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**The Techniques Used by EFL Teachers to Teach Writing
to Deaf Students:
A Case Study at One Mainstream School and Two Special
Schools in Tizi-Ouzou and Béjaia**

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Dedications

I dedicate this work to my beloved parents, lovely sister and brother, and dear friends.

Thank you for your love, encouragement, and support.

Chahinez

In memory of my father whom I miss deeply.

Yamina

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Abstract

The current study investigates the techniques used by EFL teachers to teach writing to deaf learners. The aim of the study is fourfold. First, it attempts to determine the different techniques that EFL teachers use when teaching writing to deaf learners. Second, it intends to identify the difficulties that EFL teachers face while teaching writing to deaf learners. Third, it endeavours to discover how EFL teachers try to overcome these difficulties. Fourth, it seeks to reveal the difficulties encountered by the deaf learners when learning to write. In order to meet the objectives of the study, Kress's theory of Multimodality is applied. Qualitative data collection and data analysis procedures are used. Data are collected using an asynchronous online interview conducted with four EFL teachers of deaf learners in one mainstream high school and two special middle schools in Tizi-Ouzou and Béjaia. The obtained findings are analysed using Qualitative Content Analysis. The results reveal that EFL teachers adopt different visual techniques and materials to teach writing to deaf learners for instance illustration, sign language and gestures. In addition, the findings indicate that teachers encounter challenges during the process of teaching writing to deaf learners such as repetition, deaf learners unfamiliarity with words, and deaf learners different ways of understanding. The results also revealed that deaf learners face difficulties in their process of learning writing like the lack of motivation, the incapacity to form complete sentences and to write words without their visual demonstration. However, teachers try to overcome these challenges by using various ways for example the use of repeated simple activities, adopting different ways of explanation, and interviewing the deaf learners' parents. Based on the results, the study recommends teachers to remain patient and keep looking for innovative techniques to teach writing to deaf learners.

Key terms: Deaf learners, Difficulties, EFL teachers, Techniques, Writing.

List of Abbreviations

EFL: English as a Foreign Language

QCA: Qualitative Content Analysis

NDCS: The National Deaf Children's Society

CMCs: Computer-Mediated Communication

DHH: Deaf and Hard of Hearing

DB: Decibels

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General Introduction

Statement of the Problem

Education is a fundamental human right for everyone and should be guaranteed with no discriminations. It is already heard that learning is devoted only to regular learners. However, even specific needs learners such as hearing-impaired and visually-impaired learners should be granted equal opportunities to access knowledge. Like any other learners, hearing-impaired or deaf students are able to learn any language. In fact, deaf learners may have strong capacities and abilities to learn any language and succeed in many domains. English is one of the languages that can be taught to and learned by this specific type of learners.

Learning English as a foreign language can be a challenging process for many students. In order to master this language, learners must develop the four language skills which are reading, writing, listening and speaking. A good command of these language skills is important in the teaching-learning process and assures successful communication and exchange with native speakers. Among these skills, writing is an extremely laborious task for students and a challenging skill for teachers to teach. However, deaf learners have more difficulties with written English and learn to write at a slower pace than students with no impairments. Therefore, special schools were specifically created with the aim to support and meet the needs of students with disabilities. 'The school supports students by adapting the material, media, curriculum, and so on, in relation to their special needs [...] help the students get the knowledge they need despite their disability.' (Adi *et al.*, 2017: 123). Deaf students learn English differently from their hearing peers. Learning English as a foreign language is quite challenging for deaf students because children with a hearing impairment often demonstrate substantial delays in phoneme production, vocabulary, and syntax (Ibid: 122). In this context, Moores (2006: 47) states that 'the child often must compensate for imperfectly developed grammatical skills and a limited vocabulary.'

Writing is a fundamental aspect in the process of teaching and learning English. This skill should be taught to deaf learners in order to help them to communicate with hearing persons, express their ideas and opinions, and understand messages they cannot hear

According to Moores (cited in Moores and Martin (.eds.) 2006:51), there is a complex relationship between reading and writing which are the two components of print literacy. There are greater demands on written communication today than at any time in our history. Written language can be considered as a means of communication between deaf and non-deaf persons. It is the most common tool that allows deaf people to communicate with individuals who are not familiar with sign language. In fact, deaf people are challenged to learn the language they do not hear (Hoferková, 2012: 16). Therefore, teachers must use effective strategies to teach a successful written language. However, they may encounter obstacles when teaching writing to deaf learners because they rely on the visual means of communication and the use of sign language.

As far as the dissertation is concerned, it tries to shed light on the techniques used by EFL teachers to teach writing to deaf learners as well as the challenges both teachers and students encounter during the process of teaching and learning writing. Overseas, many research works have been conducted on the topic such as the work of Siima (2011) entitled 'Teaching Reading and Writing to Deaf Learners in Primary Schools in Uganda' and the work submitted by Xu in 2018 under the name of 'Using New Media in Teaching English Reading and Writing for Hearing Impaired Students – Taking the Leshan Special Education School as an Example.' However, due to the complexity of the problem, few if no studies have been conducted in Algeria. Therefore, this study aims to address this gap in the literature.

Aims and Significance of the Study

The overall objective of this dissertation is to investigate the techniques used by EFL teachers to teach writing to deaf students. More specifically, it seeks to find out how EFL teachers teach writing to students with a hearing impairment. This includes information about the strategies, instructional materials and other actions the teacher undertakes in teaching writing to deaf students. In addition, the study endeavours to determine the challenges faced by EFL teachers when they teach writing to deaf students. That is to say, it strives to establish the hurdles that affect the teaching of writing to learners who are deaf. Moreover, this research work attempts to uncover the writing difficulties that deaf students encounter.

This study is original and worth undertaking in the sense that to the present state of our knowledge, very little if no investigation has addressed to the topic in the Algerian context. Therefore, our aims behind conducting this study are to contribute to the field of academic research and attract the reader's attention towards the way deaf learners are taught to write in English. This work is significant because the findings are hoped to offer insights into the way writing is taught to deaf students and contribute to the literature on deaf education.

Research Questions and Hypotheses

In regards to the abovementioned research objectives, the present study aims at answering the following questions:

1. What are the techniques used by EFL teachers to teach writing to deaf learners?
2. What are the challenges faced by EFL teachers when teaching writing to deaf learners?
3. How do they cope with the challenges?
4. What are the difficulties faced by deaf learners when learning to write in English?

In an attempt to answer the above-asked research questions, the following working hypotheses are suggested:

1. EFL teachers use various techniques to teach writing to deaf students such as sign language and illustrations.
2. EFL teachers face many challenges when teaching writing to deaf learners.
3. EFL teachers adopt different strategies to cope with the challenges they encounter when teaching writing to deaf learners.
4. Deaf learners encounter various difficulties when learning to write in English.

Research Techniques and Methodology

To achieve the aforementioned objectives, a qualitative case study was conducted with four EFL teachers who teach deaf students at one mainstream high school and two special middle schools in Tizi-Ouzou and Béjaia. To answer the study questions, qualitative data collection and data analysis procedures were employed. Data were gathered through an asynchronous online interview in order to elicit teachers' responses regarding the techniques they use to teach writing to deaf learners, the challenges they face during the teaching process and the perceived difficulties deaf learners encounter when learning to write in English. Qualitative Content Analysis was used to treat the obtained data.

Structure of the Dissertation

This dissertation is organised following the IMRAD (Introduction, Methods, Results and Discussion) format, also known as the traditional simple structure. Thus, the present dissertation begins with a *General Introduction* that familiarizes the reader with the field and subject of the study. It is followed by four main chapters. The first chapter, named *Review of the Literature* reviews previous works on the topic and explains the theoretical framework upon which the study is based. The second chapter, entitled *Research Design and Methodology*, describes the methodological procedures used for the data collection and data analysis. The third chapter, called *Presentation of the findings*, presents the main findings of the study. The fourth and last chapter, labelled *Discussion of the Findings*, deals with the

discussion and interpretation of the study results, answers the research questions, and tests the validity of the research hypotheses. The dissertation ends with a *General Conclusion* that summarizes the main findings and conclusions that have been reached throughout the study, highlights the limitations faced during the investigation, and offers some suggestions for further research on the topic.

Chapter One :
Review of the Littrature

Introduction

This study attempts to explore the way deaf learners are taught to write in English and determines the challenges faced by both teachers and students. Before describing the methodology used to undertake the research, it is first necessary to review the empirical literature on the topic and discuss the theoretical framework of the study. Therefore, this chapter aims at reviewing key elements related to our research. It is divided into two sections. The first section attempts to introduce a few concepts relevant to deafness. It begins with some definitions of deafness or hearing loss. Then, it clarifies the difference between deafness and hard of hearing. Afterwards, it highlights the methods used by deaf people to communicate. Finally, it studies the process of teaching and learning of deaf students including teaching methods, the difference between mainstream education and special needs education and literacy skills, and recounts past research on the topic. The second section discusses the theoretical framework of this study.

I.1.Literature Review

I. 1.1. Definitions of Deafness / Hearing Loss

According to Christianson *et al.*(2006), hearing loss is one of the most common birth defects. Hearing loss, presents at birth, is known as congenital. This abnormality can also develop later in childhood or during adulthood. It can affect the child's communication with his/her environment and cause learning problems that impact a child's performance at school (Ibid).

Similarly, the *National Deaf Children's Society* (NDCS) states that deafness is a condition that occurs when there is a problem with one or more parts of the ear. Deaf people cannot hear well enough to hold a conversation through sound alone, although some deaf people hear noises in their ears like ringing and whistling. However, the deaf and the hard of

hearing students have the same learning level. In relation to this concern, Pritchard (cited in Domagala-Zysk and Kontra, 2018: 41) states that:

If the ear is partially or totally unable to perceive sound within this area, it will affect the person's ability to hear and develop speech. [...] The lack of experience with natural language acquisition of the first spoken language (L1) will inevitably affect the acquisition and learning of the second spoken language (L2).

It is obvious that the degrees of deafness differ from one person to another. Therefore, from the physiological standpoint which stressed its interest on measuring the degrees of deafness, Hallahan and Kauffman (2005:322) indicate that:

Those maintaining a strictly psychological viewpoint is interested primarily the measurable degree of hearing loss. Children who cannot hear sounds at or above a certain intensity (loudness) level are classified as deaf; others with a hearing loss are considered hard of hearing. Hearing sensitivity is measured in decibels (units of relative loudness of sounds). Psychologists generally consider those of hearing losses of about 90 Db or greater to be deaf, those with less to be hard of hearing.

I. 1. 2. The Difference between Deafness and Hard of Hearing

The terms *deafness* and *hard of hearing* differ considerably from one another. According to Braden (1994:22), deaf persons rely completely on visual means of communication, whereas hard of hearing individuals 'generally develop oral/auditory skill, albeit with some difficulty'. In the same context, Hallahan and Kauffman (2005: 322) agree that the dissimilarity between deaf and hard of hearing persons lies in the degree of hearing loss. To be more specific, a deaf person is an individual whose hearing is so severely impaired that it prevents him/her from successfully processing linguistic information even with a hearing aid. A hard of hearing person, on the other hand, is someone whose hearing is partially impaired and may be able to communicate and process linguistic information with the help of a hearing aid (Ibid).

I. 1. 3.Communication Methods Used by Deaf People

Deaf people use several modes of communication. The method they use varies according to the other participant in communication. In other words, the communication strategy depends on whether the other individual involved in the communication process is deaf or non-deaf. However, the most common communication methods used by deaf people include sign language, lip reading, gestures and writing.

I. 1. 3. 1. Sign Language

Sign language is considered as the primary tool of communication used by deaf people. Several definitions of this type of language have been provided by different authors. According to Schlesinger and Namir (1978:01), sign language is ‘a form of manual communication which is used in every community of deaf persons...It consists largely of stable, conventional hand movements and posture each of which conveys concepts reminiscent of pantomime.’ In other words, sign language is a system of communication that uses gestures and other body movements instead of spoken or written words. Likewise Lindsey (2005:02) defines sign language as a visual language composed of a set of hand gestures and specific movements of the arms, face, head, and body posture. That is to say, sign language is articulated by body parts’ movements. In the same context, Dominguez (2009:01) says that by the 5th century B.C the Greek philosopher Socrates had thought that it is perfectly magical for deaf persons to communicate using their hands, heads, and other body components.

When it comes to the types of signs, Stokoe (2005:07) highlights three main kinds which are the natural, the conventional and the methodical signs. The first, also called “home” signs, are used by a deaf child since childhood. The second, are the signs that are accepted and used by the members of a community in a given situation. The third, are used in teaching a given language.

It is asserted that sign language is better transmitted to a deaf child while his or her parents are deaf too. Indeed, Schlesinger and Namir (1978:66) confirm that sign language is transmitted naturally from deaf parents to their deaf children since it is used from their birth.

I. 1. 3. 2. Lip Reading

Lip reading, also called “speech reading”, is another means of communication used by deaf people. It is a form of speech produced in a silent way by lip movements to transmit meaning to a deaf person (Markides, 1979:93). That is to say, lip reading is a communication method used by deaf people to interpret speech by observing the lip movements of the speaker. Many terms are used to refer to this process like ocular audition, labiomancy, labiology, visual hearing, and visual communication (Ibid). Lip reading was first taught at the beginning of 16th Century when the Italian philosopher and physician Jermone Cardan (1575) supported and believed that deaf people can be trained to speak (ibid).

I. 1. 3. 3. Gestures

Another common visual communication mode among deaf people is the use of gestures. Gestures are body movements, mainly made with the hands and arms, which allow individuals to express information, ideas, or emotions. (Toastmasters International, 2011: 8). Gestures are mainly used to clarify ideas, fix a clear image in the listener’s mind about the delivered message, and emphasise and support ideas (ibid). Gestures are visible aids in the sense that they are viewed by the receiver and attract his/her attention (ibid). Since deaf people are visual individuals, gestures can be a powerful tool to communicate successfully with non-deaf persons.

I. 1. 3. 4. Writing

Moore and Martin (2006:43) claim that ‘writing might be considered as training the hands and fingers to do the work of the mouth and tongue.’ Despite the fact that the writing level of deaf students is lower than that of their hearing peers, they have cognitive and

intellectual abilities to enhance their writing literacy (Ibid). Indeed, Moores and Martin (2006) indicate that deafness does not restrict children's ability to communicate in writing. With the rapid development of technology, the need of written communication for deaf individuals is more significant than it has ever been. Hence, teaching writing to deaf/hard of hearing persons is highly recommended.

I. 1. 4. Methods for Teaching English to Deaf Learners

Educating deaf/hard of hearing children is not an easy profession. Indeed, Adi *et al.* (2017: 126) claim that teaching English to deaf student becomes a difficult task for teachers. EFL teachers who teach deaf students have to make changes in their instruction in accordance with the learners' needs and disabilities. They need to adapt and meet the needs of these students. Adi *et al.* (2017: 126) state that:

Teachers' considerations to adjust to students' disabilities or their behaviors refer to teachers' efforts to adjust the material, media, and so on, considering deaf students who are not able to learn listening and speaking skills, and ways to make deaf students easier to learn writing and reading skills. In an example, a teacher tended to use pictures when describing something to avoid abstract imagination from the deaf students, to help them better understand things, and to give an exact example of something, because deaf students are visual learners.

Mpofu and Chimhenga(2013:69) suggest that before starting the lesson, the teacher can attract the attention of deaf learners with a signal like a tap on the shoulders or wave. In addition, he/she needs to speak unambiguously and spontaneously without overemphasizing the lip or hand movements. Furthermore, he/she has to face the class and avoid doing things that can render lip reading difficult for the students.

EFL teachers can use different techniques and methods to help deaf learners to understand and learn English and its written form. There are four methods to teach deaf learners. The first method consists of the use of sign, finger spelling and speech reading. Thesecond method involves the use of equipments like overheads projectors, bulletin boards, computer and televisions showing captions on the screen. For the third method, teachers can

use materials such as pictures, illustrations, artifacts, slides, computer graphics, and films with captions. The fourth method requires the use of visual aids such as rules charts, job and choice menus, transition time charts and cards, task organizers, daily schedules, and the internet (Mpofu and Chimhenga, 2013: 69).

I.1.5. Methods for Assessing Deaf Students

Assessing the academic skills of deaf students is important in monitoring their progress and determining the effectiveness of instruction. However, Pizzo and Chilvers (2019: 1) claim that assessing language and literacy development of deaf and hard of hearing children is not an easy task owing to the various communication modes they use.

There are two assessment approaches that can be used with deaf or hard of hearing students: formal and informal assessment (Ibid: 2). The purpose of formal assessment is to test students and compare their scores to that of their peers (Ibid: 4). Whereas, informal assessment is the most frequent assessment method used to check students' learning progress (Ibid: 2). Its approaches include performance-based assessment, curriculum-based assessment and portfolio assessment (Ibid: 4).

Accurate assessment of deaf students' writing skill is fundamental. It is stated by Burmane *et al.*(2008: 93) that 'assessment is a useful, reliable and valid instrument for analysis of deaf children' writing.' In other words, it is a key tool to enable teachers to judge the writing performance of deaf learners. According to Luckner and Isaacson (1990:230) the main purpose of writing assessment is 'to gain diagnostic information, plan appropriate instruction, monitor student progress and provide opportunity for positive feedback.' The role of teacher of hearing impaired is thus to assess accurately the students' written language skills and provide appropriate instructional objectives (Ibid).

I. 1.6. Mainstream Education versus Special Needs Education

Deaf learners have the same right to access education as hearing students. This involves equal chances to learn foreign languages like English. However, compared to regular learners, deaf students suffer from a hearing disability that renders the process of learning English extremely difficult. Therefore, deaf students require special attention and learning treatment suitable to their disability. In order to access knowledge and information, deaf students can attend a special school or a mainstream school. According to Adi *et al.* (2017: 121), a special school is an educational institution specifically created to provide instruction for children with special educational needs or disabilities. A mainstream school, on the other hand, is a non-specialised school where disabled students are placed in regular classrooms to study with students who do not have disabilities (Cherif and Mezada, 2018: 23).

Choosing the right school that best suits the needs of students with disabilities is not easy. Jenkinson (1997:91) asserts that many parents choose to place their disabled children in special schools rather than in mainstream schools for many reasons. One of the main advantages of special schools is that children who have similar disabilities and educational needs are grouped together. In addition, the presence of qualified teachers who master sign language can help deaf children in their learning process and facilitate communication between the teacher and the learner. A further benefit of special schools is the inclusion of therapies and health services like psychological counselling (Ibid: 92). Moreover, compared to mainstream classes, special school classes are smaller in size and are organised to meet the learners' needs. Concerning the curriculum in special needs schools, teachers adopt techniques and materials that serve the needs of the learners (Ibid:95). That is to say, teaching is carefully coordinated with students' unique needs and learning styles. However, placing students in special educational programmes based on their disability can inhibit their social

interactions. In other words, being separated from the real world can impede the social relations of special education students when they reach adulthood (Ibid:97).

Mainstream or inclusive schooling, on the other hand, considers all individuals as being equal and having the same right to be member of the mainstream society and share the same benefits and opportunities (Stainback and Stainback, 1989; cited in Ibid). Mainstream schooling is child-focused and encourages learners for best learning regardless of their disabilities. It is obvious that children have different learning ways. Therefore, it is apt to the teacher to adopt the necessary techniques that will suit all learners (Jenkinson, 1997:128). As for the negative aspects of mainstream education, Macbeath *et al.* (2006; cited in Shah, 2007:428) argue that mainstream schools are unable to offer the necessary facilities and expertise to teach young people with disabilities. This is due to difficulties faced by regular teachers in the teaching process (Barnes *et al.*, 2013; cited in Shah, 2007:428). In addition, Saudners (1994; cited in Shah, 2007:431) asserts that many people criticise mainstream education for its failure in promoting the child's care, and educational and social needs.

I. 1. 7.Literacy Skills of Deaf Students

Deaf students learn English through reading and writing. Thus, these skills are important and should be taught to them. According to Moores (cited in Moores and Martin, 2006: 52), 'The need for print literacy -reading and writing- is more important for deaf individuals today than it ever has been, and, with our increasing reliance on technology, the need will increase.' In fact, one of the most demanding tasks for teachers is to develop the literacy skills of deaf students. Deaf students do not read and write in the same way or at the same level as regular students. Learning to read and write is more challenging for deaf students. Indeed, research has shown that many deaf individuals struggle with various aspects of reading and writing ranging from 'the smallest units (phonemes and graphemes) to morphemes, syntax, vocabulary, and pragmatics.' (Ibid).

Deaf students develop reading and writing skills at a slower pace than their hearing peers. Research has shown that the level of reading and writing of deaf students is lower than that of hearing students. Patrick and Awori (2017: 3) declare that deaf students 'score within the low-average range when tested on contextual conventions, contextual language, and storyconstruction. The learners produce shorter and less structurally variable sentences than their hearing peers.' When it comes to reading, Gaustad *et al.* (2002) compare the morphemic abilities of deaf and hearing college and middle school students. The college group comprised 43 deaf and 33 hearing students, whereas the middle school group involved 27 deaf and 25 hearing students. The scores gained from the standardized tests showed that hearing college students outperformed the other groups. The deaf college students and the hearing middle school students demonstrated the same level of reading achievement. Deaf middle school students, on the other hand, scored lower than the three groups.

In this context, Moores (cited in Moores and Martin, 2006: 47) mentions some common errors made by deaf students when reading in English, such as reading a passive sentence (The cat was chased by the dog) as active (The cat chased the dog) and reading a negative sentence (He did not read the book) as positive (He did read the book). Moores (cited in Ibid: 45) indicates that despite the progress in educating deaf students, there are still serious obstacles that prevent them from developing their literacy skills. The first obstacle is the non-identification of a child as being deaf at an early age. The second problem is the lack of proper advice, training and support to enable effective communication between deaf children and their parents and enhance literacy skills. The third issue is that many deaf children have educationally relevant conditions. Accordingly, Moores (2006) recommends the establishment of better methods to teach deaf learners.

I. 1. 8. Previous Related Research

Reviewing former relevant studies is necessary to show the results obtained by other researchers, demonstrate the relationship between the present study and what has already been written on the topic, identify any theoretical or methodological gap, and describe how the present study intends to fill this gap.

The first work related to this study is the research conducted by Siima in 2011. In her research, she implemented a qualitative case study based on observations and interviews to investigate the way reading and writing are taught to deaf learners and determine the problems that teachers encounter when teaching these skills. The results of the study revealed that deaf learners in primary schools in Uganda were actually able to read and write. She observed that ‘the learners were able to read and write what was expected of them by the teachers during the lesson, and after being taught; defeating the argument that these pupils were slow learners.’ Concerning the methods used to teach reading and writing to deaf students, the teachers reported that they a variety of methods including sign language and demonstration. However, the results indicated that the teachers lacked knowledge on the use of appropriate methods to teach reading and writing to deaf students. Therefore, Siima stressed the importance of engaging teachers in pre- and in-service training programs to equip them with the necessary competencies to teach reading and writing to deaf students.

The second work related to the current study is a journal article written by Patrick and Awori in 2017. This study was conducted to find out the strategies used in teaching written English to learners with hearing impairments in a special school in Kenya. In their research, Patrick and Awori used a descriptive survey design based on questionnaires, observations, and interviews. The results of the study showed that the teachers relied more on traditional strategies such as continuous writing and teaching new words then using them in sentences.

This entails that these teachers do not have good knowledge about the strategies that can be used to enhance the writing performance of students with a hearing impairment.

The third work related to the current study, is a journal article by Kontra, *et al.* published in 2015. The study explored how deaf/hard of hearing students in eight specialized institutions across Hungary perceive the challenge of learning a foreign language. A mixed method was used to collect the relevant data. The findings of this study revealed that foreign language learning constitutes a real challenge for deaf/hard of hearing learners. They face a problem mainly in comprehending and producing speech in the foreign language. Despite their weak level of motivation, most of these learners are aware of the necessity of acquiring a foreign language and its beneficial aspects.

The last work was submitted by Cherif and Mezada (2018). The outcomes of this study revealed that teachers face difficulties in the selection of suitable methods for the learners. In addition, the results showed that deaf learners are not motivated to learn English and the majority of them have negative attitudes towards English.

The present research is in some way similar to the studies conducted by Siima (2011), and Patrick and Awori (2017). However, both studies focussed mainly on deaf learners in primary schools in Uganda and Kenya. In Algeria, English is not taught until middle school. Therefore, one of the purposes of the current study is to fill this gap in the literature by investigating the techniques used by EFL teachers to teach writing to deaf students in one mainstream high school and two special middle schools in Tizi-Ouzou and Béjaia, Algeria. In addition, contrary to Siima's study that focussed mainly on the challenges faced by teachers, the present study attempts to determine the obstacles met by both teachers and deaf students during the process of teaching and learning writing.

The aforementioned studies researched the obstacles faced by deaf students when learning a foreign language like English. However, none of these studies focused on the

difficulties deaf students meet when developing a particular language skill. Focusing on the writing skill, this study aims to fill a gap by investigating the challenges encountered by both teachers and deaf students during the process of teaching and learning writing.

I. 2. Theoretical Framework

In order to answer the research questions and analyse the results of the ongoing study, which aims at investigating the techniques used by EFL teachers to teach writing to deaf learners, a multimodal approach is preferred.

I. 2. 1. Social-Semiotic Theory of Multimodality

Social-semiotic theory of multimodality was developed over the past decades ‘to create a theory of semiotics appropriate to contemporary semiotic practice.’ (Kress and Leeuwen, 2001: 2). This theory is interested in meaning, in all its forms (Kress, 2010: 54). Multimodality is defined in different ways by different authors. According to Kress and Leeuwen (2001:20), multimodality is ‘the use of several semiotic modes in the design of a semiotic product or event.’ To say it differently, multimodality means the combination of different modes of communication to express meaning. Ikasari *et al.* (2019: 97-98) state that multimodality is the use of diverse semiotic modes to communicate meaning through linguistic and non-linguistic modes such as visual, gestural, spatial, and aural communication aspects.

Similarly, Jewitt (2008: 246) claims that ‘multimodality attends to meaning as it is made through the situated configurations across image, gesture, gaze, body posture, sound, writing, music, speech, and so on.’ That is to say, multimodality is characterised by the use of several channels other than language to communicate meaning. This means that language is just one mode among other communication channels. During a communication encounter, a person can use speech along with visual communicational modes such as gaze, gestures and

facial expressions to make meaning accessible. Therefore, communication is multimodal (Kress, 2010: 32)

I. 2. 2.Mode

The concept “mode”, according to (Ibid:79), is ‘a socially shaped and culturally given semiotic resource for making meaning.’ A mode can be in the form of image, writing, layout, music, gesture, speech, moving image, soundtrack and 3D objects (Ibid). People can use these different modes to communicate and make meaning. Each mode provides a specific potential for making meaning. These diverse potentials play a key role in the choice of a certain mode in a specific communicative context. The choice of a given mode is an important part of communication and development of meaning.

To illustrate, (Ibid) claims that writing in different languages consists of words, clauses, and sentences that are structured through grammar and syntax. To frame its units, writing uses graphic resources such as punctuation marks and visual means like space between words or paragraphs (Ibid). These resources have the potential to make meaning more comprehensible. According to Kress *et al.* (2001:43), each mode makes meaning differently. these meanings may not always be understood by readers. Therefore, the combination of all modes simultaneously in a given communicative situation contributes to the creation of more understandable meaning.

I. 2. 3.Multimodal Teaching and Learning

Nowadays, teaching should not be carried out through a single mode, but it should be conducted using various communication channels. This new instructional approach is known as multimodal teaching. Multimodal teaching is a term proposed by New London Group in 1996, which advocates the integration of multimedia into language teaching (Haijing, 2015:42). This new theory is based on the use of different means in order to mobilise learners’ multiple senses into the learning process (Haijing, 2015: 42). The adoption

of multimodality in the EFL classroom has shifted the teaching process from traditional to multimodal. It encourages the usage of different means for better understanding and improvement of the effectiveness and efficiency of classroom instruction (Ibid:43).

According to Paivio (1986; cited in Moreno and Mayer, 2007:310), multimodal learning environments are the ‘learning environments that use two different modes to represent the content knowledge: verbal and non-verbal.’ In other words, in the teaching process, teachers can use both verbal and non-verbal modes to convey meaning. The latter includes gestures, body language, posture, and facial expressions. The combination of various modes can enhance learners’ understanding of the teaching material. Moreover, the use of just one mode in the classroom fails to capture the meaning transmitted to the students (Kress *et al.*, 2001:18). Indeed, the combination of modes between what is said and what is shown plays a key role in a communicative event (Ibid). Therefore, multimodality should be applied to teaching writing to deaf students.

I. 2. 4. Multimodality in Teaching Writing to Deaf Students

It has already been mentioned that sign language is the most common means of communication among the deaf population, which includes visual representation to convey messages. So, it cannot be neglected that deaf individuals are visual learners and vision becomes their primary means of receiving information. Indeed, Marschark, *et al.* (2000; cited in Birinci, 2014: 55) confirm that ‘Deaf students are inherently visual learners to a varying degree, because they lack the ability to hear, they rely more on vision to compensate for their lack of hearing’. Therefore, the visual style is the most dominant mode for deaf learners to learn any component of a second/foreign language, especially the writing skill. Teaching writing is significant in deaf education and EFL teachers should use effective techniques that suit their deaf learners’ characteristics. Implementing a multimodal approach in teaching writing can help deaf learners to enhance their writing skill. The use of various visual

communicative modes such as gestures, body postures, facial expressions, and images along with written texts can help deaf learners to understand the material better. Deaf students may perform better in a learning context that accommodates their visual learning style. In teaching writing to deaf students, the teacher should not focus only on one mode, but he/she should also apply the visual tools offered by multimodality such as gaze and body movements. In fact, the multimodal approach to teaching writing fits both deaf and hearing learners.

Conclusion

This chapter reviewed notions and concepts which are essential to the study. It first introduced the main characteristics of deaf learners and their learning process. Then, it presented related studies about the topic in accordance with the purpose of the study. After that, it introduced the theoretical framework upon which the study is based. Finally, it clarified the relationship between the main concept of the theory and the aim of the ongoing study. The subsequent chapter described the methodology used to conduct the present investigation.

Chapter Two
Research Design and
Methodology

Introduction

This chapter includes the research design and methodology of the dissertation. It investigates the techniques that EFL teachers use to teach writing to deaf learners. It is, hence, concerned with the methods and procedures used in data collection and data analysis. Firstly, it begins with an outline of the research method that was followed in the study. More specifically, it gives brief information about the qualitative research method. Secondly, it introduces the data collection instrument. It includes detailed information about the type of interview that was used to gather data for the present study. Then, it explains the procedure used to gather the relevant data. After that, it offers a description of the study participants. At the end, it explicates the method of data analysis which is Qualitative Content Analysis (QCA).

II. 1. Research Method

In order to fulfil the objectives of the study, a qualitative research was held. This involves the collection of non-numerical data. In other words, the data collected in qualitative research are non-statistical in nature and can be generated through texts like diaries and journals, interview audiotapes, classroom observation, and open-ended questions (Zohrabi, 2013: 254). According to Mohajan (2018: 24), qualitative research is an approach that highlights how individuals interpret their experiences and communicate meaning. That is to say, qualitative research relies on people's beliefs, experiences and views about the situation being studied. Qualitative research permits the researcher to gain information on a given topic from the point of view of the participants. Given the fact that the present research attempts to discover the techniques used by EFL teachers to teach writing to deaf students and determine the difficulties faced by both teachers and deaf students when teaching and learning writing, a qualitative research appeared quite suitable.

II. 2. Data Collection Instrument: Teachers' Interview

In order to collect the relevant data to answer the research questions of the study, a qualitative data collection instrument, consisting of an asynchronous online interview, was used. The rationale behind the use of an interview as a main tool to collect data was to gather in-depth information about the participants' viewpoints, perceptions, and experiences in teaching writing to deaf students.

Many definitions are attributed to online interviewing. For example, James and Busher (2016:3) define online interviews as research methods used to collect data via the Internet. Salmons (2012: 5), Similarly, refers to online interviews as interviews conducted remotely using computer-mediated communications (CMCs).

Online interviews can be conducted asynchronously and synchronously. Asynchronous interviews are conducted in non-real time and involve the use of e-mails, forums, web blogs, and wikis (Salmons, 2012:4). Synchronous interviews, on the other hand, happen in real time and use instant messaging, video conferencing or video calls, and Voice-Over Internet Protocol (Ibid). In the present study, asynchronous online interviews were used to collect data via the Messenger platform. This means that the researchers and the interview respondents were not online at the same time. The interview questions were sent to the participants who responded on their own time.

The interview comprised twenty open-ended questions divided into four sections. The first section contained six questions that attempted to gather background information about the interviewed teachers. The second section included six questions that sought to determine the techniques and materials EFL teachers use to teach writing to deaf students. The third section involved five questions that intended to ascertain the difficulties that both EFL teachers and deaf students face when teaching and learning writing. The fourth and last section encompassed three questions that asked the teachers to provide some suggestions

related the topic under study. The open-ended nature of the questions allowed the participants to express themselves freely and give detailed information.

II. 3. Data Collection Procedure

The current study sought to investigate the techniques that EFL teachers use to teach writing to deaf students. In order to achieve the research objectives and answer the study questions, an asynchronous online interview comprising twenty open-ended questions was directed to four teachers of English via the Messenger platform after contacting them on their official Facebook accounts. In fact, we sent them the interview questions in a written form between the 5th and 6th of September 2020, and we received their answers between the 10th and 15th of September 2020.

II. 4. Description of the Participants

Four teachers who teach English to deaf students in one mainstream high school and two special middle schools in Tizi-Ouzou and Béjaia were asked to participate in the current study. All the interviewed teachers were females aged between twenty-five and thirty-five years old. Three teachers have completed their education at the University of Tizi-ouzou and one teacher obtained her degree from the University of Béjaia. Their teaching experience ranged from two to six years. A detailed description of each participant is provided below.

Participant 1 is a twenty-six years old female teacher. She has received a Master degree in English Language and Communication from Mouloud Mammeri University of Tizi-Ouzou. She is currently working at a mainstream high school named “Ibn Mouati” situated in Boukhalfa, Tizi-Ouzou. She has been teaching English to deaf students for almost three years.

Participant 2 is a twenty-five years old female teacher. She has received a Master degree in English Language Literature and Interdisciplinary Approaches from Mouloud Mammeri University of Tizi-Ouzou. She is currently working at a special middle school named “Ecole

Pour Enfants Handicapés Visuels” situated in Boukhalfa, Tizi-Ouzou. She has been teaching deaf students for two years.

Participant 3 is a twenty-nine years old female teacher. She received a Master degree in Didactic of Foreign Languages from Mouloud Mammeri University of Tizi-Ouzou. She is currently working at a special middle school named “Ecole Pour Enfants Handicapés Visuels” located in Boukhalfa, Tizi-Ouzou. She has been teaching English to deaf students for six years.

Participant 4 is a thirty-five years old female teacher. She received a Master degree in English from Abderrahmane Mira University of Béjaia. She is currently working at a special middle school named “Ecole Pour Enfants Handicapés Auditifs, Chahid Boualem Settar” in Béjaia. She has been teaching English to deaf students for three years.

II. 5. Description of the Setting and the Program

The investigation has been taken place in two middle special schools of special needs children; the first is named ‘Ecole pour Enfant Handicapés Visuels’ located in Boukhalfa Tizi-Ouzou, the second is named ‘Ecole pour Enfant Handicapsés Auditif, Chahid Boualem Settar’ situated in Béjaia, and one high mainstream school named ‘Ibn Mouati’ located in Boukhalfa, Tizi-Ouzou. These schools are devoted for academic standards for special needs children, they offer them a special education parameters fitting their disabilities. Concerning the curriculum, deaf learners are exposed to the same one as the regular learners which is offered by the Ministry of education

II.6. Data Analysis Procedure

The obtained data from the asynchronous online interviews were analysed qualitatively using Content Analysis. Many definitions of Qualitative Content Analysis (QCA) are given

by different authors. For instance, Hsieh and Shannon (2005:1278) refer to QCA as ‘a research method for the subjective interpretation of the content of the text data through the systematic classification process of coding and identifying themes and patterns’. In other words, content analysis is a qualitative data analysis method used to categorise textual data into codes and themes, elicit meaning and reach conclusions. The aim of QCA is ‘to provide knowledge and understanding of the phenomenon under study.’ (Downe-Wamboldt,1992; cited in Hsieh and Shannon, 2005: 1278). That is to say, QCA is a valuable data analysis tool because it provides a better understanding of a given phenomenon as well as new knowledge and information. Therefore, the obtained data are categorized into themes.

Conclusion

This chapter described the study participants and the procedures of data collection and data analysis. First, it introduced the research method used to address the study questions and test the validity of the research hypotheses stated in the General Introduction of this dissertation. It is followed by the depiction of the data collection instrument. This part justified the tool used to gather information, which is asynchronous online interview. Then, it described the interview participants in terms of age, gender, educational level, work place and teaching experience. At the end, it explained the procedure of the data analysis, which is Qualitative Content Analysis. The following chapter deals with the analysis of the findings gathered through the asynchronous online interview.

Chapter Three
Presentation of the
Findings

Introduction

This chapter is analytical in nature. It presents a thorough analysis of the findings obtained from an asynchronous online interview conducted with four teachers who teach English to deaf students at one mainstream high school and two special middle schools located in two Algerian provinces which are Tizi-Ouzou and Béjaia. In order to collect the necessary data to address the study questions and test the validity of the research hypotheses, fourteen open-ended questions along with six background questions were addressed to the participants via the Messenger platform. The answers to the interview questions were provided in a written form. The obtained data were analysed using Qualitative Content Analysis and the findings were presented according to the interview questions. The answers were analysed carefully so as to discover the techniques and materials that EFL teachers use to teach writing to deaf learners, and to uncover the difficulties and challenges that both teachers and deaf students encounter while teaching and learning writing. The interview participants were also asked to provide some suggestions and recommendations.

III.1. Techniques and Materials Used to Teach Writing to Deaf Students

The second part of the interview included six questions that investigated the techniques and materials that EFL teachers use to teach writing to deaf students. The teachers' responses to each question are provided below.

What communication methods do you adopt to deliver the message to deaf learners?

The purpose of this question was to discover the methods that EFL teachers use to communicate with deaf learners in the classroom. All the teachers stressed the use of the most common method which is the Algerian Sign Language along with gestures. For example, participant 1 said that: "most of the time I use the Algerian sign language to communicate with my learners, by including gestures and body language which are very important". In the same perspective, participant 3 claimed that:

In order to make sure that the aim of the course is accomplished, I always resort to sign language which is considered as a basic code/method of communication to teach deaf learners, this code includes gestures, eye contact, facial expressions, and sometimes this require some acting if necessary when explaining meaning of words.

What methods/techniques do you use to teach writing to deaf learners?

This question constitutes the primary aim of this investigation. It targeted to obtain information about the techniques that teachers use to teach writing to deaf learners. According to the teachers, the main technique they adopt to teach writing to deaf learners is the use of visual aids in the classroom. According to the interviewees, visualisation helps students to remember things better and understand the context or the topic of writing. Participant 1 said that:

The methods that I use to teach writing to deaf learners are mainly visual aids like images and videos that are very helpful to make the learners understand the topic on which they will write. I stick first images on the board and then I start to explain the context.

Participant 3 stressed on the strength of the photographic memory that the deaf learners have in the following statement:

In order to teach writing, I usually use visual aids; deaf mutes have a strong photographic memory, that's why using visuals is very helpful in the teaching process. To make them write about something, I usually ask a question (with using sign language or by writing it on the board) and then make them write on it.

What materials and equipment do you use when teaching writing to deaf learners?

This question was asked in order to know about the different materials and equipment that teachers utilise when teaching writing to deaf learners. In order to accomplish the aim of the lesson, the teacher can use many equipment like the board, projectors, videos from a computer, pictures and images that show the meaning of words. The participants shared the same answers for this question. For example, participant 1 said that “the different equipment and material that I usually use are white board, images, videos and a data show”. Similarly, Participant 4 asserted that “I generally use the board to stick images on it, I use also a data show, and my personal computer to show some videos.”

What are the best visual materials that can help deaf learners to acquire writing?

This question was asked with the purpose of identifying the teachers' view about the most helpful visual materials to deaf learners while acquiring writing. As far as the answers to this question are concerned, two teachers said that images and pictures are the best visual materials that help deaf learners to acquire writing fast because they have a good photographic memory. For instance, participant 4 claimed that "according to me images can help deaf learners acquire writing, because images connect them directly to words." Participant 2 shared the same response by saying that "generally my deaf students learn better when I illustrate for them what I ask them to write about by using pictures." Two other teachers claimed that all visual materials can be effective. Indeed, participant 1 affirmed that combining all the visual materials together help more the acquisition of written English by deaf learners, she advocated that;

There is not only one visual aid that is helpful. In fact, all what I mentioned before give something new, I want to say that referring to all visual aids and using them together gives better result.

In the same lines of thought, participant 3 suggested that:

I think that all the visual materials that I have mentioned contribute with something to the success of the lesson. Indeed, I suggest that when showing the visual aids they should be supplemented with sign language to make sure that the message is transmitted.

How do you establish an appropriate environment to teach writing to deaf students?

This question intended to inquire about teachers' practices while teaching writing to deaf learners. From the answers, we noticed that all the teachers shared the same point of view. They admitted that creating an effective atmosphere is very important to teach writing to deaf learners and this atmosphere should be based on communication and interaction as well as making the learners feel comfortable. Therefore, in order to ensure this atmosphere, participant 4 submitted that "I always use group work activities to make them interact and know each other better, I also try to make fun activities to make them motivated to learn." In

the same vein, the three other teachers claimed that they create an effective environment by guiding deaf learners through illustration and showing them how to write words before asking them to write. Participant 1, for instance, indicated that:

Establishing an effective environment is a vital aspect in motivating and stimulating the learners. First, to help my learners to write, I use images to make them know what the object they will write about and then I show them how to write it. I always put focus on psychological aspect of the learners, they need to feel at ease and comfortable when learning and this by encouraging them to take part in the lesson and interact with their classmates. Indeed, learners should be given opportunity to express themselves freely without being ashamed from mistakes. In short, the learning environment is based on learners-learner and learner-teacher interaction.

Moreover, participant 2 stated that:

Establishing a positive environment is very helpful to teach deaf learners how to write. Since writing is considered somehow as a communication method between regular and deaf learners, I put my emphasis on teaching writing by using visual aids. I usually use activities and games in order to create interaction between the learners and me.

How do you assess the writing performance of deaf students?

The goal of this question was to probe into the way the teachers assess the progress of the writing of their deaf learners. The results showed that nearly all the teachers adopt the same way to assess the deaf learners' writing performance. They provide the learners with easy tasks such as word matching to images, reordering sentences, write the name of pictures using a list of words. The findings indicated that three teachers tend to rely on visual and written assessment.

For instance, participant 2 has the tendency to use day-to-day assessment. The following declaration demonstrates the point:

I assess deaf learners writing performance by providing them with exercises at the end of the session where I interrogate one by one to the board and I show them pictures and they write down what they see.

In a similar way, participant 4 acknowledged assessing students' prior knowledge and understanding at the end of each term in the following assertion:

At the end of the term, I test them, in which I review all what they learn through this term, the test comprises only easy exercises, such as matching words with correspondent image.

As for participant 1, she said that “to assess the writing performance of my learners, I usually use a written assessment test to assess their comprehension and written communication.”

Concerning participant 3, she recognised evaluating her students continuously through the use of portfolio assessment. She declared that “in order to assess the writing performance of my deaf learners, I use a portfolio assessment to assess their progress in writing.”

III.2. Difficulties in Teaching and Learning Writing

The third part of the interview contained five questions which aimed at ascertaining the challenges and difficulties that both teachers and deaf students encounter when teaching and learning writing. The results are given below.

Have you received any specific training on teaching deaf students?

As far as this question is concerned, all the teachers shared the same answer. They have received specific training to teach deaf learners. Participant 3 declared that “yes, I received special training before starting to teach deaf learners”. Likewise, Participant 1 said that:

Yes, I have made training before starting teaching the deaf mutes. In fact, I have learned the Algerian sign language, I have made a training on the different methods to use when teaching deaf mutes.

Do you think that teaching writing to deaf students is a hard job?

The purpose of this question was to determine the way the teachers perceive the process of teaching writing to deaf students. Despite the fact that all the teachers received specific training to teach deaf students, the results showed that all the interviewees responded by “yes” to this questions. They considered that teaching writing to deaf learners is a challenging and very hard job. They asserted that deaf learners are slow to understand. Thus, the teacher should be patient, comprehensive, and creative at the same time. For example, participant 4 confessed that “teaching deaf learners to write is not an easy job at all, teachers should be

patient, they need to repeat things several times so as deaf learners could assimilate.” In the same vein, participant 2 declared that:

I think that teaching writing to deaf learners is a very hard job since their hearing disability prevents them to learn a foreign language easily comparing them to the hearing students. Thus, patience is recommended.

What difficulties do you encounter when teaching writing to deaf learners?

This question was mainly asked with the purpose of identifying the main difficulties and challenges that the teachers encounter when they teach deaf learners to write. After analysing the answers to this question, it appears that teachers face many difficulties. In fact, two teachers indicated that deaf learners are very slow to understand so they need to repeat one thing many times. For example participant 4 claimed that “when I repeat several times one thing I use different materials but still some of the deaf learners are not able to write what I am asking for them.” Similarly, participant 1 admitted that “the main difficulty I face is with the explanation of the meaning of some words that do not exist in their environment because they are unfamiliar with them.” In addition, participant 3 stated that:

The teacher needs to understand the needs of the learners to put himself on the learners’ shoes especially when explain abstract notions that are hard to explain by gestures, etc. So, the teacher should be patient, creative at the same time comprehensive.

As for participant 2, she stated that she faces difficulties with deaf learners’ ways of understanding in the following declaration:

I face difficulties when I teach writing to deaf learners because they have different ways of understanding, so I must explain to each one fitting his needs. Thus, I use different manners to show them what I want them to write.

How do you overcome these difficulties?

This question sought to discover whether the interviewed teachers have any strategies in order to overcome the difficulties they encounter while teaching writing to deaf students. From the answers, we deduced that the teachers try to overcome these hurdles in different ways. Participant 1 declared that she tries to overcome these difficulties by doing repeated

simple activities and supporting these tasks with visual materials since deaf learners are slow to process things. Participant 4 affirmed that she attempts to prevail the challenges by finding something closer in meaning for the words which are unfamiliar to deaf learners by saying that:

If my learners do not understand the meaning of the word 'peace' I try to show them images of the war, then I use sign communication to explain the after war, and the happiness that follows.

The two other teachers stated that since deaf learners have different behaviours and learning ways, they choose to discuss the issue with their parents. This allows them to learn about the strengths and weaknesses of their deaf learners and meet their unique needs. Participant 3 stated that "I often speak with their parents, we try to exchange information about their deaf children needs and we try to solve the problems together".

Do deaf students face difficulties when learning to write? If yes, what are these challenges?

This question asked the teachers whether deaf students encounter any writing problems and specify the kind of difficulties. The results of this question showed that all the interviewed teachers agreed that deaf learners encounter difficulties when they learn to write. They maintained that some deaf learners lack interest and are slow to understand the teaching material. Participant 3 said that "yes, deaf students face difficulties when they learn to write. They sometimes do not concentrate on what I write, they even do not take any interest to the lesson." In addition, the teachers stated that deaf learners' knowledge of grammar and vocabulary is limited. Thus, they cannot always form a meaningful sentence. Participant 1 affirmed that "my deaf students cannot form a cohesive sentence with subject, verb, and complement. For instance, instead of writing "I am sick" they write "me sick." They also claimed that deaf learners cannot write a word without a visual demonstration of it. Participant 3 stated "sometimes I use a picture of something along with sign language to make the learners understand and able to spell the word correctly." According to participant 2, deaf learners sometimes write overturned letters. She declared "I have noticed that some

learners repeat the text in the writing part of the examination, also some of them write overturned letters in some words.”

III.3. Teachers’ Suggestions

The fourth and last part of the interview asked the participants to provide some suggestions to enhance the writing performance of deaf students and improve the way English is taught to this category of learners. It encompassed three questions whose answers are provided below.

If you could change anything to enhance the writing performance of deafstudents, whatwould it be?

This question asked the interviewed teachers to suggest ways to improve the writing performance of deaf students. The participants provided different recommendations. For example participant 4 stated that in order to enhance the writing performance of deaf learners, emphasis should be placed on how deaf learners write andnot onwhat they write. She said that “in my opinion, when deaf learners write something, the teacher should give more importance to their draft not the content of writing.” Furthermore, participant 2 specified that:

I give an opportunity to deaf learners to write about what they interest them, I do not link them to themes. For instance, they write about their daily activities, I do this in order to be informed if they are able to write.

Participant 1 and participant 3 shared the same opinion. They suggestedthat to enhance thewriting performance of deaf learners, teachers should rely on authentic materials such asannual book, magazines, newspapers, and others. Participant 1 asserted that:

In order to enhance the writing performance of deaf students, I think that the best thing to do is to bring all the authentic materials the teacher can use in his teaching process. In fact, teaching deaf people is a difficult work that needs many resources. In addition, the writing skill should be fundamental in the deaf mute world, because it is the only means of communication that they can use with people who don’t master sign language. Writing skill is very important as it builds a bridge between the deaf students and the outside world, that’s why we, as teachers, should give it a huge importance.

What do you suggest to improve the teaching of English to deaf students?

The purpose of asking this question was to determine the interviewed teachers' propositions on how to ameliorate the teaching of English to deaf learners. From the teachers' answers, we deduced that in order to improve the teaching of English to deaf learners, teachers should follow a simple and clear way of teaching. For example, participant 4 insisted that in order to enhance the teaching of English to deaf learners, the teacher should plan his/her lessons relying on demonstration and illustration by using different visual aids as a support for his/her lessons. Participant 1 highlighted the importance of taking into consideration the psychological aspects, the cognitive abilities, and the different learning ways of deaf learners by saying that:

In my opinion, a teacher before starting his lesson to deaf learners, he should keep in mind that these learners are different from ordinary persons. So, he should keep smiling during the lesson in order not let them feel frustrated and stressed, they will may be feel that they are rejected, other thing that a teacher should take into consideration is that deaf learners have a limited knowledge and distinct way to learn to write.

As far as participant's 3 view is concerned, she said that:

Teaching English or any other foreign languageto deaf learners is very challenging work, because deaf learners are slow, they need repetition of things in order to learn something. Consequently, this may take a lot of time for the teacher to reach his goals. The teacher should follow an easy method of teaching, he should go straight the point and explain things with examples from our daily life. Deaf mutes don't know all whatis going on in this world, that's why some subjects can be unfamiliar to them and they only know what they see around them and they cannot imagine things they have never seen. That's why lesson plan should be based on these points.

Is there anything you would like to add?

The last interview question asked the teachers to add any other comments or suggestions they consider important to the topic under investigation. Two of the interview

participants claimed that deaf learners need special syllabus which contains themes that will prepare them for the external world. For example, participant 4 pointed out:

Once deaf learners finish their secondary school, they certainly access to university where they will have contact with regular persons, so it is very important to inform them about that world.

Participant 1 recommended that deaf learners should not be ignored in the society. According to her, we should give deaf learners the opportunity to be part of our environment and learn sign language in order to communicate with them. She also claimed that the Ministry of Education should enrol them in mainstream classes and that every teacher should learn sign language. She declared that in the following statement:

Yes, what I would like to say is that the deaf mute world is completely a different world. Teaching deaf students is a completely a different thing. The teacher should be patient, knows all the strength and weaknesses of his students, he must know even their life story because the way he behaves with them can influence their learning. Deaf learners should be given more importance and this is not what actually happens. They have a good mental health, they just can't speak and hear but this doesn't make them less than ordinary people because they also have their way of communication and can communicate and understand each other. I hope one day deaf mutes can be part of our society, for example they should be included by the ministry of education in mainstream classes.

Participant 3 suggested that teachers should pay more attention to their deaf learners' needs in the classroom, boost their confidence, and help them progress in their learning process in this statement:

Paying attention to their needs in the classroom and providing them with confidence they need to progress in learning. Teachers must also work together to make a convention on sign language to use in class and must agree on the meaning of the codes with their students because the language of communication plays a vital role in guaranteeing the development of learners' competences in English.

Conclusion

This chapter presented the results obtained from the interview conducted with four teachers who teach English to deaf learners. The interview questions were analysed qualitatively using Content Analysis. The results showed that the teachers use distinct techniques and materials to teach writing to deaf students. The findings also indicated that the interviewed teachers face many difficulties when they teach deaf learners to write. In order to overcome these challenges, the teachers use different strategies. Besides teaching challenges, the teachers mentioned that their deaf learners have various problems when they learn to write. The next chapter is devoted to the interpretation and discussion of the results reported in this chapter.

Chapter Four
Discussion of the
Findings

Introduction

The present chapter is devoted to the discussion of the findings presented in the previous chapter in relation to the research questions and the theoretical framework. It aims at discussing and interpreting the main results derived from an asynchronous online interview conducted with four teachers who teach English to deaf students in Tizi-Ouzou and Béjaia. The interview was designed in order to achieve the objectives of the study and answer the research questions raised in the general introduction, which are as follow:

1. What are the techniques used by EFL teachers to teach writing to deaf learners?
2. What are the challenges faced by EFL teachers when teaching writing to deaf learners?
3. How do they cope with the challenges?
4. What are the difficulties faced by deaf learners when learning to write in English?

This chapter contains four main parts. The first three portions aims at providing answers to the above-mentioned questions, and confirm or refute the formulated research hypotheses. The fourth and last section offers suggestions and recommendations.

IV. 1. Discussion of the Results Addressing the First Research Question

In order to answer the first research question, qualitative analysis was adopted. This question was answered relying on the data obtained from the second section of the interview that dealt with the techniques and materials used by EFL teachers to teach writing to deaf students.

The findings obtained from the seventh interview question revealed that teachers tend to use sign language along with gestures to teach and communicate with deaf learners. Sign language is a mode of communication through bodily movements used primarily by deaf people. The later includes communication through body posture, facial expressions and eye contact. Deaf students cannot hear, they tend to observe the visual clues around them in order

to learn a foreign language. Indeed, Domagaa-Zyk and Kontra (2016: 156-157) share the same view in this assertion:

Even those who are hard of hearing or deaf with some residual hearing must rely heavily on vision to make sense of their environment and the communication that takes place within. Hence, in order to acquire language, they must see it on the lips or hands (or both) of their communication partners. In addition to all this, a very important role is played by facial expressions, body language and gestures.

Deaf students hear with their eyes and speak with their hands. Therefore, it is important to use signs and gestures to teach them. This visual gestural non-verbal communication helps teachers to communicate with their deaf students without speaking and it allows deaf students to grasp the teaching material.

The results of the eighth question showed that the interviewed teachers use different techniques to teach writing to deaf learners. According to them, the use of the different types of visual aids is the best way for the deaf learners to acquire writing since their disability does not allow them to acquire a foreign language in a regular way. Therefore, visual aids can assist teachers in clarifying the message and help deaf learners to retain the teaching material. Accordingly, Easternbrooks and Beal-Alvarez (2013:25) state that ‘A third factor that causes positive learning outcomes in DHH [deaf or hard of hearing] students is that of making information visually available, including visualization, visual organization, or other visual enhancement.’ This means that deaf learners are considered as visual learners. Thus, the use of visual elements during the lessons is necessary for teachers who work with deaf students whose vision is their principal way of getting information and knowledge. Since deaf students have a visual learning ways, using multiple visual modes to communicate meaning can be a useful instructional technique. The interviewed teachers acknowledged that they explain information to their deaf students in a visual format using illustrations such as pictures, images and videos in conjunction with sign language and gestures. This means that the teachers use visual techniques to teach writing to deaf students. According to Birinci(2014:

69), 'Visual techniques refer to the techniques in which the teacher uses a number of visual materials such as pictures, photographs, drawings, flashcards...films, mime, gestures and facial expressions.'

As far as the results of the ninth question are concerned, it was found that the teachers use distinct materials and equipment to teach writing to deaf learners along with visual aids such as the use of the white board, computers, data show and projectors. In fact, computers, data show, and projectors are considered as technological materials that assist the teacher in his/her teaching process to demonstrate for his/her deaf learners any video or image while explaining the lesson. Although the white board is a valuable tool in the teaching and learning process, digital technological materials have the potential to motivate and engage students compared with the usual traditional teaching materials. The use of technological educational devices like computers is essential to improve the learning situation of deaf students. Evans (1998:78) confirms this idea by stating that:

Although the use of concrete materials such as objects is not unique to the education of deaf learners, the use of technology, and particularly computers had some features unique to the Manitoba School for the Deaf and to its use with deaf students in general.

Regarding the results of the tenth interview question revealed a divergence in teachers' views. To be more specific, two teachers asserted that the best visual materials that can help deaf learners to acquire writing are pictures and images. However, the two others teachers claimed that there is not only one visual aid that can help the deaf learners to acquire writing, but the integration of different visual aids into the lesson will give better results. In fact, basing the lesson only on pictures and images is not sufficient for the education of deaf learners. Instead, the combination of various visual modes such as pictures, images, videos, films and photographs, as well as the use of gestures and sign language will help more the deaf learners to enhance their process of learning writing. Since their hearing issue is

considered as a barrier and the information they absorb is limited. Thus, the implementation of many visual aids and materials can ensure deaf students' understanding and retention of information.

Concerning The findings of the eleventh question, it demonstrated that the four teachers adopt different methods to create a positive classroom environment. Creating a favourable classroom atmosphere where deaf students feel comfortable to participate is of paramount importance. The participants of the present study stressed the importance of creating a positive classroom environment to teach writing to deaf students. According to them, this lively and relaxing learning climate can be created through interaction, communication, comfort, and the use of visual materials. Group work and humorous activities can increase the interaction and communication in the classroom and provide a comforting environment for students to write. Indeed, allowing students to write collaboratively with their peers can encourage interaction and communication. In addition, integrating humour can boost students' motivation and confidence to write. Furthermore, the incorporation of visuals can improve the learning environment in the classroom and amplify students' interest. However, the study conducted by Siima (2011) showed different results concerning the classroom environment. Teachers paid more attention to the physical state of the classroom that allowed them to move, and used traditional seating arrangement where students sat in rows facing the teacher. This seating pattern is not suitable for communication and interaction between deaf students during the writing activities. Siima (2011: 75) specifies that 'teachers were not conscious enough of the need to plan for the learning environment to promote or enhance the learning of reading and writing.'

The analysis of the twelfth question showed that teachers adopt different ways in order to assess the writing performance of their deaf learners. The first teacher designs a small test every session and asks the learners to respond on the board one by one. The purpose of this

assessment is to determine what the students have learned on a particular day. The second teacher assesses her students every trimester with simple activities such as word matching and reordering sentences. As for the third teacher, she claimed that she uses a written assessment where she asks the deaf learners to write about a specific topic. As far as the last teacher is concerned, she adopts the portfolio assessment. The findings showed that the majority of the teachers assess their deaf students with the purpose to measure their proficiency in writing. However, the problem with such an assessment method is that it does not evaluate students' academic growth over the course of time. In order to assess the written literacy of deaf students, there is a need to monitor their progress on a regular basis. Portfolio assessment, for instance, can be used to evaluate students' progress in writing. The teacher can collect students' written compositions and drafts, and capture their progression and growth over an extended period of time.

To sum up, the results reached from the first section of the interview demonstrated that teachers use various modes, techniques and materials to teach writing to deaf students. To be specific, the findings revealed that teachers use images, pictures and videos along with technological devices such as computers and projectors. The communication modes included sign language and gestures. Similarly, Siima (2011) found that teachers use various methods to teach reading and writing to deaf students. This involved the use of sign language, finger spelling, demonstration, gestures, and illustrations. The results of the present study are in accordance with the theoretical framework of the study. Indeed, the multimodal framework makes it possible to teach and deliver the instructional material using diverse modes such as writing, gestures, pictures, and videos. Therefore, the results confirm the first research hypothesis that 'EFL teachers use various materials to teach writing to deaf students such as sign language and illustrations.'

IV. 2. Discussion of the Results Addressing the Second and Third Research Questions

In order to answer the second and third research questions, the findings obtained in the third section of the interview were discussed and interpreted.

To begin with, the findings of the fourteenth question showed that the interviewed teachers agreed about the fact that they face difficulties during the process of teaching writing to deaf learners. The first challenge they mentioned was the repetition of the teaching material. They have to repeat a given information and clarify material many times when their deaf students do not understand them. For instance, when the teacher asks the deaf learners to write down a word, he/she probably needs to repeat the word and instructions several times for the deaf learners in order to understand what the teacher is asking them to do. This may be due to their slowness to process things. Since deaf students are slow to understand the teaching material compared to regular learners, teachers have to repeat the same things many times. In fact, deaf learners are very slow to understand or acquire something new because they lack the auditory sense, which plays an important role in learning and understanding new concepts. Therefore, it is necessary for teachers of deaf learners to repeat aspects in teaching writing that are ambiguous to these learners and keep trying until they assimilate the information. Repetition in the teaching and learning process is important since it gives an opportunity to deaf learners to master the new words and remember them. However, repetition of the delivered material is time consuming and very exhausting especially when the learners have a limited range of knowledge. In fact, several research studies in the same domain showed that teachers face this difficulty. For instance, the work of Adi, et al. (2017) demonstrated that teachers face challenges when teaching hearing-impaired students and the need to repeat information is one of them. Indeed, *Adi et al. (2017: 129)* indicate that ‘... deaf students took more time compared to unimpaired students to understand the material.’

Similarly, one of Siima's (2011: 53) participants claimed that 60% of the students in class are slow learners; consequently, she had to explain and repeat teaching concepts several times. She said that 'You have to repeat, you have to repeat, you have to repeat so that the slow learners can also pick something.' (Ibid). In this case, teachers have to be patient with their students.

The second difficulty that we deduced from the findings was the distinct level of understanding of deaf learners to assimilate the teachers' instruction. This means that when the teacher asks the deaf learners to write about something. Some of them understand what the teacher is asking for only by interpreting the gestures (sign language), while others need two or more techniques to grasp the meaning of words and concepts. Learners are different and have different ways of learning. Consequently, the teacher has to adapt his/her teaching method in accordance with his/her learners and understands the needs of each deaf individual. It is very hard for the teachers to explain the same thing to each one using different methods and materials, but it still remains necessary to fit the deaf learners' needs and help them to build their knowledge as their hearing peers. Bedoin (2011:173) recommends teachers to 'adapt their teaching strategies to help their students to overcome the difficulties they encounter because of their special needs.' This means that teachers should use different teaching styles that are suitable to their deaf learners' needs. Accordingly, teachers of deaf learners should mingle all the accessible materials and sign language along with finger and lip movements in order to show them what to write.

The third and last difficulty that we deduced from the participants' responses was the deaf learners' unfamiliarity with words such as the abstract notions that do not exist in their environment. In fact, this point was considered by the participants as a difficulty because sometimes they are unable to find a way to explain these words to deaf learners. Even though teachers refer to these words using sign language or visual demonstrations, deaf learners still

remain incapable to guess the meaning. Some words are hard to explain using signs. Explaining complex and abstract concepts to deaf students is more difficult than explaining concepts referring to concrete objects. Thus, teachers have to find ways to explain these abstract notions and concepts. In her study, Siima (2011: 49) asked one of the teachers how she would teach abstract terms like *America*, and the teacher responded ‘You draw and show them; use flash cards.’ According to this teacher, explanation, demonstration, and observation are essential methods. However, teaching abstract concepts such as feelings and thoughts to deaf students using such methods is not sufficient. Indeed, Birinci (2014: 70) states that:

They [deaf learners] should learn concrete vocabulary items easily with the help of visual aids, but abstract items are the most difficult things for teaching to deaf learners because for abstract items visual representation is not always possible. For such items, using sign language translation and drama techniques can be useful.

Even though the participants have received a special training to teach English to deaf learners, they face many challenges and consider the teaching of English to deaf students as a hard and challenging profession. In fact, several previous studies confirmed this point. From their results, Cherif and Mezada (2018:59) found that teaching English to deaf students is a demanding task. Likewise, El-Zraigat and Smadi (2012:150) also established that ‘educating students who are deaf and hard of hearing is challenging.’ Thus, teachers should be patient and understanding with deaf students in order to enhance their English learning in general and their writing performance in particular. According to Adiet *al.* (2017:133): ‘it is expected that English teachers remain patient in teaching English to deaf students.’

However, it is apparent from the findings that the participants cope with the difficulties that they encounter during the process of teaching writing to deaf learners using different strategies. The first strategy mentioned by the respondents was providing deaf learners with repeated simple activities and supporting them with visual materials. Repeated activities give an opportunity for deaf learners to grasp the material presented by the teacher. Besides, presenting repeated information in a visual way is more likely to help deaf students remember

them. In addition, the participants admitted that they make efforts to explain the meaning of the words that deaf learners do not know by finding another term closer to meaning of that word, because for them the importance is not only to teach them to write but also extend their knowledge. According to Mpofo and Chimhenga (2013:74), ‘When a student does not understand what is being said, the teacher can rephrase with additional words relevant to what he or she wants to say.’ Hence, the findings revealed that the participants acknowledged that interviewing the deaf learners’ parents helped them to cope with the challenges. This strategy is very useful in the process of teaching. This clearly shows that teachers make efforts to contribute something new in deaf education. The involvement of parents in the special education of their children has been considered in previous research. For instance, the work conducted by Taller-Azulay and Rusu (2015) discussed the importance of integrating parents in their hearing impaired children’s learning process. In the same way, Siima (2011:48) discovered that teachers had many ways of teaching deaf learners such as the engagement of parents.

In sum, the outcomes of the second section of the interview entitled “difficulties in teaching and learning writing to deaf learners” confirm the second research hypothesis that “EFL teachers face many challenges when teaching writing to deaf learners” as well the third one “EFL teachers adopt different strategies to cope with the challenges they encounter when teaching writing to deaf learners”.

IV. 3. Discussion of the Results Addressing the Fourth Research Question

In order to answer the fourth research question, the interviewed teachers were asked whether deaf students face difficulties when learning to write and specify these challenges. All the participants responded positively to this question. Despite the fact that special schools are established to cater for deaf learners’ needs, they still encounter difficulties in their learning process. The first difficulty mentioned by the teachers was deaf students’ lack of

motivation, interest, and concentration. Deaf students do not pay attention, seem distracted during the lesson, and are less motivated to participate in writing activities. Motivation plays a key role in the success of the learning process. Thus, if deaf learners are not motivated, they will not be able to learn to write because acquiring the written form of any language requires learners' concentration, interest and motivation. Students' lack of interest, concentration and motivation may be due their hearing loss. In their research, Cherif and Mezada (2018:59) found that 'They [deaf learners] are not motivated because of their disability and difficulties to acquire this spoken foreign language.' Keeping deaf students interested, motivated and engaged in the writing process should be one of the primary goals of the teacher. He/she should not only teach but also motivate and encourage his/her deaf students (Cherif&Mezada, 2018: 76). The teacher should establish an appropriate environment in order to get deaf learners to concentrate on the writing lessons such as encourage peer/group work. Indeed, we cannot ignore the fact that deaf learners' lack of motivation and the activities of the teacher are interrelated. That is, even though the participants cited lack of motivation as a challenge for deaf students, it is still due to the climate that the teacher establishes during his/her class. Thus, teachers should take a great interest in their deaf learners' learning process and help them cope with this difficulty.

Another difficulty that deaf learners encounter during their process of learning to write is that they cannot write a meaningful sentence. This is mainly due to their limited range of vocabulary and grammar. This lack of lexical and grammatical knowledge prevents deaf students from expressing their ideas in the form of written texts. According to Adi *et al.* (2017: 132), deaf students have limited vocabulary compared to students with no disabilities because their hearing impairment prevents them from accessing auditory information. Deaf learners' lack of vocabulary is justified by their hearing loss, and this is clearly apparent in their written productions, especially when they are learning to write in a foreign language.

Patrick and Awori (2017:3) state that learners who are deaf ‘produce shorter and less structurally variable sentences than their hearing peers.’ Similarly, Adiet *al.* (2017: 122) indicate that the sentence structure of deaf students is not the same as their hearing peers, and it can be difficult for teachers to teach the structure of English sentences.

The third difficulty was that deaf learners cannot write without a visual demonstration of words. Since deaf students learn better with the help of their eyes, visual demonstration allows them to process and understand concepts better. Consistent with Birinci (2014: 69) ‘visual demonstrations help students associate presented material in a meaningful way and help to fix the vocabulary in students’ minds.’

The last difficulty mentioned by the interviewed teachers was the use of overturned letters. Deaf students tend to write disorderly the letters of words. In their study, Gärdenfors *et al.* (2019) found that one of the challenges deaf students face when learning to write was the use of reverted letters. They pointed out that instead of writing “sport”, deaf students write “sorpt” (Ibid: 3). This is mainly due to the lip reading, since the vowels seem to be different for the deaf learners comparing them to consonants (Sutcliffe, *et al.*, 1999; cited in Ibid:3).

In short, the findings confirm the fourth hypothesis that “Deaf learners encounter various difficulties when learning to write in English.”

IV. 4. Implications and Recommendations

Question eighteen is asked for the teachers to provide some suggestions to improve the writing performance of deaf students. The participants suggested that deaf students should be given the opportunity to write about topics that interest them. Since deaf learners are unfamiliar with things they have not seen before, they cannot actually write about them. Therefore, the teacher has to use themes like writing about their daily activities or even about their likes and dislikes. Allowing deaf students to write about subjects that inspire them and suit their proficiency level is more likely to boost their motivation towards writing. The more

deaf students are interested about a subject, the more they are excited to write about it. The other suggestion was about the use of authentic materials. Authentic materials are print, video and audio materials and include video clips, newspaper articles, magazines, advertisements, speech, poems, songs, cartoons etc. The use of such authentic materials can stimulate deaf students' interest and motivate them to write. According to the participants, the use of authentic materials can be effective in teaching writing to deaf students. Masood (2005:68) shares the same viewpoint and indicates that learners become able to write after having to check the authentic materials that were in the form of cartoons, advertisements, weather reports, horoscopes, etc.

Concerning the results of question nineteen, it showed that each teacher gave a suggestion to improve the teaching of English to deaf learners. Among the propositions, we find lesson plan which is considered as a guide for the teacher in order to achieve his/her objectives at the end of every session. According to the participants, their lesson plan should be based on the inclusion of visual materials. Teachers of deaf students can organise their lesson and activities with visual materials. Since deaf students rely more on their visual memory to learn. Thus, visual materials can be effective learning aids.

Moreover, it is important to take into consideration the psychological aspect, the cognitive abilities, and the different learning styles of the deaf learners while teaching. Each learner is different from the other in terms of cognitive abilities. For example, a learner has the capacity to memorise things easily, whereas another learner may encounter some difficulties in learning. In addition, learning styles differentiate learners and put the teacher in a situation where he/she should effectively transmit his/her message to be understood by all the learners. For example, visual learners rely on their vision and have greater chances to memorise information that is presented visually. Besides, teachers should take into consideration the psychological aspect of their deaf students. The most influential

psychological variables in the language learning process are anxiety, motivation, and self-confidence. In order to improve the English learning of deaf students, teachers should pay attention to their psychological needs and search for way to decrease anxiety and enhance motivation and self-confidence. It is also important for the teacher to adopt easy methods to teach English to deaf learners such as giving examples from their real life and environment. As the results of the study indicated, teaching deaf students is a very hard job. For better learning outcomes, teachers should be patient with their deaf students and meet their special needs.

It is important to know that the deaf mute world is different whether in terms of communication or education. Deaf people use sign language and gestures to communicate between themselves and other methods such as writing to communicate with regular people. The learning process of deaf learners is a bit different from the one of regular learners. Thus, it is crucial to design a special syllabus that will suit the deaf learners' needs and prepare them for the external world.

In spite of the fact that deaf learners are different from the regular students, this cannot prevent their integration in mainstream schools. The interviewed teachers stressed the need of integrating deaf students in mainstream classes where they can learn with students without disabilities. This can give deaf students more opportunities to learn, interact, and communicate with their hearing peers. In such an environment, deaf students can learn about the real world, socialise with their hearing peers, and develop their social skills. Mainstreaming can also give the learners the chance to build an atmosphere full of acceptance, collaboration, and coexistence with others. Consequently, the hearing impaired learners will not feel neglected or different from other students

Conclusion

The present chapter discussed the data collected from an asynchronous online interview conducted with four EFL teachers of deaf learners. The discussion of the findings provided answers to the main research questions. In addition, the hypotheses stated in the general introduction were confirmed. The first point was devoted to the discussion of the first part of the interview, namely the techniques and materials used by EFL teachers to teach writing to deaf learners. The second and third points discussed the results reached from the second part of the interview (difficulties in teaching and learning writing). Finally, the fourth point was dedicated to the teachers' suggestions and recommendations about enhancing the writing performance and the teaching of English to deaf learners

General Conclusion

General Conclusion

This dissertation explored the techniques that EFL teachers use to teach writing to deaf learners. More specifically, the ongoing study sought to reach four main objectives. The first objective intended to identify the techniques and materials that EFL teachers use to teach writing to deaf learners. The second objective consisted in determining the main challenges that the teachers of the deaf students encounter during the process of teaching writing. The third objective sought to uncover the efforts of teachers of deaf learners to overcome these challenges. The fourth objective aimed at exploring the challenges that deaf learners encounter when they learn to write. Furthermore, the study gathered teachers' suggestions to enhance the writing performance of deaf learners and improve the way English is taught to this category of learners.

In order to attain the research objectives, provide answers to the research questions stated in the general introduction, and confirm or refute the proposed hypotheses, qualitative data collection and data analysis procedures were adopted. To be more precise, data were collected using an asynchronous online interview with four EFL teachers who work with deaf students in one mainstream high school and two special middle schools situated in Tizi-Ouzou and Béjaia. Fourteen open-ended questions and six background questions were addressed to the participants via the Messenger platform. The obtained data were analysed using Qualitative Content Analysis.

The results displayed in chapter three and the discussion presented in chapter four provided answers to the research questions. First, from the results we deduced that the teachers of deaf learners use different techniques and adopt distinct materials to teach writing to deaf learners. In this content, the participants mentioned that they use illustrations, sign language and gestures. The findings indicated that the interviewed teachers use visual techniques to teach writing to deaf students. In addition, it was found that teachers support

their writing lessons using different materials and equipment such as the white board, data show, projectors and computers to display images, pictures and videos. Since deaf students require their eyesight to learn, presenting lecture information in a visual format can be beneficial. The results showed that the teachers use more than one visual mode along with traditional and technological devices to teach writing to deaf students. The combination of writing or text with visual and gestural modes to represent knowledge is the essence of the Multimodal learning theory, which fits students with learning challenges. Second, the findings revealed that EFL teachers encounter many challenges when they teach writing to deaf learners. Such hurdles include repetition of information, deaf learners' unfamiliarity with words, and deaf learners' different learning styles and ways of understanding. However, we discovered that teachers of deaf learners make efforts to cope with these challenges using distinct ways like providing deaf learners with repeated simple activities, adopting different explanations, and interviewing their parents to exchange about deaf learners' needs. Third, we have inferred that deaf learners also encounter various challenges when learning to write including lack of motivation and concentration, passivity during the writing lesson, lowness to process things, and the inability to form complete sentences and write words without their visual demonstration. Finally, we concluded with the teachers' suggestions to enhance the writing performance and improve the way English is taught to deaf learners.

It is worth mentioning that the present study has faced some limitations during the process of data collection. The first limitation has to do with the data collection tool. Indeed, the study relied only on an interview to collect data. Originally, the study was set to collect qualitative data using two research instruments, namely interview and non-participant classroom observation. We have obtained permission to conduct our study at the special middle school "Ecole Pour Enfants Handicapés Visuels" situated in Boukhalfa, Tizi-Ouzou. However, the sanitary conditions that the world witnesses today about the spread of the

Corona virus (COVID-19) did not allow us to conduct a classroom observation. Given the challenges posed by the COVID-19 pandemic that resulted in the closure of all educational institutions since March 2020, it became impossible to conduct classroom observation. Thus, this can affect the reliability of the data. Since the study is about deaf students and the way teachers teach writing to this category of learners, classroom observation is an important data collection instrument that would have allowed us to witness what happens in the classroom. The second limitation concerns the number of the participants. The interview was conducted with only four EFL teachers of deaf students: three in Tizi-Ouzou and one in Béjaia. Unfortunately, the other participants we have contacted in other provinces such as Bouira and Algiers refused to cooperate and take part in our study. In addition, we have contacted other special centres; nevertheless, English is not a compulsory subject in specialised schools like in Boumerdes. The small number of participants can affect the relevance and generalizability of the research results. The third and final limitation is that the interview was conducted online via the Messenger platform instead of face-to-face. The application of lockdown policies and social distancing measures during COVID-19 epidemic made face-to-face data collection difficult. The answers to the interview questions were provided in a written form and this prevented us from observing the interviewees' reactions while answering the questions. Therefore, this may also affect the trustworthiness of the research data. In spite of the limitations that went beyond our will, we did our best to conduct the study and collect the required data that we hope will benefit teachers and students.

In light of these limitations, some suggestions for further research are required. First, it is recommended that additional research on the topic should replicate the study and use other instruments to collect data. The current study is just a starting point. To determine the way writing is taught to deaf students and obtain more reliable results, upcoming researchers should conduct classroom observations. Classroom observation is a powerful tool that helps

researchers to obtain more detailed and precise evidence. Indeed, although the study participants admitted to be employing various techniques to teach writing to deaf students, evidence from a classroom observation may show otherwise. Second, to ensure the reliability and generalizability of the research findings, the study should be repeated with a larger sample and include teachers from the different Algerian provinces. Third, the study focused on how writing is taught to teach deaf learners. Future studies can explore the techniques used by teachers to teach students with other disabilities such as visually impaired learners.

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Appendices

Teachers' Interview

Dear participants,

This interview is part of a research work which aims at investigating the techniques that EFL teachers use to teach writing to deaf students. We would really appreciate it if you could take some of your time to answer the questions. Your answers will be anonymous and confidential. Thank you in advance for your time and participation.

I. Background Information

1. What is your gender?
2. How old are you?
3. Where did you complete your education?
4. What type of degree do you hold?
5. Do you work in a mainstream school or a special school? What is the name of the school?
6. How long have you been teaching English to deaf learners?

II. Techniques and Materials Used to Teach Writing to Deaf Students

7. What communication methods do you adopt to deliver the message to deaf learners?
8. What methods/techniques do you use to teach writing to deaf learners?
9. What materials and equipment do you use when teaching writing to deaf learners?
10. What are the best visual materials that can help deaf learners to acquire writing?
11. How do you establish an appropriate environment to teach writing to deaf students?
12. How do you assess the writing performance of deaf students?

III. Difficulties in Teaching and Learning Writing

13. Have you received any specific training on teaching deaf students?
14. Do you think that teaching writing to deaf students is a hard job?
15. What difficulties do you encounter when teaching writing to deaf learners?
16. How do you overcome these difficulties?

17. Do deaf students face difficulties when learning to write? If yes, what are these challenges?

IV. Teachers' Suggestions

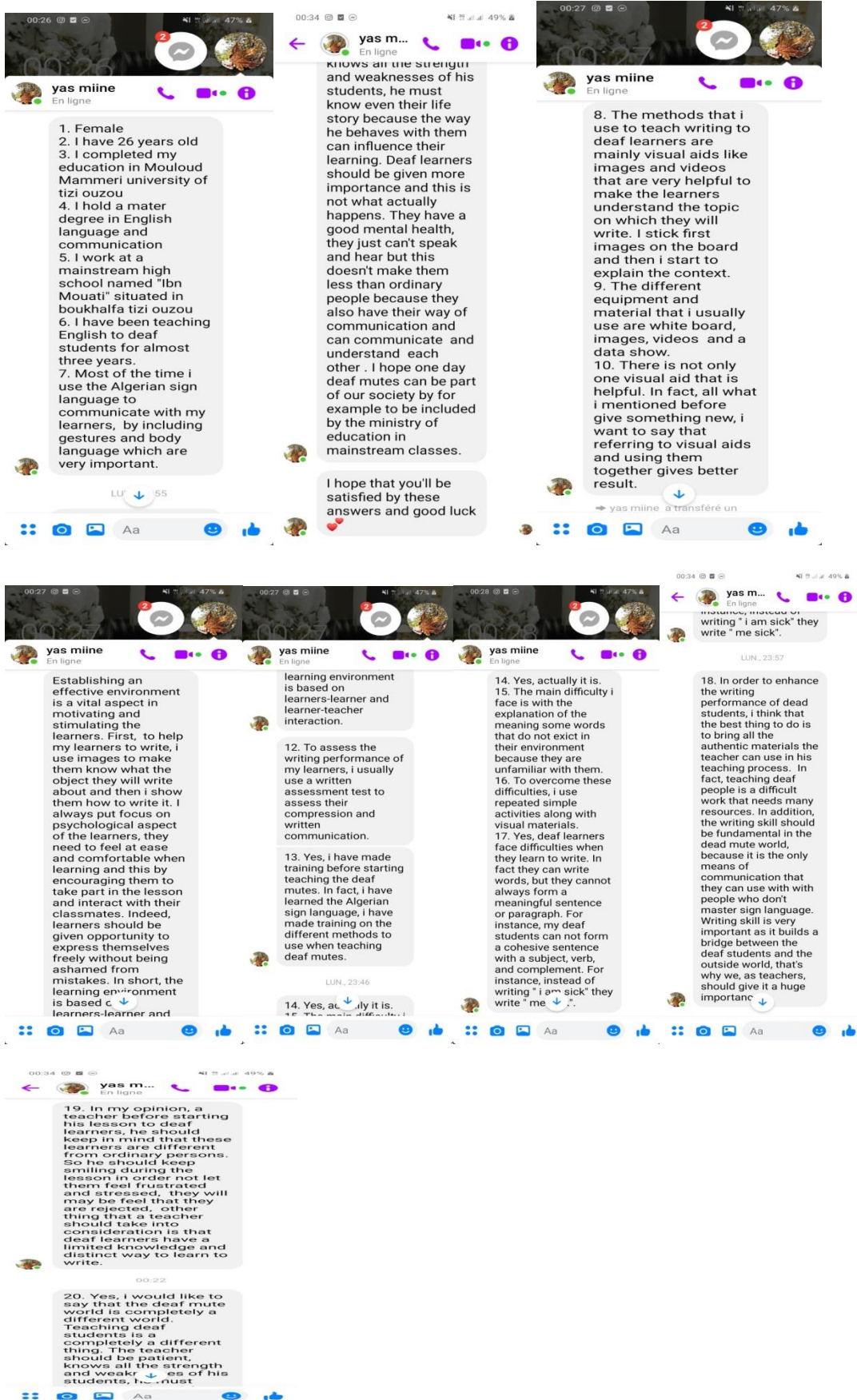
18. If you could change anything to enhance the writing performance of deaf students, what would it be?

19. What are your suggestions on improving the teaching of English to deaf students?

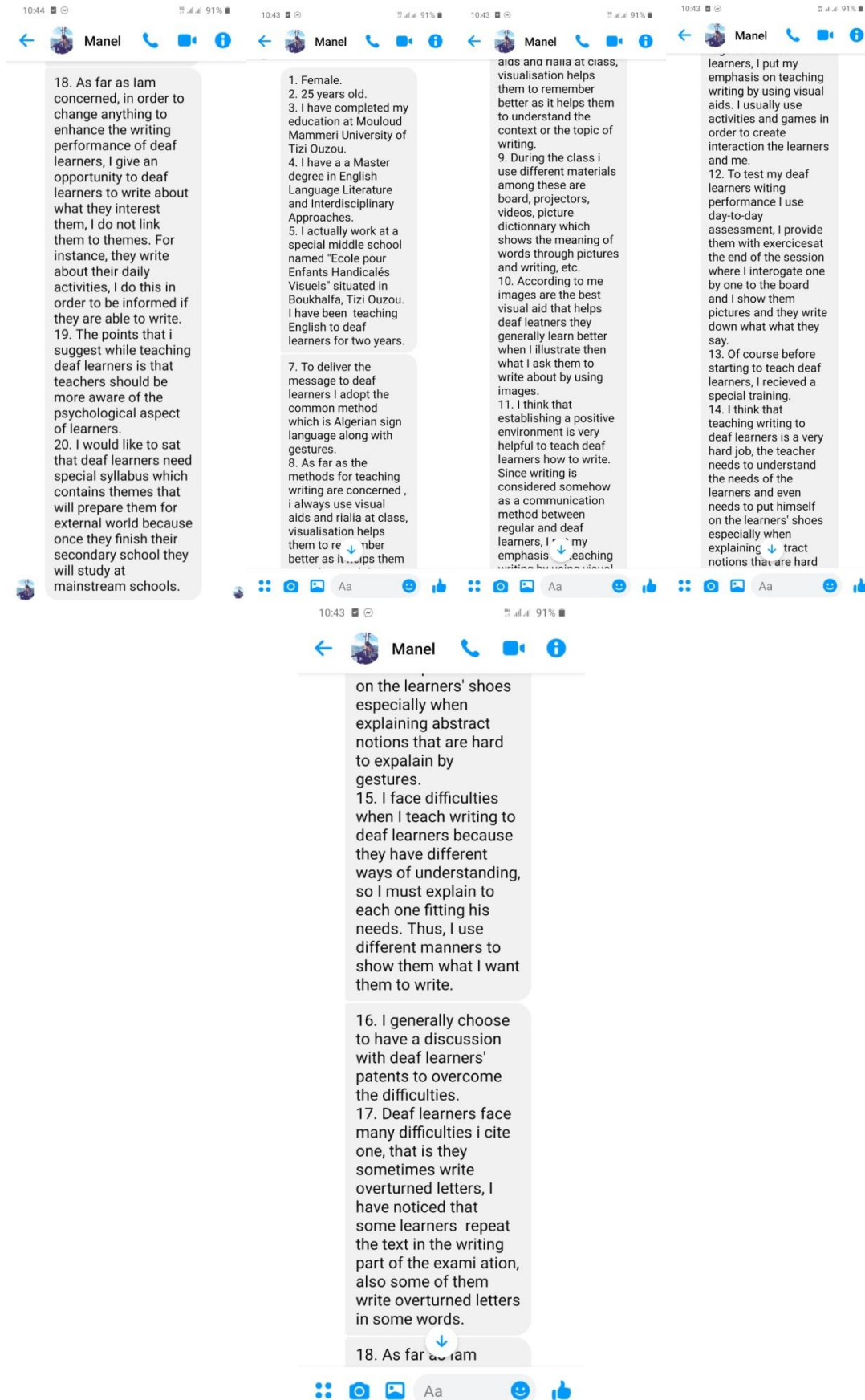
20. Is there anything you would like to add?

Scenshots of Messenger Conversations with Deaf Learners' English Teachers

Participant 1



Participant 2



Participant 3

from our daily life. Deaf mutes don't know all what is going on in this world, that's why some subjects can be unfamiliar to them and they only know what they see around them and they cannot imagine things they have never seen. That's why lesson plan should be based on these points.

20- paying attention to their needs in the classroom and providing them with confidence they need to process in learning. Teachers must also work together to make convention on sign language to use in class and must agree on the meaning of the coded with their students because the language of communication plays a vital role in guaranteeing the development of learners' competences in English.

1- female
2- i have 29 years old
3- i completed my education at university of Mouloud Mammeri
4- i have a mester degree in Didactic of foreign languages
5- i am currently working at a special middle school named *Ecole pour Enfants Handicapés Visuels* in boukhalfa, tizi ouzou

6- i have been teaching English to the deaf for 6 years

7- in order to make sure thta the aim of the course is accomplished, i always resort to sign language which is considered as a basic code/ method of communication to teach deaf learners, this code includes gestures, eye contact, facial expressions, and sometimes this require some acting if necessary when explaining the meaning of words

8- in order to teach writing, i usually use visual aids; deaf mutes have a strong photographic memory, that's why using visuals is very helpful in the teaching process. To make them write about something, i usually ask a question (with using sign language or by writing it on the board) and then make them write on it

9- concerning the materials and equipment that i use when teaching writing, i generally use pictures, images and videos. For the equipment i use the board, my personal computer, and datashow

10- i think that all the visual materials that i have mentioned contribute to the success of the lesson

11- to establish an appropriate environment to teach the deaf, one should take into consideration the physical environment of the classroom, lesson plan and also the activities that the teacher select may affect the learners performance

12- in order to assess the writing performance of my deaf learners, i use a portfolio assessment to assess their progress in writing

13- yes, i have received special training before starting to teach deaf learners

14- yes, it is

15- the teacher needs to understand the needs of the learners to put himself on the learners' shoes, especially when explaining abstract notions that are hard to explain by gestures. So, the teacher should be patient, creative at the same time comprehensive

16- to overcome the difficulties, i often speak with each one parents, we try to exchange information about their needs and we try to solve the problems together

17- yes, deaf students face difficulties when they learn to write. They sometimes do not concentrate on what i write, they even do not take any interest to the lesson

18- to enhance the writing performance of the deaf, i suggest the use of authentic materials such as annual book, magazines, newspapers, and others

19- teaching English or any other foreign language to deaf learners is very challenging work, because deaf learners are slow, this may need repetition of things in order to learn something. Consequently, this may take a lot of time for the teacher to reach his goals. The teacher should follow an easy method of teaching, he should go straight the point and explain things with examples from our daily life. Deaf mutes don't know all what is going on in this world, that's why some subjects

Participant 4

