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Fostering EFL Learners' Speaking Self-assessment as a Learning Autonomy with Generative AI Tools: The Case of 2nd Year Licence Students at the University of Ghardaia

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Dedication

First of all, I would like to express my deepest gratitude to the Almighty Allah for granting me help and strength to accomplish this research work propitiously.

I would like to dedicate my sincere gratitude to my husband for his wholehearted support; to my dear father, mother and my parents in law who have provided me with their encouragement, love and understanding.

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Abstract

The current study investigates the impact of Artificial Intelligence (AI) generative tools on promoting speaking self-assessment and learning autonomy among EFL learners. With AI transforming language learning, this research examines how the ELSA Speak application supports learners in assessing their speaking skills, fostering autonomy, and enhancing proficiency. The study focuses on identifying which speaking components are influenced by ELSA and how AI-supported self-assessment contributes to learner autonomy among 2nd-year Licence EFL students. Using a quasi-experimental design, the research involved a pre-test observation of a traditional speaking class with 40 students, from which 15 were randomly selected as the experimental group. These participants used ELSA to assess their speaking and autonomy over time. A mixed-methods approach was adopted, using a checklist to evaluate performance in pre- and post-tests and conducting interviews to gather learners' perceptions. Results show that ELSA is effective in improving learners' speaking self-assessment and autonomy.

Keywords: *self-assessment, generative AI tools, speaking skill, learning autonomy, ELSA application.*

List of Abbreviations

AI: Artificial Intelligence

EFL: English as a Foreign Language

LA: Learning Autonomy

SA: Self-Assessment

SDL: Self- Directed Learning

SRL: Self-Regulated Learning

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الملخص

GENERAL INTRODUCTION

General Introduction

1- Background of the study

The advent of Generative AI tools has revolutionized various sectors profoundly, including education which has entered a new era of innovation and technology. Thus, the way language is taught, assessed and learnt has been updated. In the sphere of English as a Foreign Language (EFL), speaking skill is regarded as the cornerstone and the basic part of language proficiency as it is the mean through which learners communicate and impart their ideas with others.

Recently, a significant transformation is occurring towards learners-centered approaches that prioritize individual responsibility and learning autonomy. However, ‘Taking charge of own learning’ remains a significant challenge for many students, since typically the method adopted for assessing the speaking skill is traditional and relies on teacher-centered approaches, consequently learners lose the opportunity of being engaged in the self-assessment process that permits them to evaluate their performance and identify areas for improvement as well as taking charge of their learning process according to Holec and Henner-Stachina (1985) self-assessment is a process in which learners are engaged in evaluating and judging their progress based on their needs and their goals .

In the light of the aforementioned shift, integrating AI tools into the learning process enable learners to have the opportunity to practice their language in informal situations inside or outside the classes (OCLL). According to Agustina and Fatmawati (2024) “*Out-of-Class Language Learning (OCLL) refers to informal learning activities conducted outside the classroom.*” (p. 177). Moreover, it helps learners gain access to personalized feedback that creates intertwining of self-assessment and learning autonomy.

2- Rationale

My rationale behind choosing this topic is to shed light on one of EFL learners' drawbacks, which is autonomy, given the fact that majority of Algerian classes approaches are still teacher-centered. Moreover, I try to investigate the role of integrating AI generative tools in EFL classrooms to empower learners' speaking self-assessment abilities.

3- Statement of the Problem

AI technologies have revolutionized teaching and learning English and in the light of the great emphasis on learner-centered approaches. However, speaking skill instruction still follows teacher-centered approach: this hinders learners from being engaged in self-assessment, and limits their autonomy and metacognitive development. This research is an attempt to investigate the role of AI generative tools in enhancing learners' speaking skill self-assessment and learning autonomy; hence, this dissertation raises the following main question:

Can implementing AI- powered tools (mainly ELSA application), in EFL teaching, enhance learners' speaking self-assessment and empower their learning autonomy?

4- Research Questions

- 1- What are the speaking components that AI powered tools (ELSA application) can empower?
- 2- What specific aspects of learning autonomy are most affected by the integration of Generative AI-supported self-assessment in EFL speaking instruction (ELSA)?
- 3- what are the challenges that may face students while using ai self- assessment tools (ELSA)?

5- Hypotheses

For the main question of this study, it is hypothesized that AI- powered tools can support self-assessment and empower learning autonomy via providing automated and personalized feedback.

For the sub-questions above, the suggested hypotheses are as follows:

- 1- AI- powered tools can enhance learners' pronunciation, vocabulary, grammar and fluency.
- 2- Setting goals and selecting learning techniques are some of the main aspects of learning autonomy that can be affected by ELSA
- 3- Learners may struggle on understanding and applying the feedback provided by ELSA

6- Research objectives

This research aims at examining the impact of self-assessment methods on EFL learning autonomy. It also attempts to highlight the importance of AI generative tools and the ways these tools assist learners to take charge of assessing and enhancing their speaking skill. Furthermore, the study tests the students' application perception and investigates its impact on their motivation and engagement as well as transforming learning process from teacher-centered approach to the learner-centered one.

7- Methodology

In order to test the mentioned hypotheses, this study adopted a quasi-experimental type of research employing a one group pre-test/post-test design. The participant group consists of 15 students from 2nd year licence level, at the University of Ghardaia. This level was selected because the learners still have not reached the level of high fluency in English and still face problems with learning autonomy so that the research results would be more reliable. As a first step, the pre-test was in form of observation session that took place in a traditional speaking class of 40 2nd year licence learners at the university of Ghardaia to

notice the learners' speaking weaknesses, as well as to observe the assessment method used by the teacher, that is generally traditional and teacher centered. To assess their autonomy and speaking self-assessment abilities, the researcher encouraged the participants to use an AI- self assessment application (ELSA). Thus, they received personalized feedback on their conversation with the ELSA application: based on the first feedback, they had another conversation taking into consideration the AI previous remarks.

To collect data and support the experiment, the researcher followed a mixed-method design, combining both the quantitative and the qualitative approach via using a checklist to assess the learners' performance in both pre-test and post-test as well as conducting an interview with the 15 learners, in which they were asked 10 different questions about their experience with the application, discussing the results, the advantages and the hurdles.

8- Limitation of the Study

Despite the valuable information gained from the research, many constraints need to be acknowledged. First, the instability of the internet connection during the intervention session caused interruptions and time loss, which affected the students' engagement with the application. Moreover, some learners encountered difficulties in using the AI tool, and applying the feedback provided, due to their less familiarity with the tool or lack of digital literacy.

9- Structure of the Dissertation

The present the dissertation consists of three chapters. the first chapter is devoted to the concepts of *self-assessment and learning autonomy*. The first part provides various definitions of autonomy as proposed by many scholars and highlights the main theories linked to this concept. It also includes the key characteristics of autonomous learners particularly within EFL classrooms. The second part, it defines assessment broadly and presents its different types followed by a detailed explanation of self-assessment and its tools. The final element of this chapter tackles the role of self-assessment in promoting

language learning autonomy.

The second chapter is devoted to the AI generative tools and speaking self-assessment in EFL classrooms. the first section defined the speaking skill and outlines its types and components. It also discusses the main challenges that face students when developing their speaking skill. The second section focused on AI technologies and their significant role in developing both educators and learners, additionally, it explores the different AI applications that address different aspect of language such as vocabulary, pronunciation and grammar. The last part of this chapter examines the role of AI self-assessment tools in enhancing learning autonomy taking into consideration ELSA speak application as an illustrative example.

The third chapter presents the practical part of this dissertation. it includes a statistical analysis of the quasi-experiment conducted, along with a detailed description of the students' responses from the interview. this followed by a discussion and interpretation of the findings. to conclude the chapter, some recommendations are suggested for the teachers and the learners to develop speaking self-assessment and learning autonomy.

10- Definition of Terms

- ***Self-Assessment:*** it is a process in which the learners evaluate their own performance and make judgement about their own progress. (Boud and Falchikov, 1989).
- ***Learning Autonomy:*** it refers to the learners' capacity to control and direct their own learning through setting goals, selecting the appropriate learning method and monitoring their progress. (Holec, 1981).
- ***Speaking Skill:*** it is described as an interactive process of creating meaning throughout producing, receiving and processing speech of sounds as the primary instrument (Brown, 2007).
- ***ELSA Speak:*** it is a flexible digital tool created to help non-native English learners improve their speech and pronunciation via short, app-based lessons. (Pilar et al., 2013).

Chapter One

1.1 Introduction

In recent EFL education, there's a growing emphasis on the roles of both teachers and learners. As a result, a great attention is being paid to learner performance both within and outside the classroom, reflecting a shift away from passive student roles towards a learner-centered approach. This approach emphasizes student agency, with learners taking responsibility for setting their own goals, selecting appropriate learning methods, and evaluating their abilities and skills through the development of metacognitive skills. These elements are central to the concept of "learning autonomy."

Self-assessment is a pivotal process in which learners evaluate their own learning, progress, and performance. It empowers individuals to take charge of their learning journey by developing the ability to monitor, reflect on, and judge their own work. Thus, it is a cornerstone of learning autonomy, enabling learners to become more aware of their strengths and weaknesses, identify areas for improvement, and develop strategies to enhance their learning. This metacognitive awareness allows them to set realistic goals, select effective learning strategies, and monitor their progress.

This chapter will shed light on the concept of learning autonomy, its definition and the theories linked to it. In addition to self-assessment which is regarded as a cornerstone of empowering learning autonomy

1.2 Learning Autonomy in EFL Classroom

Learning autonomy is one of the most investigated subjects in the field of education since a great shift is noticed from teacher-centered to learner-centered approach. Henceforth, autonomous learners are more motivated, more engaged. Furthermore, more successful in achieving their language learning goals.

1.2.1 Definition of Learning Autonomy

The concept of learner autonomy in language learning was first introduced in 1970's and then it became widespread and fully articulated by Holec in 1980's (Lennon, 2012).

Lennon (2012) added, Holec was the leader of the Centre de Recherches et d'Applications Pédagogiques en Langues (CRAPEL) at the University of Nancy in France, which was a self-access centre, that provided adults with resources to learn a foreign language without a teacher. The later defines autonomy as the ability of learners to take control of their learning process, he adds that autonomous learners use their skills to direct and manage their learning (Holec, 1981).

Han states: *"Autonomy is defined as being capable of making decisions based on one's perceptions of the world."* (Han, 2021, p. 4). Furthermore, Benson simply defines autonomy as *"The capacity to take control of one's own learning."* (Benson, 2001, p. 47)

On the other hand, (Little 1991) elaborates and develops Holec's idea that learner autonomy is not just a matter of leading one's learning rather than, it is about learner's mental and emotional engagement with their learning process. *"Essentially a matter of the learner's psychological relation to the process and content of learning---a capacity for detachment, critical reflection, decision making, and independent action."* (Little, 1991, P. 4)

Morrison (2011) highlighted the importance of the teacher's and peers' role in assisting the student during learning a language. In other words, autonomy cannot be achieved without the presence of teachers' and peers' assistance.

1.2.2 Theories of the Foundation of Learning Autonomy

Scholars have suggested several theories which are linked to the raise of learning autonomy.

1.2.2.1 Cognitive Constructivism

Constructivism learning theory (CLT) works on the principle that learners actively take part in discovery-based learning. Based on this theory, teachers can develop learning by binding new concepts and thoughts to the existing knowledge and experience (National University, 2025). in other words, constructivism believe that learning process is learner-centered hence, students are not passive they actively build their own understanding. Moreover, they are encouraged to discover, experiment and seek knowledge.

1.2.2.2 Meta Cognitive Theory

The concept of ‘metacognitive knowledge’ introduced to the literature of autonomy in language learning by Wenden (1995). She notes that planning, monitoring, and evaluation are considered as the three principal metacognitive strategies associated with autonomy and self-regulation (Benson, 2011).

According to metacognitive theory, during the procedure of teaching, students can employ their metacognitive knowledge to fully understand their actual learning situation, such as learning interests, habits, merits and demerits of learning. Having a certain understanding of their cognitive abilities, under the guidance of teachers, they can independently make appropriate learning goals, formulate plans, and select strategies. In the process of autonomous learning, students can have a clear understanding of the learning methods suitable for them and acquire knowledge efficiently (Zeng & Zhang, 2024, P. 406).

To put it another way, without metacognitive awareness, students may face hurdles to set realistic goals, select appropriate learning methods as well as assess their progress and identify their weakness.

1.2.2.3 Humanism Theory

It is called also humanistic psychology, it harkened back to the 1950's and 1960's and among the scholars who influenced and pushed to the development of this theory are Abraham Maslow & Carl Roger (Qi, 2012).

Zheng (2024) highlighted: *“Humanism focuses on human values, nature, potential, creativity, and self-actualization. It also emphasizes the concept of the whole person. Humanism believes that language teaching should be learner oriented.”* (P. 397).

To emphasize, this theory encompasses all what shapes humans ‘‘their thoughts, feelings, behaviors and social context’’, it puts focus on human experiences and perception. it believes that individuals have the capacity for conscious choice in shaping their own lives and destinies.

In the field of language teaching, humanism believes that teaching should be learner centered i.e. learning process should occur taking into consideration learners needs and personality not only providing learning materials, so authentic learning helps students find their unique qualities and personal identity (Zheng, 2024).

Moreover, Humanistic theory has a great impact not only on teaching and learning but increasing recognition of learning autonomy, beside it gives more importance to non-academic aspects such as self-esteem and motivation in language learning.

1.2.3 Self-Directed Learning

Self-directed learning (SDL) is one of the major features of learning autonomy. In the context of learning, SDL is a process in which learners take charge of their education, identify their needs, set their goals, choose and adapt their suitable leaning methods and strategies as well as evaluating their learning results (Kenowls, 1975).

Candy (1991) in the other hand regards SDL as a goal not only a process, in other words SDL is about the students' aim (become an independent learner who can control their learning) in addition to how to achieve that goal (the actions or the process to followed to become independent).

According to Loyens, Magda, & Rikers (2008) there are four dimensions of self-directed learning which are personal autonomy, self-management in learning, the independent pursuit of learning and the learner control of instruction. They explained *“Personal autonomy represents one of the principal goals of education in all settings and all ages. Self-management is the willingness as well as the ability of the learner to manage his or her own learning.”* (p. 414).

1.2.4 Self-Regulated Learning

self-regulated learning (SRL) is widespread in research on education recently. SRL covers many processes that impact learning such as goal setting, metacognition and self-assessment (Loyens, Magda, and Rikers, 2008)

Chik, Aoki, & Smith (2018) defined self-regulated learning as *“The concept of self-regulated learning focuses mainly on these individual qualities, such as the ability to plan one's learning and use suitable strategies to tackle learning activities.”* (p. 53).

Another definition stated by Zimmerman (1998) is that SRL is a self-directed technique that students use to convert their cognitive abilities to practical academic skills. The later described self-regulated learner as the one who understands and thinks about the strategies he

uses to learn, who stays motivated that he can succeed, set goals and focus on them in addition he can manage his time, identifies his strength and weakness and create suitable environment for learning.

1.2.5 Self-Access

Nowadays the topic of where language education might best take place in addition to the materials needed is ubiquitous.

Gender & Miller (1999) defined self-access as creating a suitable environment for learning including materials, resources, teachers and learners as well as the way they are organized.

To develop learning autonomy in language learning many things should be taken into account as self-access facilities, classrooms and online locations (Benson,2017). Mynard (2019) Defined self-access facilities as *“A catch-all expression, which incorporates all types of spaces— physical and virtual, large and small—for self-access learning. Some self-access facilities are referred to as Self-Access Centers (SACs) or Self-Access Learning Centers (SALCs).”* (p. 186), i.e., the aforementioned institutions provide resources and environments that permit learners to empower their autonomy and encourage them to take charge of their learning.

1.2.6 Characteristics of Autonomous Learners

Budianto & Masson (2022) noted that the foundational feature of an autonomous learner is the willingness to accept responsibility for active learning, rather than relying only on the teacher and course material. They added that an autonomous learner shows an initiative in learning through planning, adopting effective strategies, and systematically monitoring and evaluating progress.

Little, Dam, & Legenhausen (2017) stated:

Learners in the autonomy classroom play three independent roles. They are communicators, continuously using and gradually developing their communicative skills in the TL; experimenters with language, gradually developing an explicit analytical knowledge of the TL system and an awareness of the cultural conventions and social constraints that shape its use; and intentional learners, gradually developing an explicit awareness of affective and metacognitive aspects of language learning. (p.18).

Hence, autonomous learners according to the later scholars play an active role in their classroom, they continuously use the language being learned and try to improve their abilities to speak, listen, read and write rather than only memorizing grammar rules. Moreover, they go deeply when learning the language regarding the impact of the social and the cultural situations on the language.

On the other hand, Holec (1982) viewed autonomous learners as independent planners i.e., they have the ability to set goals, select learning materials and resources, complete and manage tasks and define the standards by which they assess and evaluate their learning.

1.3 Assessment in the Context of Language Learning

Assessment is a process used to evaluate the academic performance of a learner. Hence, it is crucial in language teaching because it permits instructors to see how well their learners are grasping the information provided in the classroom.

1.3.1 Evaluation vs Assessment

Evaluation and assessment have very different signification, yet many learners are unable to get the real meaning.

In education, evaluation is a process of judging the effectiveness and the value of programs, project, materials or techniques based on collected information. (Gullo, D. F. 2005)

Assessment is a process of gathering data according to some objectives and goals through tests, observations or assignments in order to monitor learning progress and make educational decisions if necessary. (Kizlik, R. 2012)

In essence, assessment is a part of evaluation. it can be said that the goal of assessment is to understand the learners' knowledge and skills.

1.3.2 Types of Assessment

There are several types of assessments that the teacher uses in classroom to assess their students' performance.

1.3.2.1 Formative Assessment

McManus (2008) defined formative assessment as a process used by both teachers and students during instruction that offers feedback to modify ongoing teaching and learning to empower learners' achievements of intended instructional outcomes.

Winna & Sabarun (2023) added "The purpose of formative assessment is to provide feedback on student performance while they are still forming a set of skills or competencies." (p. 414). Comments, suggestions, and corrections are among the feedback examples that can be used to helps learners develop their performance.

1.3.2.2 Summative Assessment

Unlike the formative assessment, summative assessment is generally used to report students' level at the conclusion of a lesson or unit. Teachers use this type of assessment to get a comprehensive picture of their students' learning (Winna & Sabarun, 2023).

J. Dolin et al (2018) stated different ways of collecting information for summative

assessment, they highlighted *“By administering tests or examinations, summarizing observations and records kept during the time over which learning is being reported, creating a portfolio of work, embedding special tasks in regular activities, engaging in computer-based tasks or some combination of these.”* (p.62)

1.3.2.3 Diagnostic Assessment

Diagnostic assessment is a type of assessment Jang & Wagner (2014) pointed out that diagnostic assessment aims at identifying learners' strengths, weaknesses and prior knowledge before instruction begins, it is then as a roadmap for the teachers to meet the specific needs of their students.

Some of the most important characteristics of diagnostic tests according to Alderson and Huhta (2011) are: first, it is more discrete-point rather than integrative i.e., it focuses on specific language elements and it doesn't assess the overall language, second, they argue that this test is less authentic than other tests because it focuses on specific language features. In addition, feedback should be given to the learners to understand their strengths and weaknesses.

1.3.3 Self-Assessment

Self-assessment is the process of evaluating learners' own performance and quantifying their own achievements. (Richards & Schmidt, 2010).

Marzuki et al (2020) believe that self-assessment is the method which enables students to discover, enhance and determine their performance as it develops students' neutral learning and individual goal setting through raising their consciousness of their personal learning. Additionally, self-assessment is used frequently in English language testing to measure learners 'language proficiency in the four skills. (Hung, 2019)

1.3.4 Importance of Self-Assessment in English Language Learning

Jamrus & Razali (2019) highlighted various advantages of using self-assessment in EFL classrooms. First it motivates learners to learn and reflect on their own English learning, second,

it enhances critical thinking and reflective practices. In addition, it empowers sense of autonomy in their own learning. The use of self-assessment in the classroom helps learners play an active role in their education.

1.3.5 Tools for Implementing Self-Assessment

Self-assessment tools are techniques that students use to test their own learning, achievements and progress. Hence there are several tools for implementing self-assessment.

1.3.5.1 Rubrics

Rubrics are grading tools used to evaluate learners' work, they offer grades and degrees such as (average, good, excellent), learners can use it to compare their performance against some standards in order to have more chance check and reflect on work during their learning journey.

(For Andrade, Du, Wang & Akawi, 2009).

Aspects	Score	Description
Pronunciation	91 - 100	Pronunciation is excellent and L1 accent does not affect intelligibility
	81 - 90	A few mispronunciations and L1 accents cause minimal listener distress
	71 - 80	Few mispronunciations and L1 accents cause listener distress
	61 - 70	Multiple mispronunciations and L1 accents cause severe listener distress
	50 - 60	Frequent errors with pronunciation and L1 accent cause severe strain for the listener
Vocabulary	91 - 100	Perfect use of vocabulary
	81 - 90	Rich and various use of vocabulary
	71 - 80	Vocabulary conveys mostly appropriate meaning; suitable for the level
	61 - 70	Vocabulary does not convey meaning some of the time
	50 - 60	Vocabulary does not convey meaning most of the time
Grammar	91 - 100	Grammar and spelling accurate
	81 - 90	Grammar and spelling accurate
	71 - 80	Grammar and spelling mainly accurate
	61 - 70	Grammar and/or spelling contain errors
	50 - 60	Grammar and/or spelling contain frequent errors
Fluency	91 - 100	Speech smooth and fluent, little to no hesitations, No searching for words
	81 - 90	Speech smooth and fluent, little hesitations, Minor searching for words
	71 - 80	Speech is relatively smooth, some hesitation and

Table 1.1 Rubric of Scoring Speaking in Performance Assessment (Ismailia, 2021, p. 72).

1.3.5.2 Checklists

Pintrich (2002) claimed that checklists are diagnostic tools used to record the level of proficiency throughout some checking items or learning objectives. He added that they are very useful for learners to know whether they have achieved each specific goal and to check their development.

	I don't do this	I do this sometimes	This is embedded in my practice	I could support someone else
I use student self-reports but am careful to check on the accuracy of the reporting.				
Student self-assessment is a routine part of my work.				
Students have learning portfolios that focus on their progress.				
I give students challenging tasks that are achievable with effort, and make it clear that failure is not only acceptable but also expected (otherwise the				

Table 1.2 Teacher Self-Assessment Checklist (Wiliam & Leahy, 2015, p. 209)

1.3.5.3 Portfolios

Stewart (1992) defined a portfolio as a collection of learners' works that demonstrates the students' efforts and progress in acquiring the language. It contains samples of students' work such as reading logs, lists of books read or pieces of writing, teacher observation notes, checklists, summaries of student-teacher conferences, and evidence of any other important activities the student has been involved in. It functions as a self-assessment tool as it helps students to understand their own needs and discover their abilities and instills responsibility for their own learning (Valencia, 1990)

1.3.5.4 Journals

Brown (2004) defined journals as tools used to register and record the learners' own thoughts and ideas that aims at collecting language skills including description of learning process, reflection on what was learned. In other words, students can use journals to analyze the condition that surround their learning. Although it is complex, a journal is effective that enhances learners' self-reflection.

1.4 The Role of Self-Assessment in Promoting Language Learning Autonomy

Self-assessment and learning autonomy are linked words since they nearly share the same definition and targets. On the one hand, learning autonomy refers to the learners' ability to reflect and evaluate their learning, on the other hand, self-assessment enables students to identify their progress so that it encourages them to develop themselves (Hati, Yunita, & Dewi, 2021).

Gardner (2000) stated that, by implementing self-assessment, learners will receive feedback on the efficacy of their learning methods they have used. Thus, self-assessment is very convenient to be applied in order to enhance learning autonomy.

“Self-assessment is important for language learner autonomy firstly because self-assessment focuses learners’ and teachers’ attention on to learning instead of accreditation.” (Cooker ,2012, p. 55). This means that self-assessment plays a pivotal role in redirecting students’ and teachers’ focus from accreditation to the learning act. Moreover, learners’ ability to assess their performance and using different tools of assessment in different context would assist them to control their learning (Boud ,1989)

In the same context, Khiat (2015) believed that the use of diagnostic tools to evaluate learners’ own performance is mandatory to create autonomous learners. furthermore, he suggested for students to enhance their life-long learning, they need to assess their progress and achievement in order to set their coming education.

1.5 Conclusion

Self-assessment is a successful method that support learners to point and direct their learning, since it enables them to establish goals, set evaluation criteria and judge their progress. Self-assessment also offers a great opportunity for reflection on performance, that is crucial for life-long learning.

Consequently, learners who become proficient in self-assessment can share their achievements, successfully meet assessment criteria, and attain autonomous learning goals.

Chapter Two

Chapter two

AI Generative Tools and Speaking Self-assessment in the EFL Classroom

2.1 Introduction

In this day and age, mastering English speaking skill is crucial due to its widespread use and being an effective mean of international communication for the majority of people. According to Rao (2019), speaking is regarded as the most challenging of the four basic English skills for EFL learners, due to the spontaneous nature of sentence production i.e., the speakers are required to generate sentences immediately and in real-time, paying attention to fluency and accurate pronunciation. Hence, even though traditional teaching methods and traditional classroom settings are significant and valuable, they may not always provide personalized and precise attention to every single learner to overcome these hurdles.

Luckily, the advancement of AI tools has revolutionized the TEFL sphere, providing engaging environment and interactive learning experiences. Hidayatullah (2024) stated *“Integrating information and communication technology (ICT) in language learning enables students to interact and immerse themselves in the language, regardless of location or access to traditional classroom settings.”* (p. 19).

In addition, technology has played a pivotal role in addressing the aforementioned challenges and in supporting English learning (White, 2007). This chapter will shed light on the role of AI tools in enhancing EFL students’ speaking skill, by presenting the aspects of speaking skill, the features of various AI powered applications as well as investigating the pedagogical implications of integrating these tools into EFL classrooms, considering both the benefits and challenges as well as the teachers and learners’ perception.

2.2 Speaking Skill in the EFL classroom

Bygate (1987) highlighted that speaking is a pivotal mean for learning a language, it is a skill that the learners use to build their personality and relationship with their colleagues, so learners need to be confident while speaking in order to execute many of their activities.

2.2.1 Definition of Speaking

Researches in language learning have proposed several definitions to the term “speaking”. According to Hornby (1987) speaking is the ability of using language, pronouncing words and making speech in order to express oneself thoughts and ideas in ordinary voice. Speaking is the process of communicating ideas by using verbal and non-verbal signs in different contexts (Chaney, 1998). Eckard and Kearny (1981), Torky (2006), and Leong & Ahmadi (2017) defined speaking as a two-way process encompasses a true communication of thoughts, information or sensations.

2.2.2 Components of Speaking

Speaking is regarded as pivotal skill in teaching and learning a language moreover, it connects people who speak the same language and help them to express their ideas, thoughts and emotions. In order to analyze the speech process five elements should be taken into consideration which are pronunciation, grammar, vocabulary, fluency and comprehension (Brown, 2003).

2.2.2.1 Pronunciation

Gilbert (2008) defined English pronunciation as “*Learning and practicing the specifically English way of making a speaker’s thoughts easy to follow.*” (Gilbert, 2008, p. 1). pronunciation is the manner in which speech is produced and words are uttered clearly to assure others’ understanding and comprehension (Kline 2001), i.e., learners ought to distinguish between sounds, and realize how they should be articulated to produce clearer language.

2.2.2.2 Vocabulary

Vocabulary is defined as the diction used in the conversation Turk (2003). People cannot reach language proficiency in written or oral form if they do not possess a proper vocabulary, so learners face challenges during learning a language and communication due to the lack of vocabulary.

2.2.2.3 Grammar

Green Baum & Nelson (2002) stated that grammar refers to a group of grammatical rules that that let us arrange and link words together to form various larger units. To speak English accurately, learners need to produce set well-structured sentences in conversations in other words students' ability to distinguish between different grammatical forms is crucial to speak English accurately.

2.2.2.4 Fluency

The main goal of many language learners in speaking is oral fluency being the main characteristic of the speaker performance. Ching-Ni Hsieh (2019) defined fluency as the ability of speakers to express ideas in a quick, smooth, accurate and clear way taking into consideration the temporal constraint.

In fact, many learners think of fluency as speaking fast without pauses, but actually this is wrong according to Thornbury (2005), he argues that speakers should balance between speed and pauses because they are both crucial factors in fluency. Moreover, speakers need to cut off from time to another to provide chance for the listeners to grasp what it is said.

2.2.2.5 Comprehension

Rivers (1981) also mentioned that understanding a written or spoken message counts on grasping the meaning of the word or text first, starting from the recognition of the sounds to understanding the whole idea, the use of grammar comes when the meaning is ambiguous and unclear.

It is important to mention that listening skill intervenes during speaking to play a great role in comprehension. Learners have to pay attention to the interlocutor during listening in order to recognize speech sounds grasp the meaning of every single word, so if students have a great listening ability their conversation will be a success and this will impact their speaking skill positively as well.

2.2.3 Types of Speaking

According to (Ampa, 2019) there five types of speaking that can be assessed and trained They are imitative speaking, intensive speaking, responsive speaking, interactive speaking, and extensive speaking. These later types are significant for learner, hence, by understanding and practicing them, learners can progressively enhance their speaking level from beginner to advanced level.

2.2.3.1 Imitative Speaking

It is an important step in developing speaking skill, it assists learners to reproduce (parrot back) English sounds accurately paying attention to individual sounds (segmental) and the features that affect the production of sounds (suprasegmental), for instance ‘stress and intonation’, this helps students to be more comprehensible. Hence, the tasks are created by taking into account the simple phonological imitation of oral production, this involves tasks such as imitation of sounds, words, phrases, sentences, dialogues and even monologues.

2.2.3.2 Intensive and Extensive Speaking

Intensive speaking refers to the production of stretches of oral language designed to show the competence phrasal, lexical, grammatical or phonological relationship. Intensive speaking includes several tasks such as directed response task, reading aloud, dialogue completion, picture-cued tasks and translation task. While extensive speaking involves longer and more complex oral production tasks that requires learners to use language freely and creatively, the tasks are oral presentation, picture-cued, story-telling.

2.2.3.3 Responsive and Interactive Speaking

Responsive speaking involves short, basic interactions that test learner's ability to understand and get engaged in simple English conversations such as question and answer, giving instruction and direction as well as paraphrasing. Interactive speaking used to train speaking ability, it requires the learners to be dynamic in order to participate in conversations in which they exchange ideas and interact with others.

2.2.4 Speaking Challenges

during the journey of learning English language, numerous issues may face the students when they attempt to speak, as well as teachers when they come to help their learners to produce the language in the classroom. These problems are inhibition, lack of topical knowledge, low participation, and mother tongue use (Tuan & Mai, 2015).

Leonita, et al. (2023) mentioned that Lacking vocabulary, pronunciation, grammar, and self-confidence affects students' fluency in speaking.

Inhibition refers to the students' feeling of being worry about making mistake and scared of criticism as well as feeling ashamed of the other learners' attention and comments toward their performance as a result, this affects their self-confidence and block them from expressing their ideas freely and fluently (Leong & Ahmadi, 2017).

Another hurdle mentioned by Leong & Ahmadi (2017) is that the students suffer from lack of vocabulary and thoughts, that is probably because the topic selected by the teacher is not of their interest or learners do not have enough information to tackle it hence, the learners feel demotivated and unable to speak. Baker & Westrup (2003) supported the later idea as well, they mentioned that it is hard for the students to discuss a topic suggested by the instructor in a foreign language, because they have little thoughts and vocabulary about the topic as well as the lack of the accurate grammar.

Leong & Ahmadi (2017) stated that classes with large number of students is considered as an obstacle because the learners at that class have less opportunity to speak moreover students with a high level of speaking may dominate and take more time talking and interacting with their teachers, as a result the other students play the role of a listener the majority of the time and lose the chance of participation.

The last problem to discuss is the use of native language in classroom. When the students share a common mother tongue, they use it to discuss unfamiliar topics or when they face language difficulties. Moreover, according to Harmer (1991) when the teachers do not encourage their learners to communicate using English, they automatically resort to their native language to explain and express their thoughts and ideas. The final cause points out that if the instructors use their learners' native language frequently in the classroom, learners will feel at ease to do so in speaking sessions.

2.3 AI and TEFL

Artificial intelligence (AI) is revolutionizing the domain of language learning and teaching, especially teaching English as a foreign language by providing creative tools and resources for both teachers and learners.

2.3.1 Definition of Artificial Intelligence

According to Pokrivcakova (2019) The term “ Artificial intelligence” appeared for the first time in 1956 by John McCarthy, he added that computers will have the ability to simulate the humans' cognitive functions. Moreover, AI tools will be able to think like humans.

Baker, Smith, and Anissa (2019) define AI as “*Computers which perform cognitive tasks, usually associated with human minds, particularly learning and problem-solving.*” (p 10).

Another definition stated by Luckin et al. (2016) who define AI as computer systems that have been created to get engaged with the world through human-like abilities such as visual perception and speech recognition and intelligent behaviours.

2.3.2 The Role of AI in Educators and Learners Development

AI in education witnessed a significant shift in teaching and learning approaches Meylani, R. (2024)., in other words, AI has a positive impact on learners and teacher's career.

Sudjitjoon et al (2022) emphasized that by analyzing student data, AI-driven analytics have considerably developed both students' engagement and academic performance showing AI's profound influence on educational outcomes. Moreover, AI technologies such as Intelligent Tutoring Systems (ITS), AI-driven analytics, and automated assessment tools participate to creating personalized and active learning experience. For instance, ITS is able to create courses based on learners needs, supplying them with individualized support and feedback (VanLehn, 2011). Furthermore, AI generative tools, such as gamification elements foster student motivation and engagement, creating a dynamic and interactive learning environment (Preiksaitis, 2023).

On the other hand, AI plays a pivotal role in developing and facilitating teaching process. For instance, it can improve the teaching methods by providing data-driven insights into student performance, enabling instructors to make informed adjustments to their teaching practices Meylani, R. (2024).

However, X. Tan et al. (2024) insisted that to ensure high-quality instruction, teachers must be proficient in AI technologies. This entails a profound examination of how teachers currently utilize AI and a concerted effort to align professional development programs with their actual needs.

2.3.3 Artificial Intelligence and Speaking skill

The incorporation of AI into teaching speaking skill has received an extensive exploration in educational research. Madhavi et al. (2023) in their research, investigated the advantages of AI technologies and their role in enhancing learners' communication skill. They conducted an experiment on 100 students in the 7th grade at an Indian school, the researchers

shed light on the students' superior performance after being taught using information communication technologies (ICT) compared to the other group taught by the traditional methods, they emphasized the parts of spoken skill which have been empowered as well.

Another aspect of this incorporation is searched by Cherner et al. (2023), who studied AI- powered presentation platforms, that provide virtual spaces for practice and receiving feedback. Their research explored how these platforms enhance public speaking and some metrics like pitch, eye contact, and volume, exploring their ability to empower oral proficiency. In Zhang et al. (2024) research, they examined the use of AI- speaking tool and its remarkable impact on boosting learners' motivation and desire to communicate as well as decreasing language anxiety.

2.3.4 Artificial Intelligence and the Aspects of Language

In addition to speaking and the other skills, AI has a significant impact on aspects of language like grammar and vocabulary.

2.3.4.1 Grammar

Improving English grammar using AI has been a subject of study recently in the EFL context. Kim (2019) examined the impact of using AI chatbots on Korean students' English grammar skills. The research showed that the learners using chatbots presented greater improvement in their grammar compared to those who interacted with human partners.

Another study done by Alotaibi (2023) in which he explored the influence of AI-powered tools such as Grammarly on grammar proficiency, the researcher mentioned the application's effectiveness in identifying grammatical errors, offering explanations and developing learners' confidence, he argued:

Grammarly gives users feedback by highlighting errors so students may notice, read them, and fix their writing, which benefits students' writing skills. Importantly, it gives indirect feedback, which helps many students who prefer not to get direct feedback from others. (p.16).

These studies in addition to others, indicated clearly that AI tools have the potential to enhance learners' grammar skill.

2.3.4.2 Vocabulary

Researches have shown that AI has effectively empowered and enriched EFL learners' vocabulary. Wei-Xun & Jia-Ying (2024) proved in their study the ability of AI applications to significantly assist learners to acquire language i.e., improve vocabulary retention and recall abilities, they explained that the later results are achieved through personalized learning experience and feedback provided by these applications.

Liu & Chen (2023) investigated the impact of an AI-based object detection translation app (ODT) on EFL learners' vocabulary acquisition. The findings showed that students who used the app learned more than the others with traditional techniques.

2.3.5 AI tools in TEFL

AI tools are changing and developing TEFL domain by providing innovative language learning methods. These include interactive chatbot communication, grammar improvement, and writing skill enhancement as well as speech assessment through advanced software.

2.3.5.1 Chatbots

Novel studies have shown the efficiency of AI chatbots in empowering EFL learners' language skills. Kim et al. (2021), investigated the effect of AI chatbots on the speaking skill of university students in an English course. The research demonstrated that the learners who used AI chatbots regularly benefited and improved their speaking abilities, they explained that

students feel more engaged and relaxed but less anxious when they have conversations with a machine rather than a human being. Moreover, the study concluded that speaking with AI chatbots is effective for improving pronunciation.

2.3.5.2 Speech Recognition Tools

Campbell & Des (2008) created PHONLAB, an interactive multimedia tool incorporating automatic speech recognition for phonetic practice. Their study was conducted on group of students, teachers and members of the academic management at a private university in Dublin. The results showed that the learners were engaged and relaxed when using PHANLOB.

Campbell & Des (2008) declared that the instructors' observations suggest that the learners were engaged with the tool easily after the orientation and the instruction from their teacher. Moreover, the teachers confirmed its importance as a phonetic teaching resource and using it as a supplement to their teaching.

2.3.5.3 Grammar and Writing Assisting Tools

AI grammar and writing assisting tools have a great influence on EFL learners' writing skill. Nurmayanti & Suryadi (2023) assessed in their study the role of QuillBot in developing students' scientific writing. Furthermore, their research emphasized how this application aids the students create authentic articles and papers, hence, its role decreasing plagiarism and maintaining the original meaning when paraphrasing.

In addition, Grammarly application demonstrated its effectiveness in assisting students to correct their spelling and grammar, improve the punctuation usage, enhance clarity, refine the writing style and enrich the vocabulary. (Karyuatry, Laksnorina & Rizqon, Muhammad Dhika Arif, 2018).

2.3.5.4 Personalized Learning Applications

AI-based personalized language learning has lately changed language education. Hence, personalized learning is a learning model in which students are involved in determining their goals and needs.

Chysafiadi et al. (2022) in their study, investigated mobile-assisted learning, demonstrating adapting and personalizing education to students' needs. Their system incorporates AI to detect and identify errors and provide feedback showing encouraging results in educational effectiveness.

2.3.6 The role of AI tools in fostering learning autonomy

AI tools have a great potential in empowering learning autonomy and self-regulated learning in language education. AI generative tools can supply students with the resources and the help they need to take charge of their learning, set their own goals and supervise their progress (Mohebbi, 2025).

Yekollu et al (2024) mentioned that personalizing the learning experience and providing immediate feedback are one of the crucial roles of AI that develop learners' skills and confidence required to become autonomous. Moreover, the use of AI in language learning may assist in the development of metacognitive skills, such as self-reflection and self-assessment, that are fundamental and effective for learning autonomy (Zimmerman, 2002). The later added that the aforementioned skills support learners to play an active role in their learning, taking informed decisions about their learning strategies as well as setting their approaches according to their progress and feedback.

Rehman (2024) Highlighted the important role of chatbots in enhancing learners' engagement and autonomy, by providing flexible and helpful resources that complement traditional education.

In non-English-speaking nations, the use of technology in education to develop autonomy has increased. In a study conducted by Tuzi & Elçiçek (2020) in which he explored the influence of a computer-assisted language learning (CALL) program called "Tell Me More" in promoting English learning autonomy among Turkish learners. The program includes interactive tasks, video-based lessons and feedback mechanism to provide students with personalized learning experience. This study discovered that the students who used this application developed their English language proficiency and became more autonomous in their learning (Agustini, 2023).

2.3.7 AI self-assessment tools

Self-assessment is a technique used by learners to evaluate their learning, performance, understanding of a specific subject or skill.

AI originates modern methods of assessment in EFL teaching and learning including peer assessment and self-assessment that are effective in fostering students' motivation and engagement (Li, 2021).

Chang, Lin, Hajian, & Wang (2023) mentioned that AI tools are effective in empowering students' self-assessment since they have the ability of providing feedback that helps the learners improve their weaknesses. They added that, this feedback can be personalized to each learners' requirements and learning style. For instance, AI can detect grammatical and spelling errors and correct pronunciation mistakes as well as finding out incorrect sentences and structures (Fitria, 2021).

According to a study conducted by Agustina & Fatmawati (2024) in which they revealed that students used various mobile application to assess themselves through completing exercises, advancing to the next levels and taking weekly quizzes. Thus, these activities help learners to be engaged in self-assessment to check their learning achievement as well as the areas needing improvement. Ai generative tools provide various, engaging and effective.

2.3.7.1 ELSA Speak

the ELSA speak is an AI-powered application featured by enhancing spoken English proficiency, through receiving personalized pronunciation training and real-time error correction (Masekan, 2024).



Figure 2.1 ELSA Speak Logo (Imran, 2025, p. 19)

According to Kusumah (2017), ELSA speak is an accessible app that is available for both IOS and Androids users. Moreover, this app is considered as a self-directed and autonomous learning tool created to enhance English pronunciation using developed technology and without requiring the instructor presence.

Hasbi & Nursaputri (2024) conducted research on eight- grade students at an Indonesian Islamic Junior high school, to examin how ELSA speak app enhances learners' English-speaking skill. The findings showed that the use of the ELSA application has a fundamental positive impact on the students' English- speaking proficiency.

Hasbi & Nursaputri (2024) stated:

Practically, students used the ELSA Speak application by taking advantage of its dictionary feature, which allows them to record their voices using built-in tools. The app then provides corrections and feedback, helping students refine their pronunciation. Additionally, the feature offers audio examples that correctly pronounce words or sentences, guiding students toward accurate speech (p. 99)

ELSA Speak possesses many benefits as highlighted by Syabina and Rahman (2024), students can utilize AI-powered speaking tools to practice correct pronunciation independently. In addition, learners have the chance to practice accurate, correct speaking in various settings such as homes, in order to free them from the anxiety of public performance, another point is that ELSA provides personalized feedback on various speaking aspects such as pronunciation, intonation, fluency, word stress, listening and contextual vocabulary resulting in significant improvements in students' speaking ability.

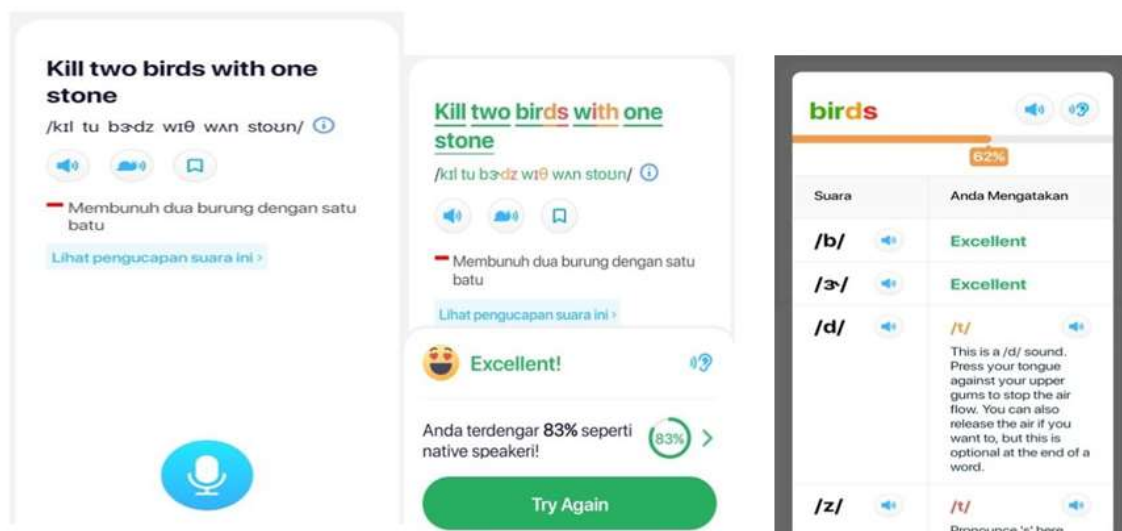


Figure 2.2 ELSA Pronunciation Feedback (Imran, 2025, p. 17)

ELSA app also incorporates situational learning, gamified activities and a welcoming multicultural setting to increase learners' engagement and make learning experience more enjoyable. Furthermore, instructors find ELSA useful to easily pinpoint students' pronunciation difficulties, so that helps teachers offer more effective and personalized lessons.

2.3.8 Challenges of Integrating AI into TEFL

Alghamdy (2023) highlights that although the implementation of artificial intelligence in education has many advantages, still it has its drawbacks that requires a thoughtful and methodical approach.

Aldosari (2020) stated that the advancement of information technologies represents many challenges for many institutions as the problem of resistance in which teachers avoid integrating AI in their work because of the lack of knowledge and limited access to these tools. Therefore, instructors would prefer sticking to traditional teaching methods rather than adapting innovative ones. To treat that, it is better to prioritize the implementation, the training and the development of digital skills, this will provide the professionals and the teachers with knowledge not only to comprehend the technological environment, but to shape it and adapt it to suit their need.

Lartey, N. N. A. (2024) claimed that students may use AI in an unethical way through activities such as violating academic integrity by acts of plagiarism cheating or submitting assignments done without their efforts.

the solution addressed by scholars is that teachers should be well trained in implementing AI tools into their teaching methods. Moreover, the overuse of AI technologies and the reliance on these tools, leads to hinder the learners' critical thinking skill and block their learning process. Similarly, this obstacle may face teachers as well.

Akgun & Greenhow (2022) identified various ethical issues surrounding AI in education, including privacy breaching, bias and discrimination. They emphasized that these ethical hurdles and difficulties faced by the teachers vary depending on the age, the level and the developmental stage of their learners.

Even though AI has the ability to create lesson plans in short time, the quality of these lessons is always under judge. In other words, AI lessons may not take the learners needs into consideration, so instead of spending time to adjust, analyze and improve the lesson to meet the students' needs and to guarantee perfect learning outcome, teachers simply accept what AI generates just to save time and efforts.

One of the biggest problems with AI in education is the digital gap, I.e., the inaccessibility of certain students to generative AI tools that leads to discrimination and inequality in classrooms. For this reason, it is mandatory to ensure that every student, regardless of socioeconomic factors, has access to these tools (Fung & Stein, 2023).

Users	Benefits	Challenges
Teachers	<ul style="list-style-type: none"> - Economy in time. - Workload reduction. - Providing training resources 	<ul style="list-style-type: none"> - Data protection and privacy. - Originality and plagiarism. - Failure to determine the level of readiness. - The challenge of developing AI-powered applications

Table 2.1 Advantages and Disadvantages of AI Chatbots for Teachers (Gokcearslan et al., 2024, p. 24)

Users	Benefits	Challenges
Students	<ul style="list-style-type: none"> - Increased motivation to learn. - Language skill development. - Improved learning performance. - Personalized and adaptive learning environments. - Instant feedback. - Ease of access. - Self-regulated learning. - Active participation 	<ul style="list-style-type: none"> - Limitation of interaction. - Misleading answers. - Limitation of personalized feedback. - Failure to understand complex expressions - Outdated responses. - Decreased communication skills. - Mechanics of voice and intonation. - Difficulty getting used to technology

Table 2.2 Advantages and Disadvantages of AI Chatbots for Students (Gokcearslan et al., 2024, p. 25)

Chapter Three

Chapter three

Data Analysis and Recommendations

3.1 Introduction

The third chapter deals with the empirical phase of this work. It investigates the impact of ELSA speak (AI self-assessment tool) on EFLs' learning autonomy and speaking skill. Moreover, it aims at shedding light on the main research elements and procedures that have been used to conduct the experiment and collect data in this study. The present work seeks to examine the learners' perception of the notion of autonomy and the role of ELSA speak self-assessment tool in enhancing their language learning autonomy, so the chapter in hand presents description and interpretation of the data collected through mixed methods (qualitative and quantitative). The experiment phases (pre-test, intervention and post-test) as well as the interview held with the students of second year license at the university of Ghardaia. Furthermore, this chapter also introduces some recommendations and suggestions for both the learners and the teachers.

3.2 Research Methodology

3.2.1 Research Design

The current study relied on a quasi-experimental design due to the nature of the study (as ELSA is recently utilized tool for EFL learners' self-assessment). Furthermore, it adopted the quantitative approach which allows us to illustrate the results statically, as well as the qualitative one to go in depth in our research theme and to address the present research questions, via analyzing the interview directed to the students. We attended sessions of oral expression in a traditional class that contains 40 students to observe their speaking performance, using a checklist as a pre-test procedure. We selected 15 students of them randomly to use ELSA speak to assess their speaking competences. The results provided were assessed using the same checklist of the pre-test to check their progress in the post-test phase.

3.2.2 Population and Sample

The population of this study includes second-year licence students of English department, Ghardaia University. the total number of the students who were present in traditional oral session was 40, from which, a sample of 15 students were selected randomly to participate in the experiment (to use ELSA speak application). the number of the sample is suitable to conduct the experiment as it allowed for effective implementation of the experiment. Moreover, due to the limitation in the university's internet connection, working with a large number of students make the experiment unfeasible. In addition, a smaller sample enables the researcher to dedicate more time to each participant and focus more on the application rather than being distracted when managing a large group.

3.3 Data Collection

The data collection process of this quasi-experimental study involved a three-phase design, consisting of a pre-test, an intervention, and a post-test, in addition to the interview conducted with the students to gain in-depth insights. The checklist bellow was used to assess the participants in both the pre-test and the post-test phases. It is divided into 5 main sections. The first section tackled pronunciation areas (utterance, intonation, stress) that covers 3 points for each aspect. The second section included fluency aspects (vocabulary variation, the flow of ideas, coherence and cohesion, non-hesitation and pauses, smoothness and continuity) that is 5 points for each aspect. The third section dealt with grammar elements (structure, conjugation, the accurate use of pronouns/articles and prepositions) that is 4 points for each element. The fifth part is dedicated for self-assessment aspects that targeted the learners' ability to identify their weaknesses and strength, as well as to correct their own errors (3 points for each feature). The last section covered learning autonomy features, which focused on students' goal-setting and strategy adaption in addition to self-confidence problems that is 5 points for each feature. The total score in the speaking checklist was determined by the sum of all ratings out of 20 points for each participant.

Features	Grades
Pronunciation <ul style="list-style-type: none"> - Utterances - Stress - intonation 	3
Fluency <ul style="list-style-type: none"> - vocabulary variation - organizing ideas - coherence/ cohesion - Non-Hesitation and pauses - smoothness and continuity 	5
Grammar <ul style="list-style-type: none"> - structure - conjugation - accurate use of preposition/ article/ pronouns 	4
Self-assessment skills <ul style="list-style-type: none"> - identifying strengths/ weaknesses - self-correction - seeking feedback form peers/teacher 	3
Learning Autonomy <ul style="list-style-type: none"> - Taking initiative to speak - Using resources to improve learning - Adapt learning strategies to the needs - Self-confidence - Shyness and anxiety 	5
Pre-test scores total	20

Table 3.1 Speaking Skill Assessment Checklist

3.3.1 Pre- test phase

The pre-test was in form of observation sessions. We have attended sessions of oral expression module with 40 students of second-year licence at the Department of English, university of Ghardaia. The duration of each session was 1h and 30 min. The observation session helped us to detect learners speaking weaknesses and to observe how the teacher corrects them (feedback). In other words, the goal behind this observation is to compare the traditional teacher-centered method with the modern approaches that involves self-assessment and autonomy.

3.3.2 Intervention Phase

The intervention session was held after the observation one (pre-test). The number of the students selected was 15, they were asked to download ELSA speaking application on their mobile phones. The session took 1h and 30 min. we started by a brief explanation of the experiment its goals and the steps to be followed to use this application. Only few students had experience with this application whereas the others have never used it before. The learners' selected a topic of their interest started talking individually with ELSA speak AI tool. The advice given to them was to make their conversation as long as possible to get better results. Once finished, the students automatically received detailed feedback from the application. The feedback covered all the aspects of speaking (pronunciation, grammar, vocabulary). Each sentence recorded was corrected. The learners were asked to repeat the conversation several times again taking into consideration the feedback given by the application. (The ELSA speak scores were automatically updated the learners' latest progress).

3.3.3 Post-test Phase

The students were encouraged to have the conversation again with another topic to determine how their performance had changed. The results provided by the application were tested again using the checklist above to grade the students' performance using the same scale.

3.3.4 The Students' Interview

The interview was designed based on the main hypotheses and components of the two chapters in the theoretical part. It was addressed to students of second year licence, at the university of Ghardaia, who were the sample of this experiment. The interview consisted of 10 questions and discussed with 15 students, with whom we applied the AI tools, in order to know to what extent Elsa speak influenced their autonomy and self-assessment. In addition, it helped us to explore the learners' perception, challenges faced with the application. The learners'

answers were recorded in order to be analyzed later.

3.4 Data Analysis

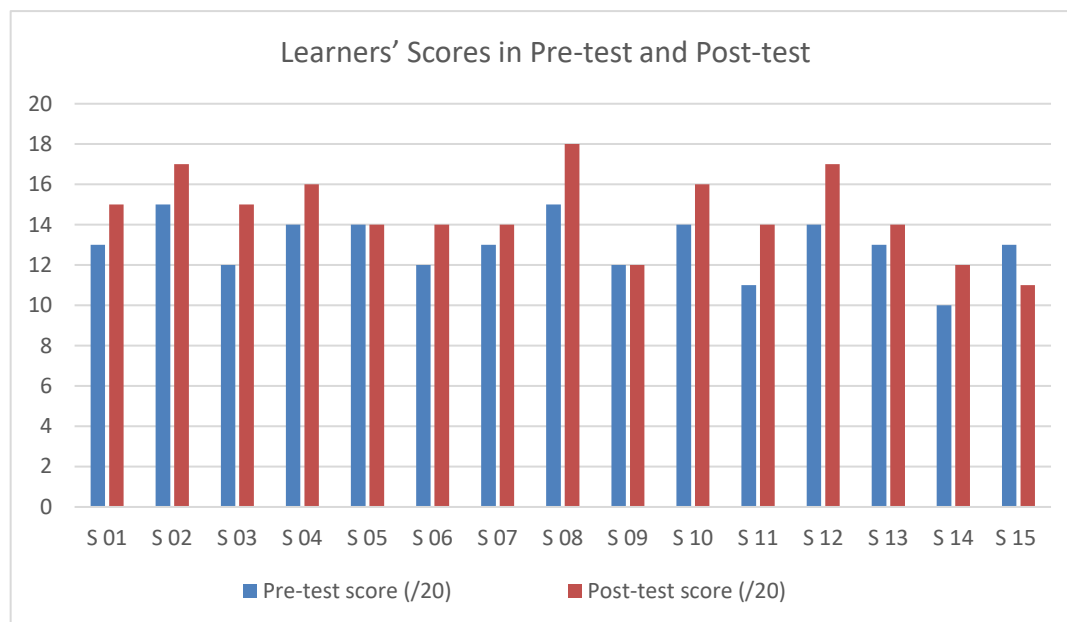
The current study utilized various experimental research qualitative and quantitative descriptors, including frequency, mean, and standard deviation to evaluate the efficacy of ELSA speak application in empowering the learners' speaking self-assessment skills and learning autonomy. the pre and post-test scores were collected at the end of the experiment and interpreted using statistical and graphical analyses. The aim was to scrutinize and test the underlying hypothesis, which proposed that the adoption of this application would lead to an improvement in the speaking skills self-assessment, as well as the learning autonomy of the participants.

3.4.1 The Participants' Scores

The speaking test scores of the participants in the pre-test and the post-test phases are presented in table 3.2 and graph 3.1 below.

Learner (N)	Pre-test score (/20)	Post-test score (/20)
S 01	13	15
S 02	15	17
S 03	12	15
S 04	14	16
S 05	14	14
S 06	12	14
S 07	13	14
S 08	15	18
S 09	12	12
S 10	14	16
S 11	11	14
S 12	14	17
S 13	13	14
S 14	10	12
S 15	13	11
Sum of scores	195	219
Mean of scores	13.0	14.6

Table 3.2 Learners' Scores in Pre-test and Post-test



Graph 3.1 Learners' Scores in Pre-test and Post-test

The data displayed in both the table and graph indicate a prominent difference in scores achieved by the learners in the pre-test and post-test. This is illustrated by the total scores obtained by the participants, which amounted to 195 in the pre-test and 219 in the post-test, representing a substantial difference of 24 points between the two totals. However, students 5 and 9 kept the same level whereas the grade of student 15 has decreased this is probably due to his unfamiliarity with technology and AI tools. Based on this analysis, we can tentatively infer that the intervention and treatment have positively impacted the most participants' performance and have been effective in enhancing their speaking skills.

3.4.1.1 Frequency of Scores

The frequency of learners' scores is presented in the table below, which displays the distribution of scores in ascending order.

Pre-test		Post-test	
Score	Frequency	Score	Frequency
10	1	11	1
11	1	12	2
12	3	14	5
13	4	15	2
14	4	16	2
15	2	17	2
-	-	18	1
Sum	15	Sum	15

Table 3.3 Frequency Distribution of Pre-test and Post-test Scores

To gain detailed data of the learners' progress, it is necessary to examine the score range in both the pre-test and post-test, including the highest and the lowest scores.

Regarding the pre-test scores, the data indicated that:

- The scores ranged from 10 to 15, with a remarkable predominance of the scores 13 and 14.
- 15 was the highest score in the pre-test.

Concerning the post-test scores the following observations were marked:

- The scores ranged from 11 to 18. The most frequent score was 14.
- 18 was the highest score.
- All learners performed better in the post-test in comparison to the pre-test, except for the two participants who kept the same level and the one of who scored less.

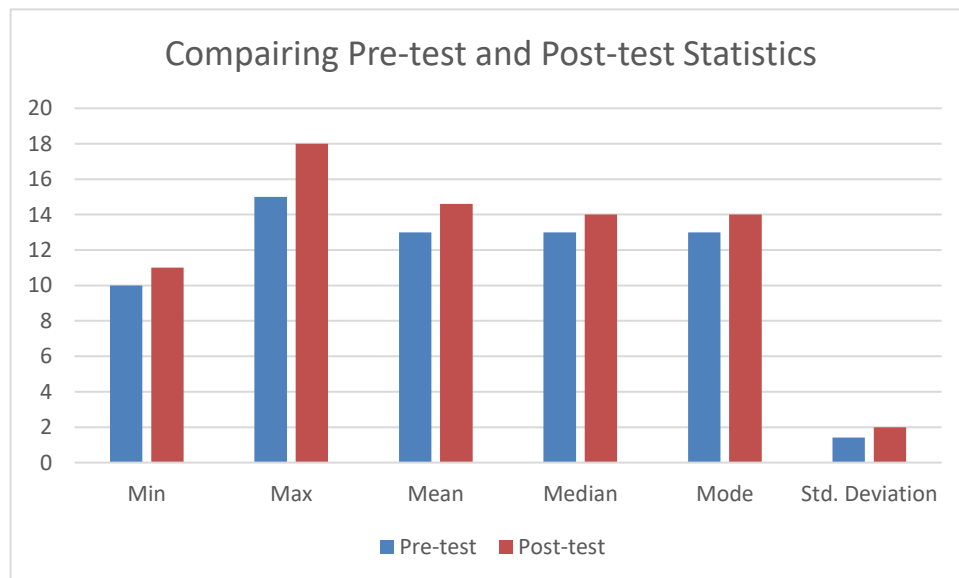
3.4.1.2 Descriptive Statistical Analysis of the Pre-test and Post-test Scores

The pre-test and post-test scores of the experimental group were described using statistical analysis, as presented in table 3.4.

Descriptive statistics	Min	Max	Mean	Median	Mode	Std. Deviation
Pre-test	10	15	13	13	13	1.41
Post-test	11	18	14.6	14	14	1.99

Table 3.4 Descriptive Statistics of the Pre-test and Post-test Scores

The average of all the scores for the pre-test is 13, while in the post-test phase, the average increased to 14.6. This indicates a marked difference in scores between the pre-test and post-test. Graph 3.2 below displays a graphical representation of the descriptive statistics shown in the table above.



Graph 3.2 Visual Representation of Pre-test Post-test Descriptive Statistics

Graph 3.2 highlights clearly a significant difference between the pre-test and the post-test results which highly suggest that ELSA speak application improved the majority of learners' speaking skill and self-assessment techniques.

3.4.2 Analysis of the Students' Interview

Q1. What were your favorite features of ELSA speak?

6 students have agreed on the same feature which is pronunciation correction, they added that the application emphasized and corrected the sounds, stress and even intonation. 2 students liked the the self-correction opportunities provided by the application, they explained that repeating the conversation several times and receiving updated scores encouraged them to pay attention to their weaknesses. The rest of students have mentioned that the application was helpful as it allows them to speak freely without shyness and anxiety.

For the first question, among several positive features of this application the most attractive ones for the learners were that of pronunciation correction and self-correction as well as the opportunities it offers to students to express their ideas freely.

Q2. Did using ELSA speak motivate you to speak? How?

All of the students' answers were positive, 14 students argued that ELSA speak motivated them to speak because they can notice their progress immediately through its personalized feedback, so this boosts their confidence, engagement and motivation. One student mentioned that the experience was fun and motivating as he considered the application as a game not a studying program.

Q3. How did ELSA speak's feedback help you?

The students shared all the same answer about this question, they confessed that the application's feedback showed them their exact weaknesses so that they make sure to avoid them when speaking. They even emphasized some common feedback related to grammar (present simple final 's') vocabulary (repeating the same word) as well as pronunciation.

Q4. To what extent did ELSA speak boost your self-assessment skills?

13 students replied that ELSA helped them to self-correct their mistakes based on the remarks provided by the application, they all agreed that it facilitates getting feedbacks at any time and everywhere without relying always on the teacher. 2 of the learners confessed that they

have benefited from the feedback but they still do not know how to identify their mistakes in the future by their own.

Q5. Did the application encouraged you to become an independent learner?

Explain.

All of the students admitted that ELSA speak helped them to become autonomous learners, as it permits them to practice wherever and whenever they want, they added that they do not need to wait for the teacher to provide them with feedback. Moreover, the feedback provided by the application helped them to analyze their errors and fix them Independently.

Q6. Did ELSA speak help you set personal goals for you speaking improvement?

one of the learners clarified that one of his first goals was to gain higher scores after each try, he illustrated by mentioning his first score and final one (from 60% to 80%). the other students stated that ELSA speak helped them to set goals because it gave them feedback on different aspects (grammar, pronunciation, vocabulary...). Therefore, they could decide which area they need to improve first moving to the others.

Q7. What were the challenges encountered while using ELSA speak?

The most repeated answer was that low network make it very difficult to use the application everywhere. 4 students mentioned that they felt bored because sometimes the application does not get exactly the idea of the learner. 3 learners stated that they rely on AI answers more than their own ideas, they explained that whenever they miss vocabularies they click on “skip” or they just use the answers suggested by the application.

Q8. How does the feedback from ELSA differ from the feedback you receive from your teachers?

The learners all agreed that ELSA speak gives more detailed feedback, it focuses on every single element of speech (pronunciation, intonation, repetition...) they clarified that even though teachers' feedback is important still their remarks are general because they can't correct every single mistake for 40 students. One student added a different comment, she said that

however ELSA speak is useful and provides well detailed feedback, the teacher can understand the cause of the mistake from the context and gives more suitable feedback which ELSA speak can't provide.

Q9. Would you continue to use ELSA speak after this study? Why?

The students shared the same answer that they will use it again, some of the learners justified that because it is accessible everywhere and anywhere even if they did not practice in class, still they have the chance to speak outside and get feedbacks. Other learners mentioned that ELSA speak helped them to know their weak areas, so they set their goals based on that feedback to make their speaking better in a short time. Only two students said using the application many times made them feel bored because they felt that the answers were repetitive.

Q10. Based on your experience, would you recommend ELSA speak to other ELF learners?

All of the students recommend the application for beginners, they clarified by saying that beginners lack speaking bases such as pronunciation intonation and basic grammar this would help them improve these areas alone. moreover, they said that the application encourages learners to set goals and be independent and aware of their needs. The fin

3.5 Discussion of the Results

First, the scores of the pre-test of this experiment according to the prepared checklist and the observation session, proved that students have weaknesses in various areas of speaking, including mispronunciation, limited vocabulary that affected fluency and frequent grammatical errors. In addition, it was noticed that learners were generally passive during the session, they relied heavily on the teacher's feedback, that is because of the lack of motivation and limited familiarity with self-assessment techniques. After he intervention session conducted with the experiment group, it is noticed that the learners were engaged with the application, they actively interacted with the application and expressed themselves more freely. The post- test results

revealed a clear progress in the learners' speaking skill, and an increased awareness of their mistakes, suggesting that the intervention had a positive influence.

The second instrument used in this research was the interview, which provided rich information about the learners' experience with ELSA speak application, particularly concerning its impact on self-assessment and learning autonomy. The analysis of the interview answers showed several findings. first of all, one of the most appealing feature of ELSA application as mentioned by the participants, was its pronunciation correction function. this application offers detailed feedback and addresses various aspects of pronunciation, that makes the tool more valuable to the learners. Moreover, students reported that speaking freely without feelings of anxiety or shyness was another significant advantage of using AI tools like ELSA speak.

Secondly, the feedback provided by ELSA speak boosted students' confidence, engagement and motivation. Thirdly, the application contributed to the development of learners' self-assessment skills through enabling self-correction based on the detailed feedback it provided. Furthermore, the availability of the application anytime and anywhere helped reduce students' dependence on the teacher and increases greater autonomy and metacognitive awareness. In other words, students became more capable of analyzing their own answers identifying their strengths and weaknesses and reflecting on their progress. As a result, one of the main roles of the application is to assist learners in setting personal learning goals by highlighting the areas that need improvement.

On the other hand, despite the numerous benefits offered by the application, students identified several challenges they faced during their experience with ELSA speak. these included issues such as poor internet connection, over-reliance on AI answers as well as feelings of boredom. these findings suggest that while ELSA speak is a valuable educational tool, it should be regarded as a complementary tool that works hand in hand with the teacher guidance. Though, the students expressed a great willingness to continue using ELSA speak, primarily

due to its ease of access and its great role at identifying areas of weakness which is an aspect that help them in setting their personal goals. The application is highly recommended for beginner-level learners since it paves the way for building essential speaking skills, including pronunciation, intonation and basic grammar. Additionally, it plays a significant role in promoting independent learning and fostering self-assessment abilities.

3.6 Recommendations

From the findings of our research, we can sum up that self-assessment process plays a crucial role in enhancing the speaking skill as well as learning autonomy. What makes the process easier is the use of AI powered tools, such as ELSA speak since it increases students' motivation and engagement. However, students of second year licence are still encountering a lot of difficulties in controlling their learning and applying speaking self-correction. Thus, some recommendations could be suggested:

- Learners are required to take charge of their learning by understanding their educational situation, setting goals, selecting the appropriate methods and strategies to ensure better results.
- For teachers, they have to integrate various strategies to empower learners' self-directed skills by providing them with freedom of choice and the opportunity to create their own goals
- Learners need to implement self-assessment techniques to check their progress and to identify their weaknesses and strengths.
- Teachers should train their learners to use self-assessment techniques and offer them with different activities inside and outside the classroom, in order to give students the opportunity to test what they did and what they need to do to achieve better outcomes.
- Teachers have to provide guidance and training on how to use AI tools since some students face difficulties in using the application and interpreting the feedback provided by AI.

- learners shouldn't rely heavily on technology; they should interact with their peers and seek feedback from their teachers as well.

3.7 Conclusion

This chapter was devoted to the empirical phase of this study, it provides a clear idea about the research method and the tools used by the researcher to collect data about this topic. Furthermore, the chapter tackles the analysis of the experiment (pre/posttest) and the students' interview. Thus, the results obtained from this quasi-experiment were subjected to critical analysis and interpretation both descriptively and statistically. Finally, the researchers proposed some recommendations that can be used by the EFL teachers and their learners to achieve a successful teaching/learning process.

General Conclusion

General Conclusion

The implementation of artificial intelligence (AI) in language learning and teaching has demonstrated significant potential in promoting both speaking self-assessment and learning autonomy. This dissertation examined the effectiveness of AI tools in empowering speaking self-assessment skills and fostering learning autonomy among second-year Licence students at the Department of English, University of Ghardaia. It also addressed key challenges that learners may face in managing their learning and assessing their speaking proficiency.

The first chapter of this research was dedicated to concepts related to self-assessment and learning autonomy. It began by defining autonomy and exploring the main theories underpinning its development in language learning, followed by an emphasis on the primary characteristics of autonomous learners. Subsequently, we highlighted various assessment types, including self-assessment, pointing out their different tools such as rubrics, checklists, and journals. Finally, we explored the interplay between these two concepts to indicate the crucial role of self-assessment in enhancing language learning autonomy.

In the second chapter, we discussed the main components of speaking skill, with an emphasis on the major speaking challenges that learners may encounter in EFL classrooms. Furthermore, we presented the crucial role of AI in contemporary educator and learner development, specifying how these tools empower learners' speaking self-assessment skills and learning autonomy, exemplified by effective tools such as the ELSA Speak application.

The third chapter focused on the practical methodology. To gather data and test the hypotheses, a mixed-methods approach was adopted. Firstly, a quasi-experiment, involving pre-test and post-test phases, was conducted with 15 second-year Licence students at the Department of English, University of Ghardaia. This experiment aimed to determine the

statistical difference between the pre-test and post-test results. Secondly, the interview was conducted with the learners after the post-test to explore their perceptions and attitudes towards managing their learning and assessing their speaking skills using the application. The collected data were then analyzed and discussed to either support or refute the hypotheses proposed by the researcher. As a final part of this dissertation, we formulated recommendations for both EFL teachers and students to encourage the enhancement of self-assessment skills and learning autonomy in the classroom.

The results statistically indicated a notable improvement in the learners' speaking performance from the pre-test to the post-test. This suggests that the second-year EFL students demonstrated high engagement with the AI application for boosting their self-assessment techniques, and they exhibited an increased awareness of the importance of taking control of their own learning to achieve better results in the future.

Regarding the first hypothesis, which posited that AI-powered tools can enhance learners' pronunciation, vocabulary, grammar, and fluency, the findings confirmed its validity. Specifically, ELSA played a pivotal role in enhancing learners' speaking components (pronunciation, grammar, and fluency).

Concerning the second hypothesis, which suggested that goal setting and selecting learning techniques could be positively affected by ELSA, the results reveal that learners exhibited increased motivation while using ELSA, which facilitated their understanding of strengths and weaknesses, enabling independent improvement and self-monitoring of progress.

For the third hypothesis, it is proposed that learners might struggle with understanding and applying AI-provided feedback. The results indicated this difficulty stemmed from a lack of effective learning strategies; in other words, some learners tended to over-rely on the teacher

for guidance, correction, and decision-making. Consequently, they struggled with independently interpreting the results and monitoring their own progress.

All in all, learning autonomy remains both an important and challenging concept within language learning. This necessitates a collaborative effort where learners and teachers work hand in hand to shift from traditional teacher-centered approaches towards adopting new learner-centered strategies, such as the implementation of self-assessment techniques. In this context, AI self-assessment tools pave the way for learners to cultivate independence and decrease over-reliance on their teachers. It is crucial to emphasize that while AI tools offer significant support for learning, they serve as complementary aids rather than replacements for the human teacher.

References

References

- Abd El Fattah Torky, S. (2006). *The effectiveness of a task-based instruction program in developing the English language speaking skills of secondary stage students* (Doctoral thesis). Egypt: Ain Shams University.
- Akgun, S., & Greenhow, C. (2022). Artificial intelligence in education: Addressing ethical challenges in K-12 settings. *AI and Ethics*, 2, 431–440.
- Alameen, A., & Kolhar, M. (2021). Artificial intelligence-based language translation platform. *Intelligent Automation & Soft Computing*, 28(1), 1-8
- Alotaibi, M. S. (2023). "It makes me aware": Undergraduates' perceptions toward using automated corrective feedback program (Grammarly) to improve their writing skills. *Journal of Applied Linguistics and Language Research*, 10(3), 1–20.
- Alderson, J. C., & Huhta, A. (2011). Can research into the diagnostic testing of reading in a second or foreign language contribute to SLA research? In L. Roberts, G. Pallotti, & C. Bettoni (Eds.), *EUROSLA Yearbook*, 11 (pp. 30–52). Amsterdam: John Benjamins.
- Andrade, H., Wang, X., Du, Y., & Akawi, R. L. (2009). Rubric-referenced self-assessment and self-efficacy for writing. *Educational Theory and Practice Faculty Scholarship*, 13, 286–292.
- Baker, T., & Smith, L., with Anissa, N. (2019). *Educ-AI-tion rebooted? Exploring the future of artificial intelligence in schools and colleges*. London: Nesta.
- Benson, P. (2001). *Teaching and researching autonomy in language learning*. London: Longman.
- Benson, P. (2017). Language learning beyond the classroom: Access all areas. *Studies in Self-Access Learning Journal*, 8(2), 135–146.
- Boud, D., & Falchikov, N. (1989). Quantitative studies of student self-assessment and peer assessment. *Higher Education*, 18(5), 529-549.
- Brown, H. D. (2003). *Language assessment: Principles and classroom practices*. California: Longman.

- Brown, H. D. (2004). *Language assessment: Principles and classroom practices*. New York: Longman.
- Brown, H. D. (2007). *Principles of language learning and teaching*. New York: Pearson Education, Inc.
- Budianto, L., & Masson, A. R. (2022). Autonomous learning features: A case studying an Indonesian ESP classroom. *Journal of English educators' society*, 7(1), 1-9
- Bygate, M. (1987). *Speaking*. Oxford: Oxford University Press.
- Chaney, A. (1998). *Teaching oral communication in grades K–8*. USA: A Viacom Company.
- Cherner, T., Fegely, A., Hou, C., & Halpin, P. (2023). AI-powered presentation platforms for improving public speaking skills: Takeaways and suggestions for improvement. *Journal of Interactive Learning Research*, 34(2), 339–367.
- Chik, A., Aoki, N., & Smith, R. (Eds.). (2018). *Autonomy in language learning and teaching: New research agendas*. London: Palgrave Pivot.
- Dolin, J. (2005). *Understanding assessment and evaluation in early childhood education* (2nd ed.). New York, NY: Teachers College Press.
- Eckard, R., & Kearny, M. (1981). *Teaching conversational skills in ESL*. Washington, DC: Center for Applied Linguistics.
- Fariani, R. I., Junus, K., & Santoso, H. B. (2023). A systematic literature review on personalised learning in the higher education context. *Tech Know Learn*, 28, 449–476.
- Gardner, D. (2000). Self-assessment for autonomous language learners. *Links & Letters*, 7, 49–60.
- Gilbert, J. B. (2008). *Teaching pronunciation: Using the prosody pyramid*. Cambridge: Cambridge University Press.
- Gokcearslan, S., Tosun, C., & Erdemir, Z. G. (2024). Benefits, challenges, and methods of artificial intelligence (AI) chatbots in education: A systematic literature review. *International Journal of Technology in Education*, 7(1), 19–39.

- Greenbaum, S., & Nelson, G. (2002). *An introduction to English grammar* (2nd ed.). London: Pearson Education Limited.
- Han, K. (2021). Fostering students' autonomy and engagement in the EFL classroom through proximal classroom factors: Autonomy-supportive behaviors and student-teacher relationships. *Frontiers in Psychology, 12*, 1-7
- Harmer, J. (1991). *The practice of English language teaching* (3rd ed.). London and New York: Longman.
- Hasbi, M., & Nursaputri, E. (2024). Using ELSA Speak application as a medium to improve English speaking skills. *International Journal of Language, Humanities, and Education, 7*(1), 1–12.
- Hati, G. M., Yunita, W., & Dewi, A. C. S. (2021). Self-assessment for higher language learners' autonomy. *JOALL (Journal of Applied Linguistics and Literature), 6*(2), 264-276.
- Henner-Stanchina, C., & Holec, H. (1985). Evaluation in an autonomous learning schema. In P. Riley (Ed.), *Discourse and learning* (pp. 145–160). London: Longman.
- Hidayatullah, E. (2024). The impact of Talkpal.AI on English speaking proficiency: An academic inquiry. *Journal of Insan Mulia Education, 2*(1), 9-25.
- Holec, H. (1981). *Autonomy and Foreign Language Learning*. Oxford: Pergamon Press.
- Hornby, A. S. (2000). *Oxford advanced learners' dictionary of current English* (6th ed.). New York: Oxford University Press.
- Hung, Y. (2019). Bridging assessment and achievement: Repeated practice of self-assessment in college English classes in Taiwan. *Assessment and Evaluation in Higher Education, 44*(8), 1191–1208.
- Imran, S. F. (2025). *The influence of ELSA Speak application to improve students' speaking skill: A project-based learning* (Undergraduate thesis). University of Sulawesi Barat, Faculty of Teacher Training and Education, English Education Department, Indonesia.
- Jamrus, M. H., & Razali, A. B. (2019). Using self-assessment as a tool for English language learning. *English Language Teaching, 12*(11), 64–73.

- Jang, E. E., & Wagner, M. (2014). Diagnostic feedback in the classroom. In A. J. Kunnan (Ed.), *The companion to language assessment: Vol. II. Approaches and development* (pp. 157–175). Hoboken, NJ: Wiley-Blackwell.
- Karyuatry, L. (2018). Grammarly as a tool to improve students' writing quality: Free online-proofreader across the boundaries. *JSSH (Jurnal Sains Sosial dan Humaniora)*, 2(1), 83-89.
- Kim, H. S., Cha, Y., & Kim, N. Y. (2021). Effects of AI chatbots on EFL students' communication skills. *Korean Journal of English Language and Linguistics*, 21, 712–734.
- Kim, N. Y. (2019). A study on the use of artificial intelligence chatbots for improving English grammar skills. *Journal of Digital Convergence*, 17(8), 37-46
- Kolhar, M., & Alameen, A. (2021). Artificial intelligence-based language translation platform. *Intelligent Automation & Soft Computing*, 28(1).
- Kusumah, C. S. (2017). *Pengaruh media pembelajaran berbantuan aplikasi ELSA Speak terhadap kepercayaan diri berbicara Inggris* (Undergraduate thesis). Universitas Pendidikan Indonesia, Bandung.
- Lartey, N. N. A. (2024). *Elevating education: Exploring the impact of AI-integration in higher education* (Master's thesis). University of Applied Sciences and Arts, FHNW, School of Applied Psychology, Olten.
- Leong Ahmadi, S. M. (2017, March 20). An analysis of factors influencing learners' English-speaking skill. *VNU Journal of Science: Foreign Languages*, 27, 140–146.
- Leonita, N. N. S. N. A., Apriyanti, N. P. R., Krismayani, N. W., Joni, D. A. A. W., & Budiarta, I. K. (2023). Speaking skill in the 21st century: Students' perceptions and challenges in English language teaching. *Presmie: Journal of English Education and Applied Linguistics*, 12(2), 614–628.
- Li, P., Ning, Y., & Fang, H. (2023). Artificial intelligence translation under the influence of multimedia teaching to study English learning mode. *International Journal of Electrical Engineering & Education*, 60(2 Suppl), 325–338.
- Liu, P. L., & Chen, C. J. (2023). Using an AI-based object detection translation application for English vocabulary learning. *Educational Technology & Society*, 26(3), 5–20.

- Loyens, S. M. M., Magda, J., & Rikers, R. M. J. P. (2008). Self-directed learning in problem-based learning and its relationships with self-regulated learning. *Educational Psychology Review*, 20, 411–427.
- Luckin, R., Holmes, W., Griffiths, M., & Forcier, L. B. (2016). *Intelligence unleashed: An argument for AI in education*. London: Pearson.
- Madhavi, E., Sivapurapu, L., Koppula, V., Rani, P. E., & Sreehari, V. (2023). Developing learners' English-speaking skills using ICT and AI tools. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 32(2), 142–153.
- Masekan, S. (2024). Using the "ELSA" application to improve students' speaking skills for eighth-grade students at SMP N 8 Satap Tondano. *Journal of Teaching English, Linguistics, and Literature*, 3(1), 32-46.
- McManus, S. (2008). *Attributes of effective formative assessment*. Washington, DC: Council for Chief State School Officers (CCSSO).
- Meylani, R. (2024). Intelligence in the education of teachers: A qualitative synthesis of the cutting-edge research literature. *Journal of Computer and Education Research*, 12(24), 600–637.
- Mohebbi, A. (2025). Enabling learner independence and self-regulation in language education using AI tools: A systematic review. *Cogent Education*, 12(1).
- Morrison, B. (2011). *Independent language learning: Building on experience, seeking new perspectives*. Hong Kong: Hong Kong University Press.
- National University. (2025). *What is constructivism in education*. Retrieved from <https://www.nu.edu/>
- Nguyen, T. V. L. (2011). Project-based learning in teaching English as a foreign language. *VNU Journal of Science, Foreign Languages*, 27, 140-146.
- Nurmayanti, N., & Suryadi, S. (2023). The effectiveness of using Quillbot in improving writing for students of English Education Study Program. *Jurnal Teknologi Pendidikan: Jurnal Penelitian dan Pengembangan Pembelajaran*, 8(1), 32-40.

- Pilar, R. A., Jorge, A., & Cristina, C. (2013). The use of current mobile learning applications in EFL. *Procedia - Social and Behavioral Sciences*, 103, 1189–1196.
- Pokrivakova, S. (2019). Preparing teachers for the application of AI-powered technology in foreign language education. *Journal of Language and Cultural Education*, 7(3), 135-153.
- Qi, A. (2012). On the theoretical framework of autonomous learning. *I.J. Education and Management Engineering*, 11, 35-40.
- Rao, P. S. (2019). The importance of speaking skills in English classrooms. *Alford Council of International English & Literature Journal (ACIELJ)*, 2, 6-18.
- Rehman, I. (2024). Examining AI competence, chatbot use and perceived autonomy as drivers of students' engagement in informal digital learning. *Journal of Research in Innovative Teaching & Learning*, 17(2), 196-212.
- Richards, J. C., & Schmidt, R. (2010). *Longman dictionary of language teaching and applied linguistics* (4th ed.). London: Pearson Longman.
- Stewart, L. L. (1992). *Portfolios and self-evaluation*. Unpublished graduate research paper, University of Northern Iowa, Cedar Falls, IA.
- Syabina, A., & Rahman, B. I. (2024). ELSA Speak application as a learning media in practicing student's speaking skills: Students' voices. *Journal of English Language Teaching*, 8(2), 288-295.
- Tan, X., Cheng, G., & Ling, M. H. (2024). Artificial intelligence in teaching and teacher professional development: A systematic review. *Computers and Education*, 8, 1-12.
- Thornbury, S. (2005). *How to teach speaking*. New York: Longman.
- Turk, C. (2003). *Effective speaking: Communicating in speech*. London: Spon Press.
- Valencia, S. (1990). A portfolio approach to classroom reading assessment: The whats, whys,

and hows. *The Reading Teacher*, 43(4), 338–340.

Van Lehn, K. (2011). The relative effectiveness of human tutoring, intelligent tutoring systems, and other tutoring systems. *Educational Psychologist*, 46(4), 197–221.

Li, W.-X., & Zhang, J.-Y. (2024). Impact of AI-driven language learning apps on vocabulary acquisition among English learners. *Research Studies in English Language Teaching and Learning*, 2(1), 2-10.

White, C. (2007). Innovation and identity in distance language learning and teaching. *International Journal of Innovation in Language Learning and Teaching*, 1(1), 97–110.

Winna, & Sabarun. (2023). The language assessment in teaching-learning English. *DIAJAR: Jurnal Pendidikan dan Pembelajaran*, 2(4), 413-419.

Zhang, C., Meng, Y., & Ma, X. (2024). Artificial intelligence in EFL speaking: Impact on enjoyment, anxiety, and willingness to communicate. *System*, 121(3), 1-34.

Zheng, Y. (2024). Empirical study of second language writing anxiety and writing proficiency among English majors. In *Lecture notes on data engineering and communications technologies* (pp. 395-404).

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81, 329–339.

Zimmerman, B. J. (1998). Developing self-fulfilling cycles of academic regulation: An analysis of exemplary instructional models. In D. H. Schunk and B. J. Zimmerman (Eds.), *Self-regulated learning: From teaching to self-regulated practice* (pp. 1–19). New York, NY: Guilford Press.

Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory into Practice*, 41(2), 64–70.

الملخص

تعالج هذه الدراسة تأثير أدوات الذكاء الاصطناعي في تعزيز التقييم الذاتي لمهارة التحدث وتطوير الاستقلالية في التعلم لدى طلاب اللغة الإنجليزية كلغة أجنبية. في السنوات الأخيرة، أحدث الذكاء الاصطناعي تحولاً كبيراً في مجال تعلم اللغات، نظراً لقدرته في تمكين المتعلمين من تحمل مسؤولية تعلمهم وتقييمهم الذاتي بشكل أكبر. ومن خلال ادماج **ELSA Speak**، تسعى هذه الدراسة إلى استكشاف الكيفية التي يُمكن من خلالها لهذا التطبيق أن يُعزز من مهارات التقييم الذاتي، ويطوّر الاستقلالية في التعلم، ويُحسن من الكفاءة في مهارة التحدث. تتبنى هذه الدراسة منهجاً شبه تجريبي، حيث أُجريت تجربة على مجموعة من طلبة السنة الثانية ليسانس في جامعة غرداية. بدأت التجربة باختبار قبلي تمثل في حضور حصة تعبير شفوي تقليدية داخل قسم يضم 40 طالباً. ومن هذا العدد، تم اختيار 15 طالباً بشكل عشوائي كعينة للتجربة. استخدم المشاركون تطبيق **ELSA Speak** المدعوم بالذكاء الاصطناعي عدة مرات لتقييم مهاراتهم الشفوية وتتبع تطوّرهم في مجال الاستقلالية. كما اعتمدت الدراسة على المنهج الكمي والنوعي؛ حيث تم استخدام قائمة التشخيص لتقييم أداء الطلاب في التحدث خلال كل من الاختبار القبلي بالإضافة إلى ذلك تم إجراء مقابلة شفوية تم فيها طرح 10 أسئلة نوقشت مع الطلاب الخمس عشر المشاركين بهدف استكشاف تصوراتهم حول استخدام أداة الذكاء الاصطناعي. وقد أظهرت النتائج أن استخدام أدوات التقييم الذاتي المعتمدة على الذكاء الاصطناعي، مثل تطبيق **ELSA**، يُعد وسيلة فعالة في تنمية مهارات التقييم الذاتي لمهارة التحدث وتعزيز استقلالية المتعلمين في عملية التعلم.