriting courses/activities	3	16%
c. Lack of teacher's feedback	1	6%
d. The quality of the writing instruments (The pen/pencil, the paper, the table, etc)	0	0%
e. More than one external factor	11	56%
f. All of them	3	16%
Total	19	100%

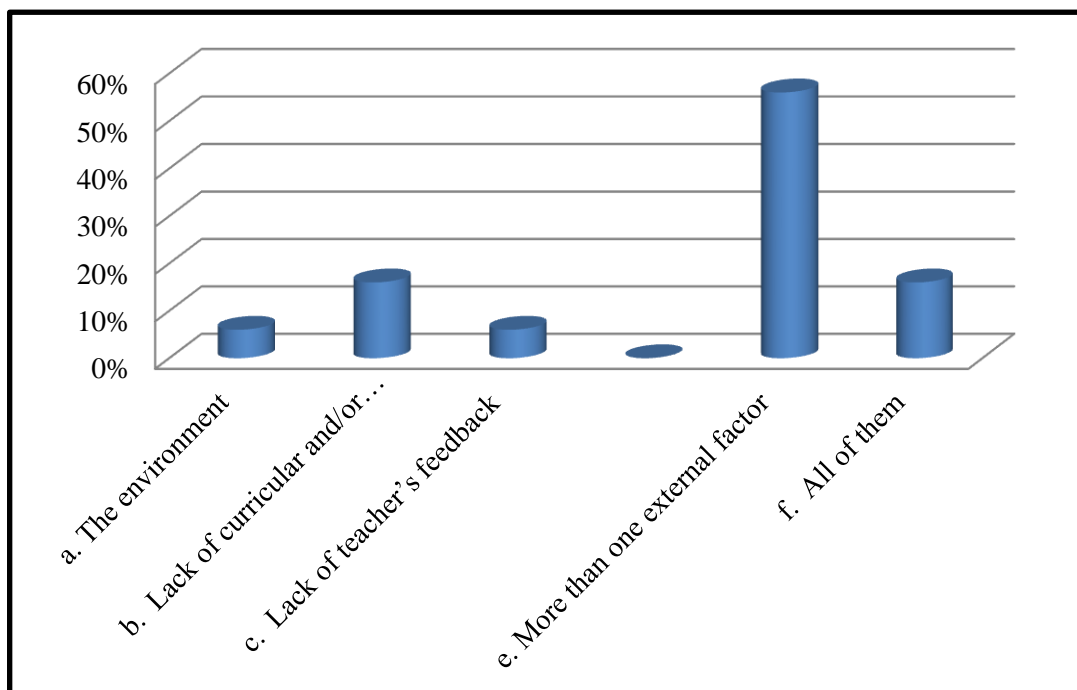


Figure 3.11: the main External Factors Affecting Handwriting Quality

This question was targeted to reveal the kind of external factors that affect pupils' handwriting quality. Regarding to the data illustrated in both table 3.18 and figure 3.11 the majority of participants (56%) stressed that there is more than one factor (The environment can impact the pupils' handwriting, Lack of curricular and/or extracurricular handwriting courses/activities, Lack of teacher's feedback, The quality of the writing instruments The pen/pencil, the paper, the table, etc). However, about (16%) of them viewed that lack of curricular and/or extracurricular handwriting courses/activities can influence the quality of pupils' handwriting. In the other hand, about (06%) of the teachers claimed that the most influential factors on pupils' handwriting quality is the environment. Furthermore, about (06%) of the sample referred to the lack of teacher's feedback. In addition, participant teachers mentioned other factors affecting pupils' handwriting like the lack of practice and writing activities during the sessions, lack of motivation, pressure, and writing too much.

Q 20. According to you, which factors greatly affect learners' handwriting quality?

Table 3.19: The main Factors Greatly Affecting Learners' Handwriting quality

Options	Respondents	Percentage
a. Personal factors	17	89%
b. External factors	2	11%
Total	19	100%

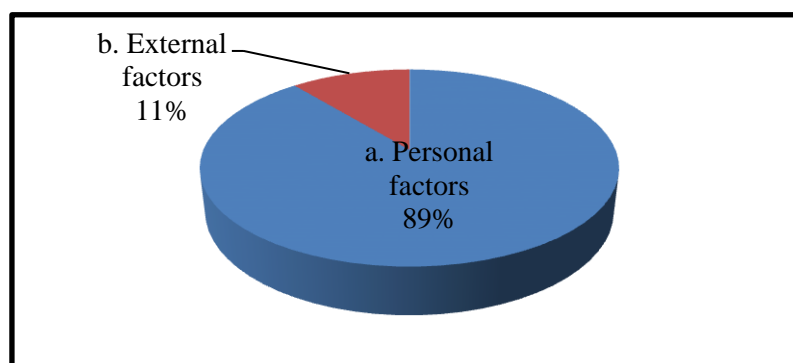


Figure 3.12: The main Factors Greatly Affecting Learners' Handwriting quality

For the sake of summarizing the different affective factors influencing handwriting investigated in the previous two questions, this question has been selected. It figures out the main factors that greatly affect the pupils' handwriting quality.

Noticeably, the table 3.19 signifies that (89%) of the respondents declared that personal factors are the ones that affect mostly pupils' handwriting quality. Otherwise, only (11%) of teachers assert that the external factors are the ones which affect mostly the quality of pupils' handwriting.

Teachers were then asked to explain their answers. Firstly, teachers who referred to the personal factors argued that they are much more important. They added the following reasons:

- They are related to the learners' personality and learning style.
- It is the students' internal factors that affect their writing whereas the external factors have little or no effects.
- They may be related to previous difficulties that could have happened in the primary school.
- Such thing appears since the childhood; it means it is personal.
- If they don't like the subject they will not pay attention or care about their handwriting.
- Personal (internal) and external factors are equally influential, but the personal ones tend to overlap because I see them more in my students.
- There are some students who do not like to write.
- Handwriting reflects the student's emotional and mental state.
- Learners' self-awareness of the importance of handwriting motivates them to ameliorate it.

- They include motivation to write, level of interest, and personality.
- It is a will matter. If a student wants really to have good handwriting, s/he can do that.

Secondly, the teachers who opted for external factors as the ones that affect handwriting argued that external factors affect handwriting while personal factors affect the way people write. They are also the most influential because may be pupils did not learn how to write in primary school.

Q 21. How does handwriting quality impacts the overall development of a learner? (You may choose more than one answer).

Table 3.20: The Effect of Handwriting Quality on the Overall Development of a Learner

Options	Respondents	Percentage
a. Poor handwriting contributes to poor grades in class tests	1	6%
b. Pupils with good handwriting feel motivated to learn	0	0%
c. Examiners find difficulties when marking work with poor handwriting	1	6%
d. Teachers form negative attitude on pupils or with poor handwriting	0	0%
e. Good handwriting reflects one's character	0	0%
f. Good handwriting reflects one's creativity	0	0%
g. More than one effect	13	67%
h. All of them	4	21%
Total	19	100%

The table 3.20 above shows the respondents' opinions about the effect of handwriting quality on the overall development of a pupil. One participant declared that poor handwriting contributes to poor grades in class tests. Moreover, (21%) of teachers stated that all of the proposed effects can influence the handwriting quality on the overall development of a learner. The majority of participants (67%) accorded that more than one effect impact the pupils' handwriting quality on overall development. It is important to note that all of these factors can impact the quality of pupils' handwriting either negatively or positively. In addition to that, other informants added some extra different factors such as handwriting makes the learner feel either self-confident or depressed.

Q 22. If you have any comments or suggestions, please feel free

This section of the questionnaire gave teachers the chance to expose their views about the issue under investigation. In this subtracted question, we asked the informants to express their opinions about the factors that can affect pupils' handwriting quality and, at the same time, to provide further suggestions about the topic. Noticeably, only two teachers out of nineteen 19 had answered this item. The following is what they suggested:

- I think that the emotional internal and external factors are reflected in the pupils' answers and their way of writing, so I guess know about the emotional (intelligence) part of the learning process will create great positive difference in the writing skill development.
- I would like to say that teachers should focus on the pupils who have a bad handwriting and encourage them to improve it.

It can be deduced that those participants have a well recognition of the negative consequences of poor handwriting on pupils' written skills as well as the factors that lead

to this problem. In the same hand, they were striving to overcome these obstacles; likely, they even urge all other teachers to encourage their pupils to develop their handwriting.

3.1.4 Discussion and Summary of the Findings of questionnaire

This current part of the research contains the summery and discussion of the findings that sprouted from the analysis of this questionnaire that have given us the opportunity to answer our research questions.

This research aimed to investigate the importance of writing skill in developing pupils' language proficiency and the main factors that affect middle school pupils' handwriting quality. Particularly, this investigation was initiated to show the role of legible handwriting in achieving pupils' success; in addition, this study was an attempt to highlight the strategies that teachers use in helping their pupils to develop legible handwriting. As well as, the previous analysis of the preceding tools has shown relevant vision that allows us to answer our research questions as long as to affirm our research assumption.

All the English teachers that participated in this questionnaire affirmed that there is a relationship between writing skill and pupils' language proficiency because writing is the major source of language that increases all the other skills, and it allows pupils to build their language proficiency because it is obligatory for all pupils to master this skill and be able to write from the beginning of their educational years; that means, writing is the fundamental and the first skill that pupils have to master; however, poor writing skills affect the efficiency of learning.

Teachers demonstrated that they encourage their pupils to write by using numerous strategies such as practicing more writing at school and home by writing free topics, short and long passages and cooperative techniques. All of them affirmed that practice makes

perfect. It is worthy to mention that most of teachers find that teaching writing as well as assessment is a hard topic for a number of reasons. For instance, writing is the most difficult productive skill which needs to be taught carefully with all its aspects as vocabulary, grammar and punctuation. Another reason is that handwriting is the hardest skill to be mastered. It is also hard to be taught and assessed, and short time devoted to it. Besides, teachers stated that they should implicate different strategies that would enable them develop their pupils' writing as well as handwriting skills.

The teachers' questionnaire also helped us answer the research questions raised at the beginning of this study.

➤ **Research question 1: what are the main factors that affect middle school pupils' handwriting quality?**

As expected, the results of this questionnaire confirmed one of the main research questions which are exploring the main factors that affect pupils' handwriting quality. Teachers declared that there are extrinsic and intrinsic factors that may influence this skill such as: the environment, the type of the pen and affective factors like self-esteem, motivation, lack of teachers' feedback, lack of practice on handwriting and lack of curricular as well as personal factor and extracurricular handwriting courses/ activities.

➤ **Research question 02: does poor handwriting affects pupils' handwriting quality?**

Reflecting on the obtainable findings, teachers confirmed that the majority of their middle school pupils have handwriting problems and they are struggling with poor handwriting. Teachers asserted that they find unreadable passages when they correct their pupils' sheets. They mentioned a set of results that they observed on their pupils with poor handwriting such as: pupils leave gaps when they write, they do not complete their assignments, they dislike writing on the board, and they score badly in exams.

➤ **Research question 03: what is the importance of legible handwriting in education?**

Teachers sustained that legible handwriting is crucial for middle school pupils. As long as they mentioned that pupils need legible handwriting to answer their exams and assignments (helps teachers to decode what they have written), legible handwriting is not less important than grammar or any other skill.

➤ **Research question 04: what are teachers 'attitudes towards their pupils' level in handwriting?**

As mentioned before, the majority of teachers confirmed that teaching pupils to develop their handwriting is significant in learning process. Beyond what has been said, handwriting is the mirror that reflects pupils' ideas and information. Yet, poor handwriting can influence pupil's scores such as: exams marks, or tests. So far ,having a poor handwriting will give a negative impression about the pupils' level even they are excellent .on the other hand ,teachers are aware about the role of handwriting that it plays in the academic achievement .

3.2 Classroom Observation

3.2.1The Procedures of Classroom Observation

The classroom observation took place in Geuchi ElBachir Middle School, in Magra, M'sila during the third semester of the academic year 2021-2022. The observation was non participant. It lasted six (6) sessions; the last session was an English exam that took the duration of two hours.

It was conducted with one group/class consisting of 27 pupils (16 males and 11 females). It is worth mentioning that there were four (4) left-handed pupils. A checklist had been prepared before in order to facilitate the process of observation. Moreover, it is important to mention that the researcher was a passive observer. She did not intervene during the delivery of lesson contents and did not actively participate in class; nevertheless, she could interact with pupils, verify their handwritings, and watch closely their way of writing.

3.2.2. Aim of the Classroom Observation

In order to investigate some of the factors that affect handwriting performance which could not be mentioned and answered throughout the questionnaire, we conducted a classroom observation in order to gather more data as well as to validate those obtained from the questionnaire. Therefore, classroom observation, we believe, would give us the opportunity of being close to pupils during English classes and might allow us to observe them when they were writing so that we could investigate the various factors that affect their handwriting.

3.2.3 Description and Analysis of Classroom Observation

The checklist was divided into four sections: workstation, pen /pen hold, grip pressure, and general features. Each section includes different and varied aspects to be observed.

3.2.3.1. Section one: Workstation

Through this section, we aimed to observe the factors related to pupil's posture while writing. Moreover, via this observation, we attempted to gather data linked to the numerous elements under this section which are: the position of chair, the set and desk, position of feet, forearm stabilization, and the paper position.

3.2.3.1.1. Position on chair and postural control

We observed that class chairs caused several obstacles for both short and tall pupils. For short pupils, the chairs were too high; as result, their feet were not flat on the floor; pupils had to sit on the front edge of the chair in order to put their feet on the floor and obtain a position that would help them to handwrite correctly. This created for them problems when they were writing. Tall pupils, on the other hand, put one leg over the other one or spread their legs forward, so their feet were not put a comfortable position, which could affect their writing position.

3.2.3.1.2. Relative height of seat and desk

We observed that the table affects pupil's handwriting skill: small pupil's seemed to struggle with the tables being high for them; they might not correspond with the seats. On the other side, for tall pupils, table height caused back curvature. This could their handwriting, and would probably affect their body health with time

3.2.3.1.3 .Position of the paper and handedness

We observed that 23 pupils were right- handed and four (04) pupils were left - handed. The majority of pupils put their papers or copybooks in slanted right or slanted left during writing while some others put their paper in the opposite side of their seats. In addition, some pupils used to place their papers with upside down manner and started writing from bottom to top without supporting of the narrowing hand

3.2.3 Section two: Pen /Pen hold

This part of the checklist was designed to check how pupils grasp their pens. The aim was to observe the distance from the tip of the pen (how close or far pupils' fingers are to the tip of the pen).

We observed that the majority of pupils were holding the pen from the middle; their fingers were far from the tip of the pen. This might cause for them problems when they form letters, and would, consequently, lead to handwriting problems.

3.2.4. Section three: Grip pressure

This section was devoted to observation of the amount of pressure that pupils apply on their pens and papers.

We observed that some pupils were pressing on their pens during the writing process; as a result, they produced bold type of writing. Furthermore, some pupils did not press on the pen, so then they produced unclear light writing. Besides, some pupils were pressing on papers, and this caused holes. Additionally, 21 pupils used dynamic tripod grasp during handwriting process; four (04) males used the quadripod grasp and two (02) females used immature grasp which is referred to as static tripod grasp .

3.2.5. Section four: general features (spacing, letter size, frequency of looking at the original text during copying a task, etc)

This section aimed to check how often pupils look at the original text in order to copy the tasks from the board as well as to observe the letter size and the spacing produced by pupils.

During copying sentences of the original text from the board, we noticed that pupils were copying sentences word by word; they vocalized each letter before they wrote it. Hence, the written words were not written in straightway. We also noticed that they produced inappropriate spacing and letters' size, either being small or big letters. Besides, they used irregular spacing between letters and words.

3.2.3 Discussion of the findings of the classroom observation:

Through the analysis of the data gathered and gained from the classroom observation, beneficial results were obtained; they shed light on the factors that influence pupil's handwriting.

To begin with, class furniture has a great importance in managing a good body posture. We put emphasis on the position of chairs and desks as the main elements that support pupils' comfort during writing. This is affirmed by Sassoon (2006) who states, "it becomes clear that it may not be possible to write well unless the body is properly placed and the arm able to move freely." (p. 08) .

Additionally, we have noticed that the majority of pupils used the dynamic tripod grasp during writing. This confirms that it is an efficient mature grasp. In addition, we have observed that two female pupils used immature grasp called static tripod grasp which is defined by Edward et al. (2018) as follows: "thumb stabilized in opposition to the radial side of the third digit along the pencil shaft with index on top of shaft. Shaft placed in web space." . Moreover, we noticed that the two females have a poor handwriting because they used an immature grasp. This confirms that immature grasps can affect the pupils' handwriting negatively. A female was wearing glasses; she produced an illegible handwriting. She used to write the letters in big size and does not respect the lines and spacing. This confirms that poor visual motor integration influences negatively the pupil's handwriting.

During the observation, we noticed that some pupils hold the pen from the middle, and when they start writing, they just make a kind of scribble and non understood letters either too small or too big and not spaced. This confirms that inappropriate pen hold can influence pupils' handwriting. In this concern, Sassoon (2006) argues, "the way you hold your pen

affects your letter forms.” (p. 30). Moreover, she describes this pen hold by bad pen hold: “This pen hold is bad it does not let the fingers move, the limited movement shows in the writing .The hand pushes along the line but cannot go up and down .So there is hardly difference between the tall and short strokes.” (p. 30)

Furthermore, some pupils were placing their paper in the opposite side of their seats which might affect their handwriting. Sassoon explains (2006), “where you place the paper is vital, it Influences how you sit hold the pen and the end, what you write.” (p. 31). She adds, “The paper is over the wrong side, the writer sits badly and cannot see what he is doing, letters, especially those that join at the top. Spread out as he pulls his hand across to make sure he has written the right thing.” (p. 31)

To conclude, the analysis and discussion of data gathered from this observation enabled us to determine the main factors that have a vital role in affecting the pupil’s handwriting quality which are furniture, posture, pen hold /pressure, and paper position.

Conclusion

Eventually, the present chapter aimed to discuss the practical part of the study. It offered a review of the research methodology used in this study. Particularly, two data collection tools were employed: A teacher’s questionnaire and a classroom observation conducted with a class of first year middle school pupils. These aimed to gather information about the main factors that affect pupils’ handwriting quality. A thorough analysis was then undertaken in order to answer the research questions and confirm the assumption stated at the beginning of the study.

General Conclusion

General Conclusion

The present research aimed to present an investigation of the main factors that affect middle school pupils' handwriting quality. Additionally, this work was based on exploring the main factors that leads to pupils' poor handwriting in their written works.

The research study was based on an investigation that consists of three chapters. The first two chapters were concerned with the theoretical part of the research study which investigates the main factors that affect pupils' handwriting. More specifically, the first chapter presented definitions, the importance, and the major difficulties of writing as well as handwriting. The second chapter was designed to gain deeper insights on the main factors that affect learners' handwriting. It attempted to discuss the extrinsic and intrinsic factors that can influence learners' handwriting quality. In fact, this chapter is regarded to help teachers identify the various factors that can negatively influence young learners' handwriting and leads to illegible productions and failure in the educational domain. The last chapter, however, was devoted to the practical part of the study. It was meant to analyze, discuss, and draw conclusions about the data obtained from the two employed data collection tools: teachers' questionnaire and classroom observation. Accordingly, a descriptive research study was conducted in order to validate and confirm the raised assumption.

The teacher's questionnaire was administered and submitted online to 19 nineteen teachers of English from different middle schools in order to explore the main factors that affect handwriting and also to capture the teachers' attitudes and perception about the task of handwriting.

In addition to the questionnaire, a classroom observation took place in Geuchi el Bachir Middle School in M'sila with one class of first year level. It was carried out during

(06) sessions. We observed pupils in their natural learning environment as well as the way they handwrite, especially under the pressure of exam. Five (05) of the sessions were devoted to observe more factors which are not mentioned in the teachers questionnaire.

The results obtained have revealed that handwriting is a crucial skill for middle school pupils, but it is ignored by teachers and syllabuses designers. Moreover, pupils struggle with illegible handwriting which is affected by numerous factors: extrinsic and intrinsic that lead to lower academic successes.

To sum up, through the analysis and discussion of the data obtained, the findings affirmed the validity of the study assumption which assumed that legible handwriting is crucial for middle school learners and it is affected by numerous factors .

There are a lot of limitations for the present study .The observation is planned in just one school .More than that, the sample size is small ,only 27pupils in class, it is due to the pandemic regulations .Consequently , results cannot be generalized due to the limited number of participants and because of the limited time which does not permit to go in depth within this research . In addition , the teachers were not very cooperative in answering the questionnaire ,only nineteen19 teachers answered it .

Future research can focus on other elements of handwriting by increasing the number of observations and the number of sample size in order to reinforce the reliability of estimates will be strong .

Recommendations

Regarding the analysis and discussion of the research findings, some recommendation can be drawn:

For teachers

- Teachers have to aware their pupils about handwriting significance in their education.
- Teachers have to cover all the different factors that affect their learners handwriting and try to develop their pupils' handwriting.
- Teachers should acknowledge the existence of handwriting problems in the regular class room and have positive attitude towards learners who have handwriting problems .

For syllabus designers

- Syllabus designers have to standardize handwriting lessons in the middle school (first and second year) curriculum and part parcel of the official learning program.
- Syllabus designers should add some extra session of writing within syllabus.
- Syllabus designers should assign the right strategies to teachers for selecting the suitable methods to teach ,assess , diagnose and reach to the lesson objectives in the other hand.
- Syllabus designers have to include teaching the print style in the primary and middle schools because is the most dominant style.

For pupils

- Pupils have to be aware of the importance of handwriting in their educational career.

- Pupils have to write. Through writing, they enhance their ability to retrieve information.
- Pupils have to revise by recalling and writing down . The writing process helps pupils to visualize and memorize letters this also aids their automaticity and their ability to formulate words without thinking about the letters form and order .

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Appendices

Appendix 01

A Questionnaire for Middle School Teachers of English Language

Dear teachers

I am a second-year Master student of English. I would be so grateful if you sincerely answer this questionnaire which is an attempt to gathering information needed for the accomplishment of my master's dissertation. Through this work, The researcher wants to investigate the main factors that affect middle school pupils' handwriting. Please tick(√) your answer(s) in the corresponding box(es), and make a full statement whenever necessary. Be sure that the answers you provide will certainly remain confidential and will only be used for research purposes.

Thank you for your collaboration.

Prepared by:

Ahlem MEBARKI

Supervised by:

Mrs.Sakina BENCHAREF

2021-2022

Section One: General Information

Q1. What is your qualification?

License Master Magister Doctorate

Q2. How long have you been teaching English in middle school?

- 1-5 years
- 5-10 years
- More than 10 years

Q3. Are you:

- A full time teacher
- A part time teacher

Section Two: Introduction to the Writing Skill

Q4. According to you, which skills are difficult to be mastered by students?

- Listening
- Speaking
- Reading
- Writing

Q5. How many sessions you devote for writing skill per sequence?

- One session
- Two sessions
- More than two sessions

Q6. Do you think that the time devoted to teaching written expression is sufficient to cover most of the aspects required to improve the writing skills of the students?

- Yes
- No

In both cases, please explain.

.....

.....

Q7. Do you teach the writing skill for?

- Increasing the students' vocabulary
- Language development
- Developing writing as a skill

Section Three: Handwriting

Q8. How do you find teaching and assessing writing?

An easy task A hard task

Justify your answer, please

.....

.....

Q9. Do you find unreadable passages when correcting your pupils' exam sheets?

Yes

No

Q10. Does the students' handwriting matter for you when giving the final score?

Yes

No

Q11. What do you exactly do when finding unreadable exam sheets?

.....

.....

.....

Q12. Do you think that having a good/legible handwriting style is:

A gift

Learned

Both

Justify your answer, please

.....

.....

.....

Q13. Do you think that teaching pupils how to develop their handwriting is:

Important

Not important

If it is important, is that because:

- It gives a positive first impression to the reader
- It affects' readers' motivation to read
- It puts teachers at ease when correcting
- It affects pupils' final score
- It affects pupils' academic progress
- All of them

If others, please specify

.....

.....

Q14. Is there any part of the current syllabus that focuses on handwriting?

- Yes No

If you think that it should be included, please say why

.....

.....

.....

Q15. From your experience as a teacher of English language, what are the main strategies that can be used for enhancing middle school pupils' hand writing?

.....

.....

.....

Q16. When finding some students' poor handwriting, do you encourage them to develop or to ameliorate their handwriting?

- Yes
- No

If yes, what do you suggest for them?

.....

.....

.....

Q17. Which of the following signs/symptoms that are likely to appear on learners with handwriting difficulties?

- They usually do not complete assignments
- They do not complete their assignments in time
- They do not take notes
- They have poor class attendance
- All of them

If others, please specify

.....

.....

.....

Q18. According to you, which of the following personal factors greatly affect(s) learners' handwriting quality?

- Learners' attitude towards writing and handwriting
- Lack of interest
- The fine motor (skills that require coordination of small muscles to control small, precise movements in the hands)
- Learners' vision difficulties
- Visual-Motor Integration (It is the process that links what the eye sees to what the hand produces)
- Perception/spatial requirements (direction, size, shape, slope, and positioning)
- All of them

If others, please specify

.....

.....

.....

Q19. According to you, which of the following external factors greatly affect(s) learners' handwriting quality?

- The environment
- Lack of curricular and/or extracurricular handwriting courses/activities
- Lack of teacher's feedback
- Writing instruments' quality (The pen/pencil, the paper, the table, etc)
- All of them

If others, please specify

.....

.....

Q20. According to you, which factors greatly affect learners' handwriting quality?

- Personal factors
- External factors

Justify your answer, please

.....

.....

.....

Q21. How does handwriting quality impact the overall development of a learner?

- Poor handwriting contributes to poor grades in class tests
- Pupils with good handwriting feel motivated to learn

- Examiners are frustrated in marking work with poor handwriting
- Teachers form negative attitude on pupils with poor handwriting
- All of them

If others, please specify

.....

.....

.....

Thank you for your time, efforts and collaboration

Appendix 2

Classroom observation checklist

Observation		observed	Not observed
Workstation	Position on chair		
	Desk height		
	Chair height		
Postural control	Position of feet		
	Forearm stabilization		
Handedness	Position of paper in relation to handness		
	Hand dominance	right	
		left	
Pen/Penhold	Position of fingers	Fingers are close to the tip	
		Fingers are far to the tip	
Grip and pressure	Pressure	On paper	
		On pen	
	Grasp	mature	
		Immature	
General features	Letter size	appropriate	
		not appropriate	
	Spacing	appropriate	
		not appropriate	
	Copying	By groups	
		By word	
By letter			

Appendix03

Pupil 01

sequencia
est on / I get in and do 21
Task 3. I look at the
pictures then write sent
I get up at 6:30 am I wash my
face. I get dressed.
I have breakfast at 7:00 am
I go to school at 7:20 am
I have lunch at 12:00
I go home then I
watch TV. I have dinner
at 8 p.m. I go to bed at 10
p.m.

Pupil 02

my daily
Everyday, I get up at
6:30 a.m. I wash my
face. I have breakfast
then I go to school at 7:20
a.m. I have lunch at
12:00 I go home then
I watch TV. I have dinner
at 8:00 p.m. I go to bed at
10 p.m.

Pupil03

about my daily activities
Everyday, I get up at 6:30
a.m. I wash my face, I have
breakfast then I go to school at
7:30. I lunch at 12:00
do my homework. I watch
TV, I have dinner at 8:00 p.m.,
I go to bed at 9:00 p.m.

Pupil 04

Exercise 1
A mel get up at 6:30 a.m. She
goes to school at 7:30 a.m.
the afternoon she watches
TV and does her homework
She, He, it + Verb + s
x Verb ending in (ch, sh,
ss, x, o, z, + e)
Task 7: I put the verb in
the correct form.
I Am (to get) gets dressed
and she (to go) goes to school
at 7 a.m.
Linda (to do) does the
homework then she
watches TV. + DTV

Pupil 05

Hi, James
 Every day, I get up at 6:30, wash
 at 7:15, and I go to school at 8:00.
 In the afternoon, I can be
 in a park for at 5:00 p.m. I
 at 10:00 and I do my homework
 at 10:30 with my family at 10:30
 then I go to bed at 10:30.

Pupil 06

Sunday, February 11, 2000
 Hi James
 I am a 13 year old girl from Algeria
 I speak Arabic and French
 I am 1.55 m tall and 45 kg
 my mother is a teacher and my father
 is a doctor. My mother is 45 years old
 and my father is 50 years old.
 I have a brother and a sister.
 My brother is 10 years old and my sister
 is 8 years old.
 Love
 Zamir

الملخص

يواجه معظم تلاميذ المدارس الجزائرية في الطور المتوسط مشكلة ضعف الكتابة بخط اليد في اللغة الإنجليزية كلغة أجنبية، مما يؤثر هذا بشكل أساسي على إنتاجهم الكتابي و إنجازاتهم التعليمية، لذلك تهدف هذه الدراسة إلى استكشاف العوامل الرئيسية التي تؤثر على مهارة الكتابة بخط اليد. وفقاً لذلك ، انه لمن المفترض أن الكتابة بخط اليد المقروءة أمر بالغ الأهمية لتلاميذ المدارس المتوسطة، وقد تتأثر بالعديد من العوامل، لتأكيد صحة هذا الافتراض وللإجابة على أسئلة هذا البحث تم إجراء دراسة وصفية. علاوة على ذلك ، من أجل جمع البيانات اللازمة، تم استخدام أداتين منهجيتين لجمع البيانات المطلوبة. أولاً، تم تصميم استبيان موجه لأساتذة التعليم المتوسط (عينة من 19 أستاذاً تم اختيارهم عشوائياً من متوسطات مختلفة) وذلك لاكتساب مواقفهم و وجهات نظرهم حول تجربتهم الشخصية مع مشاكل الكتابة بخط اليد للتلاميذ. بالإضافة إلى ذلك ، تم إجراء عملية ملاحظة صف الدراسة لتلاميذ السنة الأولى المتوسط (27 تلميذاً) في مؤسسة "قشي البشير" ب"مقرة" ولاية المسيلة خلال العام الدراسي 2021-2022. كما أن الهدف من هذه الدراسة هو التحقق من العوامل الرئيسية التي تؤثر على الكتابة بخط اليد للتلاميذ خلال مسيرتهم الدراسية في اللغة الإنجليزية، بناءً على ذلك كشفت النتائج المتحصل عليها أن هناك عوامل معينة تؤثر على مهارة الكتابة بخط اليد للتلاميذ عند الكتابة باللغة الإنجليزية وتعبق أدائهم الأكاديمي، في الواقع هناك عوامل خارجية تنقسم إلى: عوامل بيئية مثل: الإضاءة ، والمسافة من السبورة ومقدار خط اليد المتوقع من المتعلم ؛ بالإضافة إلى ذلك العوامل المساعدة للكتابة مثل: قبضة قلم الرصاص ، والضغط المطبق على أداة الكتابة، وارتفاع الطاولة، أشارت النتائج إلى أن: غالبية المشاركين يعتبرون الكتابة بخط اليد مهارة مهمة يجب أن يتقنها تلاميذ مدارس التعليم المتوسط، تم العثور على تركيز أقل من قبل الأساتذة لتدريس مهارات الكتابة بخط اليد في الطور المتوسط، أكد معظم الأساتذة على أن صعوبات الكتابة بخط اليد أثرت على الأداء الأكاديمي لتلاميذ الطور المتوسط، يحفز الأساتذة تلاميذهم من خلال تقديم ملاحظات شفوية أو كتابية، هناك عوامل معينة تضعف من مستوى الكتابة بخط اليد مما أثر على تحصيلهم التعليمي. لذلك، أوصت الدراسة بضرورة إدراك الأساتذة لوجود مشاكل الكتابة بخط اليد في الفصول الدراسية العادية والعمل وفقاً لذلك لحلها. إضافة على هذا، يجب على مصممي المناهج الدراسية إدراج دروس الكتابة بخط اليد وأسلوب الطباعة في مناهج الطور المتوسط.

الكلمات المفتاحية: مهارة الكتابة بخط اليد، عوامل الكتابة بخط اليد، الكتابة بخط اليد المقروءة، الأداء الأكاديمي، تلاميذ مدارس التعليم المتوسط، العوامل الخارجية والداخلية.