THE IMPACT OF FORMATIVE ASSESSMENT ON STUDENTS’ SPELLING ENHANCEMENT

The Case of Second Year LMD Students of English at Larbi Ben M’hidi University-Oum El Bouaghi

A Dissertation Submitted to the Faculty of Letters and Languages, Department of English, in Partial Fulfilment of the Requirements for the Degree of Master in Language Sciences and Teaching English as a Foreign Language

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2013-2014
DEDICATION

In the name of Allah, the Merciful, the Compassionate

This work is dedicated:

To my parents.

To my sister and brothers, particularly to Marouane.

To all my family and friends.
ACKNOWLEDGEMENTS

I should like to express my sincere gratitude to my supervisor Mrs. ARROUF for her guidance, understanding, and precious advice.

My special thanks go to all my teachers at Larbi Ben M’hidi University, Oum El Bouaghi, for their continuous help and encouragement.

My other special thanks go to Pr. Dylan WILIAM for his help, and providing some books.
ABSTRACT

The current study is concerned with investigating the effectiveness of formative assessment in enhancing the spelling proficiency. This study was conducted using a quasi-experimental design, in which there was a control and an experimental group. The sample of the study was composed of thirty-seven second-year students of English as a foreign language, who are studying at Larbi Ben M’Hidi University of Oum El Bouaghi, for the academic year 2013-2014. Those participants were pre-tested through a paragraph-writing task. Next, they were treated for a period of three weeks, where the experimental group was treated with the integration of formative assessment in the instruction and the control group was treated without the integration of formative assessment in the instruction. Then, they were post-tested through the same task applied in the pre-test. After analysing the results of both tests (pre- and post-test) in terms of error rates, the alternative hypothesis was rejected. That is to say, formative assessment has no significant impact in enhancing students’ spelling. Finally, issues for further investigation are suggested.
LIST OF ABBREVIATIONS

AD: After Death.

E.F.L: English as a Foreign Language.

H₀: The Null Hypothesis.

H₁: The Alternative Hypothesis.

i.e.: That is.

M.ER: The Mean of Error Rates.

p.: Page Number.
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RESUME

الملخص
INTRODUCTION

Writing is always considered as a difficult skill for EFL learners to acquire. This difficulty is mainly because of subskills of this system such as grammar, punctuation, and spelling. Spelling, for example, in the context of English is a serious problem that makes EFL learners suffer while writing because of the lack of correspondence between the phonemes (sound) and the graphemes (visual imagery) of its words. This problem of spelling often takes a relatively long period to be solved. Following this context, formative assessment with its attributes tries to help learners raise their level of achievement in learning, and thus in writing and spelling in particular, in a short time.

Statement of the Problem

The importance of summative assessment may not be denied in language learning, but ‘Just weighing a pig doesn’t fatten it!’ as it is said. This assessment of learning gives an overall picture that summarises the judgement of achievements, of learners, teachers, or schools. This means that the gap in the learning process remains unsolved; more concretely, one or more items unachieved. However, assessment for learning is an ongoing and planned practice that provides support for making decisions.

Writing is a complex skill in that it needs a relatively long period to be acquired. In particular, spelling is one component taking part in this complexity. Algerian students of English as a foreign language, for example, may suffer from committing lots of spelling mistakes, to the extent that they feel bored of the composition. It may take them a long time just checking on dictionary the correctness of the words. The teacher in the case of summative assessment gives marks at the end of the activity with general comments, which makes students less interested in learning from their mistakes and limits their chance to correct them immediately. Whereas, the teacher who applies formative assessment provides immediate
individual ‘descriptive’ feedback, which gives students the chance to learn from their mistakes, or even peers’ mistakes, to correct them with a sense of motivation to show improvement, and to become more autonomous. Interestingly, what makes formative assessment applicable is that it is not for replacing standard tests. However, it helps students to pass those tests, and it is an ongoing planned process to help the teacher doing his teaching, without making any change on the curriculum content.

Aim of the Study

The study aims to investigate whether or not formative assessment is effective in enhancing second year English students’ spelling. It tries to help teachers of English as a foreign language see assessment from different angles, not just assessment of learning but for learning, as well.

Research Question and Hypothesis

This research raises the following question:

Does formative assessment enhance students’ spelling?

For answering this question, it is hypothesized that students who are taught paragraph writing through formative assessment would show significant improvement in spelling than those who are not.

Means of Research

The study follows the quasi-experimental design in which it includes two groups, an experimental and a control group.

For answering the research question, two main instruments were used for the data collection namely: the pre-test and the post-test.
At first, both groups were pre-tested through a paragraph-writing question for the sake of confirming that students in these groups are similar at the level of spelling proficiency. Then, the two groups were post-tested, via the same question of the pre-test, in order to compare their spelling proficiency performance after the treatment period.

Structure of the Dissertation

The study is composed of two Chapters:

The first chapter is divided into two sections. The first section is devoted to formative assessment definitions, origins, the attributes of effective formative assessment, and formative assessment in the EFL classroom. The second section discusses English spelling, its definition, history, importance, and strategies.

The second chapter is concerned with the field work. It includes the design of the experiment, a presentation of the findings and a discussion of the results.
Chapter One: Review of the Literature

Section One: Formative Assessment

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Introduction

Assessment in the last few decades is taking on new dimensions in changing the world of education. Formative assessment, for instance, is one of the concepts that causes noticeable effects on the educational outcomes around the world. Thus, this section gives an overview about a definition of assessment, points of view about defining formative assessment as a process or a tool, the difference between formative and summative assessment, and the origins of formative assessment. Then, it presents the five attributes of formative assessment and the four principles of learning in the EFL classroom.

1.1.1. A Definition of Assessment

Caldwell (2008) defined Assessment as a four-step process. The first step is the identification of what to assess. This is usually done in a form of a question like “Do my students need specific feedback on how to improve their spelling?” The second step is to determine how to collect information and then collecting information or evidence. For example, a paragraph-writing test is conducted to collect the evidence. The third step is analysing the evidence collected. The forth step is to make the right decision on the basis of the third step results. This definition is chosen since it goes hand in hand with what is called formative assessment.

1.1.2. The Nature of Formative Assessment

1.1.2.1. Formative Assessment: Process vs. Tool

Many definitions have been proposed by different scholars for the term formative assessment. Thus, the lack of a clear-cut definition led to a diversity in the views concerning the nature of this kind of assessment, such as considering it as a process or a tool.
Some researchers see formative assessment as a process. Black and William define it as “all those activities undertaken by teachers, and by their students in assessing themselves, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged” (2001, p. 2). That is, it is a set of practices that involves teachers and learners, who exchange feedback, which is going to be used for adapting their practices. Heritage, Kim, Vendlinski, and Herman (2008) clarify that the feedback is provided “while instruction is underway” (p. 1). Popham (2008) adds more clarity saying that “formative assessment is a planned process” (p. 6).

Other researchers see formative assessment as a tool. Kahl (2010), for example, believes that it is “a tool that teachers use to measure student grasp of the specific topics and skills they are currently teaching. It’s a “midstream” tool to identify specific student misconceptions and mistakes while the material is being taught” (p. 1). Wiliam (2011) commenting on the definition given by Kahl saying that “Indeed, it appears that the term formative assessment is now more often used to refer to a particular kind of assessment instrument than a process by which instruction might be improved” (p. 38).

1.1.2.2. Formative vs Summative Assessment

According to Moss and Brookhart (2009), formative assessment, or assessment for learning, can be differentiated from summative assessment (also known as assessment of learning) through a number of characteristics.

First, they differ in the purpose of conducting the assessment. While formative assessment purpose is to improve learning in general and learning outcomes in particular, summative assessment is to measure standards achieved. That is, the former aims at raising the level and the quality of achievement not the measurement of achievements, which is the concern of the latter.
Second, formative assessment takes place during instruction as an integrated part within it, in the form of “minute-to-minute and day-by-day classroom activities” (Wiliam, 2011, p. 160), to reflect the ongoing guidance of the teacher throughout the learning progress from one stage to the upper. Whereas, summative assessment is considered as an independent activity that occurs at the end of the instructional cycle, like the end of the unit or the end of the semester or the year, for giving snapshots about the status of learning.

Third, students and teachers, in formative assessment, are acting as “intentional learners” (Wiliam, 2011, p. 160), i.e. there is a collaboration between them. They know their goal and the learning needs, so they use the feedback based on the information collected from assessment (or the evidence) to fulfil these needs. Conversely, in summative assessment the teacher acts as the auditor, who is the only responsible of making decisions in the classroom, and the learner as the audited, who is restricted with the teacher’s decisions.

Fourth, formative assessment is described by Moss & Brookhart (2009) as being fluid, i.e. it is an ongoing and flexible process that depends on “student need and teacher feedback” (Moss & Brookhart, 2009, p.7). In contrast, they described summative assessment as being “rigid”. That is to say, it is a static measure of the achievement status that is not accompanied with the intention to react to the results.

1.1.3. The Origins of Formative Assessment

Flashing back memory in history reveals the fact that Scriven is considered as the first to use the term ‘formative evaluation’ in contrast to ‘summative evaluation’, in 1967, in relation to curriculum evaluation. He used formative evaluation to describe the ongoing evaluation of the curriculum while it is implemented and there is the possibility to be improved, with regard to the results of the evaluation. Whereas, the evaluation for making the final decision about continuing or terminating the use of the curriculum Scriven called summative evaluation.
In 1968, Bloom, the Taxonomy of Educational Objectives founder, tried to make a shift from the formative ‘evaluation’ into ‘assessment’. Bloom used the term in his Learning for Mastery model which he shortened later to Mastery Learning, in 1971a. In this model, teachers organize concepts and skills into learning units of one or two weeks of instruction for each. At the end of the unit, a formative assessment is conducted on the basis of the unit’s learning goals. The results are going to help giving students information about their learning, i.e. what they have learned and what they need to put more focus on.

Scriven’s and Bloom’s role in the history of formative assessment is very important. However, many researchers in the field of assessment consider the review of research conducted by Black and Wiliam in 1998, at Kings’ College in London, as being a shift point in the development of what is called ‘formative assessment’. In their publication named ‘Inside the Black Box’ (this title is used to describe the classroom that you cannot understand unless you get inside it), they conducted a meta-analysis of more than 250 research journals and publications in the period between 1988 and 1997. In this meta-analysis sound arguments are elicited to prove the effectiveness of formative assessment.

1.1.4. Effective Formative Assessment

There are many propositions concerning what should be taken into consideration to say that formative assessment is effective. Wiliam (2011), for example, states that formative assessment should exist with the existence of five key strategies, namely: (a) clarifying, sharing, and understanding learning intentions and criteria for success, (b) engineering effective classroom discussions, activities, and learning tasks that elicit evidence of learning, (c) providing feedback that moves learning forward, (d) activating learners as instructional resources for one another, (e) activating learners as owners of their own learning (p. 2).

Chappuis (2009) presented seven strategies, but she categorised them to answer three questions that a student asks while he/she is learning. The first question is “Where am I
going?” For answering this question, she proposes two strategies: (a) provide students with a clear and understandable vision of the learning target, (b) use examples and models of strong and weak work. The second question is “Where am I now?” Teachers can answer this question when they: (c) offer regular descriptive feedback, and (d) teach students to self-assess and set goals. The third question is “How can I close the gap?” Chappuis suggests that teachers should: (e) design lessons to focus on one learning target or aspect of quality at a time, (f) teach students focused revision, and (g) engage students in self-reflection, and let them keep track of and share their learning.

McManus (2008) proposed five attributes for an effective formative assessment, which are:

- Learning Progressions
- Learning Goals and Criteria for Success
- Descriptive Feedback
- Self- and Peer-Assessment
- Collaboration

Those attributes are going to be tackled one by one, but we have to bear in mind that “No one of the following attributes should be regarded as a sine qua non, that is, an attribute without which the assessment would not be formative” (McManus, 2008, p.4).

1.1.4.1. Learning Progressions

Learning Progressions are defined by many researchers where some characteristics are added and others eliminated. According to the Council of Chief State School Officers (CCSSO) “Learning progressions should clearly articulate the sub-goals of the ultimate learning goal” (McManus, 2008, p. 4). In another definition, Popham (2008) states that a “learning progression is a sequenced set of subskills and bodies of enabling knowledge that, it is believed, students must master en route to mastering a more remote curricular aim” (p. 24). Popham (2008) explains that “a body of enabling knowledge is a set of facts or information
the student must memorize or understand” (p. 25). The bodies of enabling knowledge with the subskills construct what Popham calls the “building blocks”, which can be considered as stairs towards “the ultimate learning goal” or the “more remote curricular aim”.

From these two definitions, progression is a student’s incremental movement from being a novice to being an expert in terms of performance (Heritage, 2008). Learning is “a trajectory of development that connects, knowledge, concepts and skills within a domain” (Heritage, 2008, 4). Those connections unveil the gaps and help teachers make decisions about the right actions to move the learning process forward. Figure 1 represents an example of a learning progression model, proposed by Popham (2008).

![Learning Progression Model](image)

Figure 1. A learning progression model (Popham, 2008, p. 26)

In the case of Figure 1, we have five building blocks—two subskills and three bodies of enabling knowledge. However, the form in this graphic is just an illustration and
progression’s designer, who is often the teacher, can adapt it to what he/she believes his
students should achieve. He/she can adapt the size of the building blocks or their order.

According to Heritage (2008), learning progressions should be based on three key
elements to be an active participant in the effective formative assessment, which are eliciting
evidence, providing feedback to students, and involving students.

- Eliciting Evidence

Formative assessment is not a series of events to be done while the learning process is
taking place. Instead, formative assessment role is to inform the instructional action. This
action causes a change, and hence it makes the previous information out of date because the
students’ learning will improve. Therefore, there should be an ongoing evidence that goes
hand-in-hand with the appropriate adjustments to make learning move forward. In other
words, the teacher elicits the evidence that makes him have an insight about the students’
learning status and makes decision about the following step (Heritage, 2008).

- Providing Feedback to Students

If the learning goal is clear to students, then the role of the teacher is to enhance
understanding of the goal. This role can be satisfied via providing students with feedback. The
teacher in his/her feedback pushes students to sharpen their understanding of the goal. For
example, a teacher wants to develop understanding that “objects have properties that can be
explained and measured” (Heritage, 2008, p.6). That is, when students classify objects, they
should explain why they classified such an object in a given category. If an object is not in the
right category, then the teacher would say "there are three objects that belong in this category
and one that does not. Look again, think about your explanations, and see if you can figure
out which one does not belong and why" (Heritage, 2008, p. 6). Thus, students will adjust
their own learning tactics.
• Involving Students

Metacognition (or thinking about thinking) is proved by cognitive theories to have a crucial place in the learning process. In relation to formative assessment, metacognition helps students to monitor and evaluate their learning, like choosing the right strategies for a given task. Students are expected to have the desire to know the long-term goal, but the problem lies on how teachers could help students to evaluate the degree of success in meeting the goal, because of the distance between the current and the desired situation. This problem makes benefit from feedback and monitoring learning harder on students (or even teachers). Therefore, long-term goals should be broken down into short-term objectives. These short-term objectives represent more opportunities for students to adjust their learning as a response to their self-assessment, and peer and teacher’s feedback (Heritage, 2008).

1.1.4.2. Learning Goals and Criteria for Success

Setting a goal for learning necessity is something unquestionable, what matters more is that how this goal should be dealt with. Actually, it is not enough to write (as a teacher) the objective on the board, or paraphrase it in one sentence or two and ask students to repeat it orally. Instead, the goal should be shared in the sense that students have to understand this goal in order to take a part of responsibility in achieving the goal (Moss & Brookhart, 2009). On the way to their target, students need some guidelines to know if they reached their objective. These guidelines are technically known as criteria for success. Moss & Brookhart (2009) assert that teachers often have two common misconceptions about sharing learning goals.

The first misconception is that “informing the students of the learning target by telling them what it is or by writing it on the board is sufficient” (Moss & Brookhart, p. 27). Teachers, by writing the objective on the board, try to make students remember this objective. However, making the objective inside students’ heads does not mean that they understand it.
Thus, when a teacher discusses the lesson objective, he is giving students opportunity to “express the objective in their own words and clarify the concept in their own minds” (Moss & Brookhart, p. 27). In addition, he/she should provide samples of good works to depict for students what a goal really means (Moss & Brookhart, 2009).

The second misconception is that “Sharing a rubric with students will ensure they understand the criteria for success” (Moss & Brookhart, p. 27). That is to say, to share a rubric with students is a positive thing, but this does not necessarily lead to understanding the criteria for success. For example, some criteria are easy to understand when they are concrete as numbers, like “illustrate with three examples”. Whereas others are not easy to understand, such as “voice conveys a sense of the person behind the words” (Moss & Brookhart, p. 27), in the context of writing. In such a case, not all students can distinguish the writing that do (convey a sense of the person behind the words) well from the writing that do less (Moss & Brookhart, 2009). Hence, a rubric will organise the criteria into levels in terms of quality. Furthermore, asking students to paraphrase these levels enables the teacher to test their comprehension of the criteria.

1.1.4.3. Descriptive Feedback

McManus (2008) defines what can be called descriptive feedback saying that “students should be provided with evidence-based feedback that is linked to the intended instructional outcomes and criteria for success” (p. 4). From this definition, first, descriptive feedback is an evidence-based feedback, i.e. teachers’ comments are based on the ongoing assessment that defines precisely the learning gaps. Second, descriptive feedback is associated with the intended instructional outcomes or the learning goals, either short-term or long-term goals. Third, descriptive feedback is associated with the criteria for success; that is, it should be relevant to these criteria, supports these criteria, as it should not contradict even one of these criteria.
Feedback can be counterproductive, as it may, at worse, lower the performance. Wiliam (2011) indicates that the feedback is effective “only if the information fed back to the learner is used by the learner in improving performance” (p. 120). It is true that a feedback like “you have to improve your spelling” informed the student that he/she has to improve his/her spelling, but it does not help him move forward. In other words, “a recipe for future action” (Wiliam, 2011, p. 121) should be provided in addition to the determination of the problem. This is showing the need for linking the feedback with the learning progressions, in which short-term goals are like stairs towards the long-term goal.

Students and teachers’ journey, with formative assessment, towards the long-term goal must be away from marks and grades. Black, Harrison, Lee, Marshall, & William (2004) stated that using comments only as feedback has a positive impact on learning achievement; while giving grades with comments has a negative impact, because scores will make students ignore the comments. The latter should “identify what has been done well and what still needs improvement and give guidance on how to make that improvement” (Black, Harrison, Lee, Marshall, & William, p. 49). The teacher has to leave room, in his/her learning planning, for students to make a response to feedback (Black, Harrison, Lee, Marshall, & William, 2004).

Moss & Brookhart (2009) stated that teachers while providing feedback have different options concerning the feedback method. However, the choice should be related to four areas: Timing, Amount, Mode, and Audience.

First, teachers should give feedback at the appropriate time. The appropriate time can be when the learning target is fresh in their minds and there is time to make a change. It should be given immediately after something done properly to be as an example of criteria for success, and after something done wrongly to make the learner think about a way to avoid it. Teachers should provide feedback and turn the attention to a cumulative repetition of a mistake which gives the impression that the student is careless about it.
Second, the amount of feedback is based on the student and the task the teacher is dealing with. That is, different students (in terms of level) receive different amounts of feedback, and different assignments require different kinds of feedback, too. In addition, the teacher have to make a balance between strengths and the weaknesses, such as the sandwich strategy—a strong point, a weak point, a strong point. The teacher should mention at least one strong point unsuccessful students did in their works.

Third, the feedback mode as being written, oral or demonstration depends on the learning conditions, like the goal, the age, the assignment, the verbal abilities of the students, and so on. For illustration, oral feedback suits more young learners or in cases where comments are too long to be in a written form. Written feedback has the advantage that students can keep with them this feedback and have a look on it whenever it is needed, since it targets specific points in the piece of writing. Demonstration, however, is sometimes more effective, as providing a sample of a good argumentative essay in the case of teaching how to write an argumentative essay.

Forth, the audience of the feedback can be an individual or a group. The individual feedback is more helpful in terms of specificity, because it is based on his/her abilities. Whereas, group feedback is not always effective, for example, a student may think that he/she is not concerned with the comments or even does not understand if he/she is concerned or not. In the case where students share the same problem the feedback can be effective, but it is better if the teacher gives a minilesson to teach this group the problematic part.

1.1.4.4. Self- and Peer-Assessment

The importance of self- and peer- assessment is in making students have the chance to think meta-cognitively about their own learning (McManus, 2008). Meta-cognition is a main concern for self- and peer- assessment. It includes “knowing what one knows (metacognitive
knowledge), what one can do (metacognitive skills), and what one knows about one's own cognitive abilities (metacognitive experience)” (Wiliam, 2011, p. 148). Therefore, when the teacher helps his/her learners “think meta-cognitively about their own learning [he] fosters the idea that learning is their responsibility and that they can take an active role in planning, monitoring, and evaluating their own progress” (McManus, 2008, p. 5). In other words, self-assessment helps students to become autonomous learners via raising their sense of responsibility in learning, and make them plan, monitor and evaluate their progress. This participation in learning can be done with the help of some tools like rubrics and checklists.

According to Moss & Brookhart (2009), self-assessment takes place when “students review their own work and identify strengths and weaknesses for the purpose of improving performance” (p. 80). Students, taking into consideration criteria for success, review their works to define strong and weak points and to be aware about their status towards their goal, so they can develop their performance through making the right decisions for what should be done next. Teachers’ role in self-assessment is to help learners interpret their own judgments into action plans in their learning progressions (Moss & Brookhart, 2009). However, many teachers hold a wrong idea about self-assessment that it refers to students giving themselves marks. In fact, the formative use of self-assessment purpose is to draw the learners’ intentions and focus to practice certain skills and concepts that should be learned. Giving them marks causes a shift in their intentions to make grades the centre of their interest (Moss & Brookhart, 2009).

Black, Harrison, Lee, Marshall, and William (2004) indicated that the peer-assessment importance in learning is due to many reasons. The first reason is that it raises the learners’ motivation to act carefully. For example, the learner is motivated to do his/her best in composing a clear and accurate piece of writing because he/she knows that it is going to be assessed by his/her classmate. The second reason is that learners use in their discussion a
natural language, which helps clarifying problematic ideas for one student by his/her classmate. In such a situation, students may accept, from each other, judgments that they do not sometimes take seriously when they are provided by their teacher. The third reason is that, unlike a feedback provided by an individual student, a feedback provided by a group of students assists the teacher’s attention to that feedback. Hence, a solid relationship is built between the students and their teacher in terms of communication about learning. In addition, this feedback helps students discover their needs and make the teacher knows them. While students are in a peer-assessment activity, the teacher has the opportunity to observe things that he/she is not able to see when he/she is presenting a lecture.

1.1.4.5. Collaboration

McManus (2008) suggested that “A classroom culture in which teachers and students are partners in learning should be established” (p. 5). In other word, a new culture should be established, in which teachers and their students are partners inside the classroom. The teacher collaborates with his/her students by sharing and discussing the learning goals and the criteria for success to reach these goals. He/she collaborates with his/her students through helping them to be responsible in their learning, to monitor it by themselves and to provide each other constructive feedback (via guiding their self- and peer- assessment). He/she collaborates with his/her students mainly by sharing decisions for moving learning forward.

McManus (2008) believes that the classroom culture of collaboration should be based on some characteristics. One characteristic is the existence of “a sense of trust between and among students and their teachers” (McManus, 2008, p. 5). This kind of trust is established by setting norms of respect among students and between students and their teacher, inside the classroom. It is established via transparency in their relationships, such as being honest to ask about unclear points (for students) and for the teacher to tell his/her students that they are
weak in a given area. It is established by appreciating differences from both sides, students’ strategies or a teacher’s techniques, in dealing with certain things. Another characteristic is in creating a non-threatening environment or a healthy atmosphere where students feel safe to ask questions. Popham (2008) believes that the combination of the first two levels of formative assessment (teachers’ instructional adjustments and students’ learning tactic adjustments) leads to the creation of the third level of formative assessment, which is classroom climate shift. He meets the McManus’ (2008) definition of collaboration saying that classroom climate could be an equivalent of classroom culture or atmosphere.

1.1.5. Formative Assessment in the EFL Classroom

What is presented in the five attributes is applicable to different educational areas. However, Jones and Wiliam (2007) proposed four principles of learning that should be applied in modern foreign languages classrooms and, as a result in, English as a foreign language (EFL) classroom.

The first principle is that the treatment of the learners should be adequate to their level of knowledge. The reason behind doing so is checking that what has been presented for the learners is understood, and clarifying the important questions, and hence this is going to be a good warm-up for moving to a new material.

At this stage, students must play an active role in the learning process, as the second principle of learning, because “learning has to be done by them, it cannot be done for them” (Jones and Wiliam, 2007, p.5). The role of the teacher makes the learners involved in the learning process through injecting challenges and learners are going to react in an attempt to overcome those challenges and learn the information each in his/her way.

The third principle that should exist in the EFL classroom is the answers for the ‘what’ and the ‘where’. The ‘what’ stands for learning objectives that should be presented by the teacher

18
and established by the learners. Then, the learners determine the ‘where’ or their position concerning the criteria for success, and try to ask questions and discover how to reach the ‘what’.

As a fourth principle, students should deal with their works “using language learning activities based on peer and self-assessment” (Jones and Wiliam, 2007, p.5). This will help them benefit from the teacher’s and peers’ feedback to improve their works quality. The time they base their adjustments on right understanding of objectives and their criteria, “they begin to take ownership of their learning” (Jones and Wiliam, 2007, p.5).

Conclusion

Formative assessment is not, actually, an end in itself in enhancing achievement, but is due to the teacher to be flexible and creative in using those attributes by adapting and bringing or creating new ideas that fit his/her context. Particularly, it is due to both teachers and leaners, as partners in the EFL classroom, to make those four principles a part of success in learning the language.
Chapter One: Review of the Literature

Section Two: The Importance of Spelling in the EFL Writing Classroom

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Introduction

In the last few decades, more attention is devoted to English spelling from researchers, educators, and parents. This section, therefore, tries to shed light on English spelling by giving a definition, a short overview about its history. In addition, it presents the debate related to the importance of spelling and gives some spelling strategies.

1.2.1. Definition of English Spelling

Spelling is defined as “the association of alphabetic symbols, called graphemes, with speech sounds, called phonemes (the smallest identifiable sounds in speech)” (Montgomery, 1997, p. 1). The English spelling system, in particular, is known as being difficult to learn, because of the lack of correspondence between the graphemes and the phonemes. There are different reasons for this difficulty. One reason can be seen in the belief that the complexity of the English language history entails that its spelling system is difficult. This can be due to the new technologies like text-messaging (Bearne, 2002). Another reason is represented in the belief that what makes English spelling appear to be very irregular is simply that the majority of the 400 or so most irregular words are also among the most frequently used words. It is their frequency, not their number, that creates the impression of great irregularity in English spelling (Upward & Davidson, 2011, p. 3).

1.2.2. The History of English Spelling

As indicated in Upward & Davidson’s (2011) words, it is believed that English spelling is irregular and ambiguous for many reasons. One of the reasons that led to this belief is the lack of knowledge about the English language in general and English spelling in particular. The English language (and its spelling) is composed from the languages of England invaders
namely: the Romans; the Angles, Saxons, Jutes, and Vikings; and finally the Normans (Rudling, 2012).

The Romans are considered from the first invaders. They invaded and colonised Britain in 43 AD and called it Britannia. They used the Latin language that is revealed in English in the words like: island, debt, and plumber (they contain silent letters). They withdrew from Britain in 410 AD with no big influence on spelling (Rudling, 2012).

After the Romans left, the Saxons, Angles, and Jutes (north European tribes) started their invasion of Britain and named England ‘Angle-land.’ They spoke Germanic languages which then called Anglo-Saxon. They have participated in the modern English with very common words like: earth, house, food, daughter, women, and so on. Then, the Viking invaded Britain in 793 AD. They fought the Anglo-Saxons, and lived together in peace. They formed Old English from their languages. Particularly, the Vikings added new words to English such as: anger, cake, die, and smile (Rudling, 2012).

In 1066, chaos started in English spelling with the Normans (or the French) invasion. In this period, French is the language of nobility, French and Latin are used in law and government, and English is the language of lower classes and peasants—just in a spoken form. Therefore, a great number of French words became English like: castle, romance, and servant, and the French rules were applied on English by Norman scribes; for example, the ‘s’ was replaced by ‘ce’ (e.g. ‘mys’ became ‘mice’) (Rudling, 2012).

In brief, a short overview about the history of English is a facilitator to understand the Modern English spelling journey from the invasions of the Romans, the Angles, Saxons, Jutes, and Vikings, until noticing the major contribution of Normans in the Modern English spelling irregularity.

1.2.3. The Importance of Spelling
One of the problems that students face while writing is spelling mistakes. Thus, a hot debate is raised in the last few decades about the importance of developing the spelling proficiency.

One group of researchers argues for giving priority to the quality of ideas presented over the accurate spelling. The focus on the right spelling from the beginning, instead, may impede the flow of ideas and the quality of writing. In addition, too much emphasis on spelling accuracy can affect negatively the learner’s motivation and willingness to write (Westwood, 2005).

Another group emphasises the importance of spelling accuracy and argues, as Westwood (2005) mentioned (as cited in Graham, Harris & Chorzempa, 2002; Stewart & Cegelka, 1995), that spelling mistakes lower the composition intelligibility and give the impression that the student is careless or is not clever as his/her peers. Jones (2009) presented a paragraph that some people on the internet use as an argument to diminish the importance of spelling accuracy:

Aoccdrnig to rscheearch by the Lnguisiite Dptanmeret at Cmabrigde Uinervtisy, it deosn't mttaer in waht oredr the ltteers in a wrod are, the olny iprmoetnt tihng is taht the frist and lsat ltteer be at the rght pclae. The rset can be a total mses and you can sitll raed it wouthit porbelm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as a wlohe.

Translation: According to research by the Linguistic Department at Cambridge University, it does not matter in what order the letters in a word are, the only important thing is that the first and last letter be at the right place. The rest can be a total mess and you can still read it without a problem. This is because the human mind does not read every letter by itself, but the word as a whole (para. 2).
However, she presented the paragraph to prove that it is a myth and that there is no research about that. She argues that this paragraph does not follow the rule that what matter is just the first and the last letter. Furthermore, this passage can be read just by fluent readers.

1.2.4. Spelling Strategies

James and Klein (1994) stated, on the basis of spelling literature, that good spellers have three principle strategies in spelling namely: phonemic, visual, and metalinguistic; in which “the novice speller has to acquire all three” (p. 32). The first spelling strategy is the phonemic. The Speller who depends on this strategy sounds out the word in order to check its spelling. However, those spellers depending on the phonemic route to spelling face problems in that they substitute certain graphemes with other graphemes in case of words that sound the same or homophones, such as (two) and (too). The second spelling strategy is the visual. The use of this strategy means the use of visual memory strategies, in that the speller retrieves the word image as whole from memory. This strategy is more related with reading. The third strategy is the use of metalinguistic knowledge. It has a link with building linguistic knowledge like knowing the regularities and irregularities of the language, i.e. it is about raising linguistic awareness.

Conclusion

In sum, to learn a language is to master its system, and spelling as a unit in this system. This unit is related to other facilitators like knowing about its history to unveil the hidden facts, to be more convinced about its importance, and to make the strategies proved by research more effective.
CHAPTER TWO: THE FIELD WORK

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Introduction

This study tries to investigate the impact of formative assessment on EFL students’ spelling. This chapter presents the method chosen, the sample under investigation, and the research design followed in doing this study. It presents, with details, the procedures of conducting this research; i.e. pre-testing the participants, doing the treatment, and post-testing them; and the instruments used for collecting data. Then, it provides the results of the study. Finally, a discussion of these results and future research suggestions are introduced.

2.1. The Choice of the Method

The design adopted for the present research is quasi-experimental. This choice is based on the nature of the topic under investigation, i.e. to investigate the cause-effect relationships between the independent and the dependent variables. In addition, the random selection of the sample gives the power to generalize its results on the whole population.

2.2. The Sample

The participants of the study, who differ in their age, gender, cultural background, and intellectual abilities, are two randomly selected groups from a population of 296 second-year university students of English. They are randomly selected groups—the treatment group consists of twenty (20) and the control group consists of seventeen (17) students. They study at Larbi Ben M'hidi University of Oum El Bouaghi for the academic year 2013-2014.

Interestingly, Second-year students are selected because second-year level is the only one available for conducting the experiment on.

2.3. The Research Design
The study is following a quasi-experimental design, in which two groups are under investigation. The first one is the experimental group that is taught paragraph writing with the integration of formative assessment as a component in the instructional process. The second one is the control group that is taught paragraph writing with the ordinary method of teaching (using just summative assessment).

The study attempts at answering the following question:

Does formative assessment enhance students’ spelling?

Statistically speaking, the earlier question is read as follows:

Is there a significant difference in spelling between the students who are taught paragraph writing using formative assessment and those who are not?

Lodico, Spaulding, and Voegtle (2006) defined a research hypothesis saying that it is “an educated guess that states the expected outcome of the study. The researcher is ‘educated’ through the literature review” (p. 181). In this line of thought, the following hypothesis is set:

H₁: There would be a significant difference in spelling between the students who are taught paragraph writing through formative assessment and those who are not.

The null hypothesis is:

H₀: There would be no significant difference in spelling between the students who are taught paragraph writing through formative assessment and those who are not.

The study consists of two variables: one is independent (formative assessment) and another is dependent (spelling mistakes).
Table 1 gives an interpretation to the elements included in Figure 2:

**Table 01: The Interpretation of the Research Design’s Schematic Representation**

<table>
<thead>
<tr>
<th>Element</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>It is composed of 20 students.</td>
</tr>
<tr>
<td>Control group</td>
<td>It is composed of 17 students.</td>
</tr>
<tr>
<td>Pre-test</td>
<td>It is a paragraph-writing task in order to measure the spellings of words</td>
</tr>
<tr>
<td></td>
<td>within a given context.</td>
</tr>
<tr>
<td>Treatment 1 (T1)</td>
<td>The formative assessment attributes and techniques are integrated in the</td>
</tr>
<tr>
<td></td>
<td>process of teaching.</td>
</tr>
<tr>
<td>Treatment 2 (T2)</td>
<td>The instruction is carried out in the ordinary way of teaching (like the</td>
</tr>
<tr>
<td></td>
<td>determination of objectives and the use of grades).</td>
</tr>
</tbody>
</table>
### Procedure

#### 2.4.1. Pre-testing

The experiment start was by pre-testing the participants of the experimental and control groups. The topic of the paragraph-writing task was as follows: “Write a paragraph about the difficulties that you have faced or you are still facing in learning English.” The reason behind giving this topic is that it deals with the difficulties EFL learners faced or they are still facing. This was supposed to be a motive to use the necessary words, concerning frequent use in English, for expressing their ideas. The advantage in this case is that the context helps in the determination of some misleading spellings like homophones (words pronounced the same but differ in spelling). The students were asked to do the task in thirty minutes as they were informed that the marks are not going to be included in their examinations’ marks (the experimental group is not yet aware that there will be no marks, to see their reactions towards using comments instead of grades).

#### 2.4.2. Treatment

The treatment period took place after the pre-test. The two groups (experimental and control) received a ninety minute session per week during a period of three weeks. The researcher was the teacher in both groups in order to avoid any interference of the different teachers’ characters on
one or both groups. The lectures presented during the treatment sessions remained the same prescribed in the syllabus.

2.4.2.1. Experimental Group Treatment

Students were taught following the McManus’ (2008) five attributes of effective formative assessment and using two techniques. Traffic light cards is the first technique which refers to the use of three coloured cards; the green (I am following), the yellow (please! slow down, there is a problem), and the red (I am lost). The other technique is the lollypop sticks, which is the use of sticks of wood on which the students’ names are written. The lollypop sticks are used for the sake of making random selection, and hence to apply the ‘no hands up’ rule in the formative assessment classroom. The two techniques were used throughout the period of three weeks specified for the treatment.

2.4.2.1.1. The First Session

The first session was a practice for writing an essay introduction. Before starting the practice, the learning goal was shared and discussed with the learners, until the teacher confirmed that they understood it through asking them to paraphrase it with their own words. This made them take part of responsibility in terms of achievement as they took part in its determination. The ultimate goal was writing different types of essays. Writing an essay cannot be achieved in one session, so learning progressions should be established. The learning progressions are a result of breaking down the ultimate goal or the long-term goal into medium- and short-term objectives that help in making students more involved by giving more opportunities to benefit from the feedback. The short-term objective of the first session was writing an essay introduction as an application of theoretical lesson. In addition, a medium-term objective was developing their spelling
proficiency, since it was along three sessions. The teacher provided guidance for students who used the cards to ask for help. At the end of the session, the students submitted their works to the teacher to correct them.

2.4.2.1.2. The Second Session

In the second session, the teacher gave back the works with descriptive feedback and asked students to read their comments, which provided spelling rules and tips, and a strong point in each student writing as a kind of motivation. Then, the teacher passed through the rows reading the comments with each student and checking that they understood them with a small discussion. Other comments were given to the whole class concerning the mistakes most of the students made. All that practice related to feedback took from fifteen to twenty minutes. The short-term objective of this session, which was writing a body of an essay, was shared and discussed; and the students were reminded about the medium-term objective, which was developing their spelling proficiency.

The teacher started the lesson by asking students to predict the content as a strategy to collect evidence on how to tackle the lecture, like whom to ask or what made things seem difficult. Next to that, the teacher pointed students, using the “lollypop sticks” technique, to read from the handouts, he gave, and then point others to explain before his explanation. The lecture was presented in a form of a list of steps and a good essay body sample was read and analysed with students as an illustration of criteria for success. The lecture was presented in approximately half an hour. After presenting the lecture, the students started the practice of writing a two-paragraph body and submitted it to the teacher to be corrected. In the remaining five minutes, the teacher asked students to give him written feedback about what they liked and what they thought should
be changed in the instruction, as a kind of collaboration between the teacher and his students in
developing the classroom practices.

2.4.2.1.3. The Third Session

In the third session, students received their compositions with written feedback and the teacher did the same practices related to feedback were done in the second session. The teacher discussed the short-term objective of the current session, which was writing an essay conclusion, and the medium-term objective, which was developing their spelling proficiency. The lecture was presented following the same process in presenting the essay body lecture. Then, students were asked to write the conclusion. They self-assessed their writings on the draft paper by underlining the words they were not sure about, before copying down their compositions on new papers. Those new copies were exchanged, each student with his peer. In peer-assessment, the Two Stars and a Wish technique was applied, in which each student gave his classmate two strong points were done (as stars) and one weak point to be developed (as a wish), with suggestions on how to develop the weak point–like giving a rule or a tip to overcome a spelling problem.

2.4.2.2. Control Group Treatment

The instruction in the control group was following the same routine during the three weeks. The lecture was presented and explained by the teacher. When he asked a question, students rose their hands and the teacher pointed from them; if the answer was wrong, he chose another student or gave the answer himself. Then, students started the practice individually, writing the introduction, the body, or the conclusion–It depended on the lecture was presented. At the end of the session, they submitted their writings to the teacher to be corrected. The teacher in his correction underlined the spelling mistakes and gave grades for the whole composition. The next
session, students received their woks and started the new lecture following the same way of instruction applied in the first session.

2.4.3. Post-testing

Students of both groups were post-tested after the period of treatment. The test was the same done in the pre-test (a paragraph-writing task). Students were asked to keep their copybooks and dictionaries away and the teacher made sure that there was nothing on tables except pens and new papers before dictating the question, for preventing the use of the draft paper of the pre-test.

2.5. Instruments

2.5.1. Test used in Pre-testing and Post-testing

The students of the experimental and control group were pre-tested and post-tested using the same paragraph-writing task. This task was about the following topic: “write a paragraph about the difficulties that you have faced or you are still facing in learning English.” The participants were asked to do the task in thirty minutes individually.

2.6. Counting Mistakes

The method followed in counting mistakes is that whenever the spelling of a word is wrong, it is counted as a mistake. The mistakes can be an omission of a letter, addition of a letter, mixing the order of letters, and/ or putting a word instead of another word like homophones.

2.7. Statistical Analysis

In analysing the data, error rates are calculated for each student writing. The error rates are calculated through dividing the number of spelling mistakes (in each the paragraph) by the paragraph words’ number. This method is applied because the length of paragraphs differs from
one student to another, and hence a long paragraph equals more mistakes. Then, a t-test is implemented on the two independent groups (control and experimental) in order to see whether the independent variable (formative assessment) caused a significant change on the dependent variable (spelling) or not.

2.8. Results

2.8.1. The pre- and post-test results

Table 02 shows the number of spelling mistakes in the pre- and post-test of the experimental and control group, and the total number of mistakes.

**Table 02: The Number of Spelling Mistakes of Each Student in the pre- and post-test**

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual students</td>
<td>Pre-test</td>
</tr>
<tr>
<td></td>
<td>Number of mistakes</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
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<tr>
<td>5</td>
<td>24</td>
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<tr>
<td>6</td>
<td>3</td>
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<td>7</td>
<td>9</td>
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<tr>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
</tr>
</tbody>
</table>
Importantly, the number of mistakes are not used in the statistical analysis. The number of mistakes do not reflect the real level of the students, since a long paragraph equals more mistakes and this aspect makes a difference when it comes to comparing the pre- and post-tests. For example, a decrease in a student’s number of mistakes could be a result of writing a long paragraph in the pre-test and a short one in the post-test.

Instead, error rates are used as an alternative to the number of mistakes. Thus, the number of words in each paragraph are counted, and then the number of mistakes are divided by the number of words in each student paragraph. Tables 03 and 04 presents the experimental and control groups number of mistakes, paragraph number of words and error rates in the pre- and post-test.

<table>
<thead>
<tr>
<th></th>
<th>10</th>
<th>23</th>
<th>9</th>
<th>10</th>
<th>5</th>
<th>12</th>
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<tr>
<td>11</td>
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</tr>
<tr>
<td>20</td>
<td>12</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>193</td>
<td>92</td>
<td>Total</td>
<td>195</td>
<td>174</td>
<td></td>
</tr>
</tbody>
</table>
Table 03: The experimental group number of mistakes, paragraph number of words, and error rates

<table>
<thead>
<tr>
<th>Individual students</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of mistakes</td>
<td>Paragraph number of words</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
<td>226</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>204</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>212</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>142</td>
</tr>
<tr>
<td>5</td>
<td>24</td>
<td>133</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>162</td>
</tr>
<tr>
<td>7</td>
<td>9</td>
<td>102</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>102</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>181</td>
</tr>
<tr>
<td>10</td>
<td>23</td>
<td>153</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>101</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>126</td>
</tr>
<tr>
<td>13</td>
<td>19</td>
<td>190</td>
</tr>
<tr>
<td>14</td>
<td>5</td>
<td>92</td>
</tr>
<tr>
<td>15</td>
<td>1</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>16</td>
<td>18</td>
<td>182</td>
</tr>
<tr>
<td>17</td>
<td>2</td>
<td>156</td>
</tr>
<tr>
<td>18</td>
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<td>103</td>
</tr>
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<td>19</td>
<td>3</td>
<td>70</td>
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<td>193</td>
<td>2774</td>
</tr>
<tr>
<td>Mean</td>
<td>11,6</td>
<td>138,7</td>
</tr>
</tbody>
</table>

**Table 04**: The control group number of mistakes, paragraph number of words, and error rates

<table>
<thead>
<tr>
<th>Individual students</th>
<th>Number of mistakes</th>
<th>Paragraph number of words</th>
<th>Error rates</th>
<th>Number of mistakes</th>
<th>Paragraph number of words</th>
<th>Error rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>72</td>
<td>0,0139</td>
<td>3</td>
<td>113</td>
<td>0,0265</td>
</tr>
<tr>
<td>2</td>
<td>38</td>
<td>124</td>
<td>0,3065</td>
<td>33</td>
<td>121</td>
<td>0,2727</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>101</td>
<td>0,0990</td>
<td>12</td>
<td>114</td>
<td>0,1053</td>
</tr>
<tr>
<td>4</td>
<td>17</td>
<td>121</td>
<td>0,1405</td>
<td>9</td>
<td>103</td>
<td>0,0874</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>89</td>
<td>0,0337</td>
<td>6</td>
<td>96</td>
<td>0,0625</td>
</tr>
<tr>
<td>6</td>
<td>13</td>
<td>153</td>
<td>0,0850</td>
<td>3</td>
<td>161</td>
<td>0,0186</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>86</td>
<td>0,0581</td>
<td>10</td>
<td>217</td>
<td>0,0461</td>
</tr>
</tbody>
</table>
Comparing the control and experimental group pre-test can be through comparing the means of the two groups. Therefore, the mean of each group should be calculated. For calculating the $\bar{X}_{er}$ the following procedure is followed:

1- The error rates of each student’s paragraph are calculated, in which the spelling mistakes are divided by the number of words in the paragraph. For example: $6/102=0.0588$. The result of this division is called ‘error rate’ of spelling in the paragraph.

2- Then, the error rates of each group’s paragraphs are collected to have the total error rates of each group. The results are divided by the number of subjects in each group ($n$) to find out M.E.R. Thus, the following formula is used $\bar{X}_{er} = \frac{\sum er}{n}$. This formula is similar to $\bar{X} = \frac{\sum xi}{n}$, because error rates are statistical values that can be represented as an xi.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>14</td>
<td>108</td>
<td>0.1296</td>
<td>13</td>
<td>147</td>
<td>0.0884</td>
</tr>
<tr>
<td>9</td>
<td>9</td>
<td>132</td>
<td>0.0682</td>
<td>8</td>
<td>136</td>
<td>0.0588</td>
</tr>
<tr>
<td>10</td>
<td>6</td>
<td>113</td>
<td>0.0531</td>
<td>12</td>
<td>171</td>
<td>0.0702</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
<td>120</td>
<td>0.0167</td>
<td>1</td>
<td>162</td>
<td>0.0062</td>
</tr>
<tr>
<td>12</td>
<td>8</td>
<td>96</td>
<td>0.0833</td>
<td>6</td>
<td>95</td>
<td>0.0632</td>
</tr>
<tr>
<td>13</td>
<td>18</td>
<td>154</td>
<td>0.1169</td>
<td>19</td>
<td>182</td>
<td>0.1044</td>
</tr>
<tr>
<td>14</td>
<td>6</td>
<td>102</td>
<td>0.0588</td>
<td>3</td>
<td>92</td>
<td>0.0326</td>
</tr>
<tr>
<td>15</td>
<td>33</td>
<td>335</td>
<td>0.0985</td>
<td>12</td>
<td>102</td>
<td>0.1176</td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>149</td>
<td>0.1141</td>
<td>9</td>
<td>135</td>
<td>0.0667</td>
</tr>
<tr>
<td>17</td>
<td>8</td>
<td>137</td>
<td>0.0584</td>
<td>7</td>
<td>136</td>
<td>0.0515</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>208</strong></td>
<td><strong>2192</strong></td>
<td><strong>1,5343</strong></td>
<td><strong>166</strong></td>
<td><strong>2283</strong></td>
<td><strong>1,2787</strong></td>
</tr>
<tr>
<td><strong>Mean</strong></td>
<td><strong>12,2353</strong></td>
<td><strong>128,9412</strong></td>
<td><strong>0.0903</strong></td>
<td><strong>9,7647</strong></td>
<td><strong>134,2941</strong></td>
<td><strong>0.0752</strong></td>
</tr>
</tbody>
</table>
Hence, the control group $\bar{X}_{er}$ is calculated:

$$\bar{X}_{er} = \frac{\sum er}{n}$$

$$\bar{X}_{er} = 1.5342/17$$

$$\bar{X}_{er} = 0.0902$$

Similarly, $\bar{X}_{er}$ of the experimental group is also calculated:

$$\bar{X}_{er} = \frac{\sum er}{n}$$

$$\bar{X}_{er} = 1.6937/20$$

$$\bar{X}_{er} = 0.0846$$

**Table 05: Error rates of the Control and the Experimental Group Pre-test**

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Error rates</th>
<th>M.ER</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cont.</td>
<td>17</td>
<td>1.5342</td>
<td>0.0902</td>
<td>0.0669</td>
</tr>
<tr>
<td>Exp.</td>
<td>20</td>
<td>1.6937</td>
<td>0.0846</td>
<td>0.0533</td>
</tr>
</tbody>
</table>

The data in Table 05 indicates that M.ER in the control group ($\bar{X}_{er}\text{Cont.} = 0.0902$) is a bit higher than it is in the experimental one ($\bar{X}_{er}\text{Exp.} = 0.0846$). Checking if there is or there not a significant difference between the two groups can be through conducting a t-test for independent groups.

2.8.2.1. T-test for independent groups

For calculating the t-test for independent groups, the following steps are followed:

1. Calculating the mean of the control and the experimental group.
2. Calculating the sample variance of each group.
3. Calculating the t-test value for independent groups.

4. Checking if t is statistically significant on the probability table with degree of freedom (df) df= n₁+n₂-2 and probability (p) p < .01.

5. Comparing the observed t-value (t.obs) with the critical t-value (t.crit).

The Mean

The Experimental Group

\[ \sum er_E = 1,6937 \]

\[ \bar{x}_{er E} = \frac{\sum er_E}{n_E} \]

\[ \bar{x}_{er E} = \frac{1,6937}{20} \]

\[ \bar{x}_{er E} = 0,0846 \]

The Control Group

\[ \sum er_C = 1,5342 \]

\[ \bar{x}_{er C} = \frac{\sum er_C}{n_C} \]

\[ \bar{x}_{er C} = \frac{1,5342}{17} \]

\[ \bar{x}_{er C} = 0,0902 \]

The Sample Variance

The Experimental Group

\[ \bar{x}_{er E} = 0,0846 \]

\[ S^2_{er E} = \frac{\sum (er - \bar{x}_{er})^2}{n_E} \]

\[ S^2_{er E} = \frac{0,3360}{20} \]

\[ S^2_{er E} = 0,0168 \]

The Control Group

\[ \bar{x}_{er C} = 0,0902 \]

\[ S^2_{er C} = \frac{\sum (er - \bar{x}_{er})^2}{n_C} \]

\[ S^2_{er C} = \frac{0,0717}{17} \]

\[ S^2_{er C} = 0,0042 \]
The t-test

The following formula is used for calculating the t-test:

\[
 t = \frac{\bar{X}_{E} - \bar{X}_{C}}{\sqrt{\frac{s_{ER_{E}}^2}{n_{E}} + \frac{s_{ER_{C}}^2}{n_{C}}}}
\]

\(\bar{X}_{E}\) = The M.E.R of the experimental group.

\(\bar{X}_{C}\) = The M.E.R of the control group.

\(s_{ER_{E}}\) = The sample variance of error rates of the experimental group.

\(s_{ER_{C}}\) = The sample variance of error rates of the control group.

\(n_{E}\) = The number of individual subjects in the experimental group.

\(n_{C}\) = The number of individual subjects in the control group.

\[
 t = \frac{0.0846 - 0.0902}{\sqrt{\frac{0.0168}{20} + \frac{0.0042}{17}}}
\]

\[
 t = \frac{-0.0056}{\sqrt{0.0008 + 0.0002}}
\]

\[
 t = -0.1772
\]
The degree of freedom (df = n1+n2-2; i.e., df=20+17-2) is 35. Through this degree of freedom, the observed t-value (-0.1772) can be located in the table. This observed t-value is compared with the critical t-value, which is (in this case) 2.7238 at the 0.01 level of significance. The comparison shows that the observed t-value (t_{obs}) is lower than the critical t-value (t_{crit}) (t_{obs}: -0.1772 < t_{crit}: 2.7238), and assists that the two groups are similar and there is no significant difference between them.

2.8.3. Control Group Pre-test versus Control Group Post-test

It is noticed (as shown in table 06) that the pre-test M.ER (\(X_{er} = 0.0902\)) is higher than the post-test M.ER (\(X_{er} = 0.0752\)). Those means should be compared statistically to see the impact of the treatment (without the use of formative assessment) on spelling.

Table 06: Error rates of the Control Group Pre- and Post-test

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Error rates</th>
<th>M.ER</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cont.pre.</td>
<td>17</td>
<td>1,5342</td>
<td>0.0902</td>
<td>0.0669</td>
</tr>
<tr>
<td>Cont.post.</td>
<td>17</td>
<td>1,2786</td>
<td>0.0752</td>
<td>0.0597</td>
</tr>
</tbody>
</table>

2.8.3.1. The paired-samples t-test of the control group

The paired-samples t-test is used for comparing M.ER before and after the treatment in order to see whether there is a significant difference or not. To calculate the paired-samples t-test the coming steps should be followed:

1. Calculating the difference between each student pre- and post-test error rates.
2. Calculating the mean difference \(\bar{d}\).
3. Calculating the standard deviation of the differences $S_d$, and the standard error of the mean difference $SE(d) = \frac{S_d}{\sqrt{n}}$

4. Calculating the t-test value using the formula $t = \frac{\bar{d}}{SE(d)}$.

5. Checking if $t$ is statistically significant on probability table with degree of freedom (df) $df=n-1$ and probability ($p$) $p < .01$.

6. Comparing the observed t-value with the critical t-value.

**Table 07: The control group difference between each student pre- and post-test error rates**

<table>
<thead>
<tr>
<th>Individual student</th>
<th>Difference $d$</th>
<th>Square difference $d^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.0127</td>
<td>0.0002</td>
</tr>
<tr>
<td>2</td>
<td>-0.0337</td>
<td>0.0011</td>
</tr>
<tr>
<td>3</td>
<td>0.0063</td>
<td>0.0000</td>
</tr>
<tr>
<td>4</td>
<td>-0.0531</td>
<td>0.0028</td>
</tr>
<tr>
<td>5</td>
<td>0.0288</td>
<td>0.0008</td>
</tr>
<tr>
<td>6</td>
<td>-0.0663</td>
<td>0.0044</td>
</tr>
<tr>
<td>7</td>
<td>-0.0121</td>
<td>0.0001</td>
</tr>
<tr>
<td>8</td>
<td>-0.0412</td>
<td>0.0017</td>
</tr>
<tr>
<td>9</td>
<td>-0.0094</td>
<td>0.0001</td>
</tr>
<tr>
<td>10</td>
<td>0.0171</td>
<td>0.0003</td>
</tr>
<tr>
<td>11</td>
<td>-0.0105</td>
<td>0.0001</td>
</tr>
<tr>
<td>12</td>
<td>-0.0202</td>
<td>0.0004</td>
</tr>
<tr>
<td>13</td>
<td>-0.0125</td>
<td>0.0002</td>
</tr>
<tr>
<td>14</td>
<td>-0.0262</td>
<td>0.0007</td>
</tr>
<tr>
<td>15</td>
<td>0.0191</td>
<td>0.0004</td>
</tr>
<tr>
<td>16</td>
<td>-0.0474</td>
<td>0.0022</td>
</tr>
<tr>
<td>17</td>
<td>-0.0069</td>
<td>0.0000</td>
</tr>
<tr>
<td>$\sum$</td>
<td>$\sum d=-0.2556$</td>
<td>$\sum d^2=0.0156$</td>
</tr>
</tbody>
</table>

**The Mean Difference**

44
\[ \bar{d} = \frac{\sum d}{n} ; \text{where } \bar{d} = \text{mean}, \ d= \text{difference scores, } n= \text{number of subjects, and } \sum = \text{sum} \]

\[ \bar{d} = \frac{-0.2556}{17} \]

\[ \bar{d} = -0.0150 \]

**The Standard deviation of differences**

\[ S_d = \sqrt{S^2} = \sqrt{\frac{\sum d^2}{n} - \bar{d}^2} \]

Where \( S= \text{sample variance, and } \sum d^2 = \text{sum of the square difference} \)

\[ S_d = \sqrt{\frac{0.0156}{17} - (-0.0150 \times -0.0150)} = \sqrt{0.0011} \]

\[ S_d = 0.0338 \]

**The standard error of the mean difference**

\[ SE(\bar{d}) = \frac{S_d}{\sqrt{n}} \]

\[ SE(\bar{d}) = \frac{0.0338}{\sqrt{17}} = \frac{0.0338}{4.1231} \]

\[ SE(\bar{d}) = 0.0081 \]

**The t-test**

\[ t_{n-1} = \frac{\bar{d}}{SE(\bar{d})} \]
\[
t_{17-1} = \frac{-0.0150}{0.0081}
\]

\[
t_{16} = -1.8518
\]

After calculating the degree of freedom (df=n-1=17-1, df=16), which represents a critical t-value (2.9208) at the 0.01 level of significance, it is compared with the observed t-value (-1.8518). The comparison indicates that there is no significant improvement in the control group after the period of treatment.

2.8.4. Experimental Group Pre-test versus Experimental Group Post-test

Table 08: Error rates of the Experimental Group Pre-and Post-test

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Error rates</th>
<th>M.ER</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp.pre.</td>
<td>20</td>
<td>1.6937</td>
<td>0.0846</td>
<td>0.0533</td>
</tr>
<tr>
<td>Exp.post.</td>
<td>20</td>
<td>1.0263</td>
<td>0.0513</td>
<td>0.0373</td>
</tr>
</tbody>
</table>

As presented in table 08, the spelling performance in the post-test is more than one-third lower than it is in the pre-test. This is indicated in the post-test M.ER that equals to 0.0513 in comparison to the pre-test M.ER with 0.0846. For proving a significant improvement or disproving it statistically, a paired-samples t-test should be calculated.

2.8.4.1. The paired-samples t-test of the experimental group

The steps have been followed for calculating the control group’s paired-samples t-test, are going to be followed with the experimental group.
Table 09: The experimental group difference between each student pre- and post-test error rates

<table>
<thead>
<tr>
<th>Individual student</th>
<th>Difference d</th>
<th>Square difference $d^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-0.0206</td>
<td>0.0004</td>
</tr>
<tr>
<td>2</td>
<td>-0.0317</td>
<td>0.0010</td>
</tr>
<tr>
<td>3</td>
<td>-0.0494</td>
<td>0.0024</td>
</tr>
<tr>
<td>4</td>
<td>-0.0155</td>
<td>0.0002</td>
</tr>
<tr>
<td>5</td>
<td>-0.0618</td>
<td>0.0038</td>
</tr>
<tr>
<td>6</td>
<td>-0.0051</td>
<td>0.0000</td>
</tr>
<tr>
<td>7</td>
<td>-0.0264</td>
<td>0.0007</td>
</tr>
<tr>
<td>8</td>
<td>0.0162</td>
<td>0.0003</td>
</tr>
<tr>
<td>9</td>
<td>-0.0570</td>
<td>0.0033</td>
</tr>
<tr>
<td>10</td>
<td>-0.0764</td>
<td>0.0058</td>
</tr>
<tr>
<td>11</td>
<td>0.0256</td>
<td>0.0007</td>
</tr>
<tr>
<td>12</td>
<td>-0.0048</td>
<td>0.0000</td>
</tr>
<tr>
<td>13</td>
<td>0.0145</td>
<td>0.0002</td>
</tr>
<tr>
<td>14</td>
<td>-0.0493</td>
<td>0.0024</td>
</tr>
<tr>
<td>15</td>
<td>-0.0151</td>
<td>0.0002</td>
</tr>
<tr>
<td>16</td>
<td>-0.0638</td>
<td>0.0041</td>
</tr>
<tr>
<td>17</td>
<td>-0.0128</td>
<td>0.0002</td>
</tr>
<tr>
<td>18</td>
<td>-0.0018</td>
<td>0.0000</td>
</tr>
<tr>
<td>19</td>
<td>-0.0825</td>
<td>0.0068</td>
</tr>
<tr>
<td>20</td>
<td>-0.1496</td>
<td>0.0224</td>
</tr>
<tr>
<td>$\Sigma$</td>
<td>$\Sigma d = -0.6673$</td>
<td>$\Sigma d^2 = 0.0550$</td>
</tr>
</tbody>
</table>

The Mean Difference

\[
\bar{d} = \frac{\Sigma d}{n}; \text{ where } \bar{d} = \text{mean, } d = \text{difference scores, } n = \text{number of subjects, and } \Sigma = \text{sum}
\]

\[
\bar{d} = \frac{-0.6673}{20}
\]
\[ \bar{d} = -0.0334 \]

**The Standard deviation of differences**

\[ S_d = \sqrt{S^2} = \sqrt{\frac{\sum d^2}{n} - \bar{d}^2} \]

Where \( S = \) sample variance, and \( \sum d^2 = \) sum of the square difference

\[ S_d = \sqrt{\frac{0.0550}{20} - (-0.0334 \times -0.0334)} = \sqrt{0.0038} \]

\[ S_d = 0.0621 \]

**The standard error of the mean difference**

\[ SE(\bar{d}) = \frac{S_d}{\sqrt{n}} \]

\[ SE(\bar{d}) = \frac{0.0621}{\sqrt{20}} = \frac{0.0621}{4.4721} \]

\[ SE(\bar{d}) = 0.0138 \]

**The t-test**

\[ t_{n-1} = \frac{\bar{d}}{SE(\bar{d})} \]

\[ t_{20-1} = \frac{-0.0334}{0.0138} \]

\[ t_{19} = -2.4202 \]
In this case, the degree of freedom is 19 (df=n-1=20-1), which represents a critical t-value (2.8609) at the 0.01 level of significance. The comparison of the critical t-value with the observed t-value (-2.4202) reveals the fact that there is no significant improvement in the experimental group spelling proficiency.

2.8.5. Control Group versus Experimental Group Post-test

In the pre-test, the experimental group performed a little bit better (\(\bar{X}_{\text{Exp.}} = 0.0846\)) than the control group (\(\bar{X}_{\text{Cont.}} = 0.0902\)), but they are still considered as being at a similar level. Since they are at a similar level, it is hypothesised that the experimental group students would improve their spelling proficiency because they are taught paragraph writing through formative assessment.

### Table 10: Error rates of the Control and the Experimental Group Post-test

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Error rates</th>
<th>M.ER</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cont.</td>
<td>17</td>
<td>1.2786</td>
<td>0.0752</td>
<td>0.0597</td>
</tr>
<tr>
<td>Exp.</td>
<td>20</td>
<td>1.0263</td>
<td>0.0513</td>
<td>0.0373</td>
</tr>
</tbody>
</table>

In order to prove the alternative hypothesis or disprove it; i.e., whether or not the application of the independent variable (formative assessment) leads to a significant change on the dependent variable (spelling), a t-test for independent groups is conducted.

2.8.5.1. T-test for independent groups

For calculating the t-test for independent groups, the following steps are followed:

6. Calculating the mean of the control and the experimental group.

7. Calculating the sample variance of each group.
8. Calculating the t-test value for independent groups.

9. Checking if t is statistically significant on the probability table with degree of freedom (df) df= n1+n2-2 and probability (p) p < .01.

10. Comparing the observed t-value ($t_{obs}$) with the critical t-value ($t_{crit}$).

**The Mean**

<table>
<thead>
<tr>
<th>The Experimental Group</th>
<th>The Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\sum er_E = 1.0263$</td>
<td>$\sum er_C = 1.2786$</td>
</tr>
<tr>
<td>$\bar{X}_{er E} = \frac{\sum er_E}{n_E}$</td>
<td>$\bar{X}_{er C} = \frac{\sum er_C}{n_C}$</td>
</tr>
<tr>
<td>$\bar{X}_{er E} = \frac{1.0263}{20}$</td>
<td>$\bar{X}_{er C} = \frac{1.2786}{17}$</td>
</tr>
<tr>
<td>$\bar{X}_{er E} = 0.0513$</td>
<td>$\bar{X}_{er C} = 0.0752$</td>
</tr>
</tbody>
</table>

**The Sample Variance**

<table>
<thead>
<tr>
<th>The Experimental Group</th>
<th>The Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\bar{X}_{er E} = 0.0513$</td>
<td>$\bar{X}_{er C} = 0.0752$</td>
</tr>
<tr>
<td>$S_{er E}^2 = \frac{\sum (er - \bar{X}_{er})^2}{n_E}$</td>
<td>$S_{er C}^2 = \frac{\sum (er - \bar{X}_{er})^2}{n_C}$</td>
</tr>
<tr>
<td>$S_{er E}^2 = \frac{0.0264}{20}$</td>
<td>$S_{er C}^2 = \frac{0.0574}{17}$</td>
</tr>
<tr>
<td>$S_{er E}^2 = 0.0013$</td>
<td>$S_{er C}^2 = 0.0033$</td>
</tr>
</tbody>
</table>
The t-test

The following formula is used for calculating the t-test:

\[
t = \frac{\bar{X}_{ER} - \bar{X}_{EC}}{\sqrt{\frac{s_{ER}^2}{n_E} + \frac{s_{EC}^2}{n_C}}}
\]

\[\bar{X}_{ER} = \text{The M.ER of the experimental group.}\]

\[\bar{X}_{EC} = \text{The M.ER of the control group.}\]

\[S_{ER} = \text{The sample variance of error rates of the experimental group.}\]

\[S_{EC} = \text{The sample variance of error rates of the control group.}\]

\[n_E = \text{The number of individual subjects in the experimental group.}\]

\[n_C = \text{The number of individual subjects in the control group.}\]

\[
t = \frac{0.0513 - 0.0752}{\sqrt{\frac{0.0013}{20} + \frac{0.003}{17}}}
\]

\[
t = -0.0239
\]

\[
t = \frac{0.0003}{\sqrt{0.0003}}
\]

\[
t = -1.3815
\]
Since the participants of the study are 37, the degree of freedom (df = n_1+n_2-2) is 35. At this degree of freedom, the critical t-value is 2.7238 at the 0.01 level of significance. Thus, the observed t-value (t_{obs}) is lower than the critical t-value (t_{crit}) (t_{obs}:-1.3815< t_{crit}: 2.7238)

Therefore, there is no significant difference between the two groups’ post-test means. In other words, the alternative hypothesis is rejected, and the null hypothesis is accepted. That is, formative assessment has no significant effect on EFL students’ spelling.
Discussion

The current study is conducted to investigate the role formative assessment could play in enhancing students’ spelling. Thus, the following hypothesis was tested:

It is hypothesized that students who are taught paragraph writing through formative assessment would show significant improvement in spelling than those who are not.

The findings of the study, however, prove that formative assessment has no significant impact in enhancing the students’ spelling. Statistically speaking, the observed t-value is lower than the critical t-value ($t_{obs}$: $-1.4678 < t_{crit}$: 2.7238). Therefore, the alternative hypothesis is rejected and the null hypothesis is accepted.

**Non-Significant Improvement for the Control Group**

After the period of treatment, no significant improvement was noticed on the control group. The main reason for this result could be the lack of motivation. Students’ lack of motivation may be because they may not know their learning goals, and if they know them, they may not understand them or know their positions towards achieving those goals. This result may reflect the relationship of the students and their teacher, where the teacher was the dominant in the classroom working with dependent students who do not take responsibility for their learning. In such a case, students do not take much care of spelling, and the teacher did not give specific descriptive feedback for spelling, or gave just grades.

**Non-Significant Improvement for the Experimental Group**

The findings of the study show that formative assessment caused no significant improvement on spelling. This can be due to the fact that learners may need more time to be familiar with formative assessment. To be familiar with its attributes and techniques such as understanding the
learning goals and making learning progressions from those goals, learning how to assess themselves and their peers appropriately, and to collaborate with the teacher and benefit from his/her descriptive feedback. All those new things in the classroom may impede the learners from reacting positively and make improvement in a period of three weeks.
GENERAL CONCLUSION

There is a controversy about the role of formative assessment in writing and spelling in particular, if it helps in developing this skill. The results of the study show that formative assessment impact on students’ spelling is not significant. However, the study aims to change the teachers’ point of view towards the assessment issue that is limited in summative assessment; to see feedback from a different angle (descriptive not just judgmental); and to have more understanding to the role of the teacher, the role of the student, and their relationship in the classroom. In addition, it aims to show how a teacher can help his/her learners and make them more responsible by sharing and discussing goals, and planning to those goals systematically with the use of learning progressions.

Limitations of the Study

This study has some limitations in that it was planned to be implemented at the secondary school level, but due to the administrative difficulty to have access to teach at this level, the study was implemented, instead, at the university level. Since, it is proved that the more the level is higher, the more formative assessment impact is limited. In addition, the treatment period is not sufficient for students to be familiar with the new changes inside the classroom like using the lollypop sticks to point students and giving descriptive feedback instead of judgmental feedback (or grades).

Suggestions for Further Research

Further research may tackle the effect of formative assessment on different dependent variables like:
1. This study shows that formative assessment has no significant effect on students’ spelling when using a quasi-experimental design. It is suggested that applying another research design could lead to a different result, and changing the dependent variable (spelling) to other language components (like punctuation, tenses,…and so on) may lead to a different result as well.

2. McManus’ (2008) five attributes for effective formative assessment are just an example, one could apply the five key elements proposed by Wiliam (2011) or Chappuis’ (2009) seven strategies.

3. Web-based formative assessment is one new area for investigation that includes by itself a variety of ideas in relation to the new technological inventions.
REFERENCES


Rudling, J. (2012). *The reasons why English spelling is so weird and wonderful.*


RESUME

La présente étude est concernée par l'enquête de l'efficacité de l'évaluation formative dans l'amélioration de la maîtrise de l'orthographe. Cette étude est effectuée en utilisant une expérience, dans lequel il existe un groupe témoin et un groupe expérimental. L'échantillon de l'étude est composé de trente-sept étudiants de deuxième année de l'anglais comme une langue étrangère, qui étudient à l'Université de Larbi Ben M'Hidi–Oum El Bouaghi–pour l'année scolaire 2013-2014. Les participants sont pré- testés par une tâche de la rédaction d'un paragraphe. Ils sont traités pour une période de trois semaines, lorsque le groupe expérimental est traité avec l'intégration de l'évaluation formative dans l'instruction et le groupe témoin est traité sans l'intégration de l'évaluation formative dans l'instruction. Ensuite, ils sont post-testés par la même tâche appliquée dans le pré-test. Après avoir analysé les résultats des deux tests (pré- et post-test) en termes de taux d’erreur, l'hypothèse alternative est rejetée. C’est-à-dire, l'évaluation formative n'a pas d'impact significatif dans l'amélioration de l'orthographe des étudiants. Enfin, les questions pour complément d'enquête sont suggérées.
المملوک

موضوع هذا البحث بدوره محاولة استقصاء مدى فاعلية التقييم البنائي (أو التكويني) في المساعدة على تحسين القدرة الإملائية.

لإنجاز هذا البحث تم اعتماد المناهج التجريبي، بحيث كان هناك مجموعة تجريبية ومجموعة مقارنة. تم تطبيق البحث على عينة مكونة من سبعة وثلاثين طالبا من طلبة شعبة اللغة الإنجليزية (كلغة أجنبية)، مستوى سنة ثانية ليسانس، بجامعة العربي بmuş مهيدي-أم البواقي- للسنة الدراسية 2013-2014. اختيرت العينة قبل بداية تطبيق البحث بكتابة درجة. بعدها طبق البحث ولمدة ثلاثة أسابيع، حيث كان التطبيق مع المجموعة التجريبية بإدراج التقييم البنائي في التدريس بخلاف مجموعة المقارنة التي تم معها التدريس دون إدراج التقييم البنائي. بعد تطبيق البحث اختير أعضاء العينة بكتابة درجة أيضًا.

نتائج الاختبارين تم تحليلهما بحساب نسبة الأخطاء، لتكون النتيجة رد الفرضية البديلة. أي أن التقييم البنائي في هذه الدراسة لم يحقق تأثيرا كبيرا في الجانب الإملائي للطلبة. تختتم الدراسة بمقترحات بحث ذات صلة بالموضوع.