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MOULOUD MAMMERI UNIVERSITY OF TIZI OUZOU جامعة مولود معمري- تيزي وزو

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EFL Students Attitudes towards AI- Based Self-Assessment. The Case of Master Students at the Department of English at MMUTO.

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DEDICATIONS

This work is dedicated to:

To my wonderful mother, for always being there and shaping me into the person I am today. Her strength and guidance have supported me through every stage of life.

To my amazing father who has always embodied love, respect, and encouragement in my eyes.

To my dear brothers, Boualem, Boudjemaa, and Ghilas, you mean the world to me.

To my brother's wife, Taous, your strength and kindness are a constant source of inspiration.

To my nephew, Akcel, may your life be filled with love, joy, and endless promise.

And to my loving family and friends, with all my love and deepest gratitude.

Radia BELKACEMI

'First of all, I thank God, who gave me strength and courage'

To my dear parents who gave me life and who are always by my side, I say thank you for all your sacrifices.

To my two brothers Yazid & Ferhat who always make me happy.

To my two sisters Karima & Souhila who are my best friends.

To my sister's husband Hakim SEGGAR without forgetting Noredine BECHEUR whom I consider like my brothers to whom my mother did not give birth.

To my pretty nieces Louise & Léa SEGGAR whom I love a lot.

To all my teachers, cousins, uncles.

And to all those who love me & those whom I love.

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Abstract

The research investigates Algerian EFL learners' perspectives on utilizing Artificial Intelligence (AI) for self-assessment, drawing upon the theoretical framework of self-assessment, AI technology, self-determination, and metacognition. Rooted in Boud's (1995) concepts of 'Enhancing Learning through Self-Assessment', and informed by the World Travel and Tourism Council's (2024) 'Introduction to Artificial Intelligence Technology', the study explores how these technologies intersect with learners' self-determination and metacognitive processes. Employing a mixed-method approach, the study gathers data through a questionnaire conducted with Master degree students in language studies at the Department of English at Mouloud Mammeri University of Tizi Ouzou, as it includes interviews with EFL teachers. The aims of this research are twofold: first, to identify the factors that influence EFL student's attitudes towards using AI for self-assessment; and second, to explore the specific benefits that EFL students perceive in using AI tools for self-assessment**.** The findings reveal that the vast majority of students are indeed highly familiar with and frequently use AI not only for self-assessment but for a multitude of other academic purposes.

Key words: EFL learners, Artificial Intelligence(AI), self-assessment, attitudes, self-determination, metacognition.

List of Abbreviations and Acronyms:

- **4V's:** Volume, Velocity, Variety and Veracity
- **AI:** Artificial Intelligence
- **ANN:** Artificial Neutral Networks
- **ChatGpt:** Chat Generative Pre-Trained Transformer
- **DL:** Deep Learning
- **EFL:** English as a Foreign Language
- **Educause:** Organization name
- **e.g.:** For Example
- **GPUs:** Graphic Processing Units
- **i.e.:** that is
- **IT:** Information Technology
- **ML:** Machine Learning
- **MMUTO:** Mouloud Mammeri University of Tizi Ouzou
- **OED:** Oxford English Dictionary
- **SDT:** Self Determination Theory
- **SRL:** Self-Regulated Learning
- **Statista:** Company name
- **TCs:** Teacher Candidates
- **WTTC:** World Travel & Tourism Council

List of Diagrams:

Contents

Statement of the Problem

In our age of swiftly evolving technology, Artificial Intelligence (AI) is steadily establishing itself as a fundamental component of modern life. It is defined as "the capacity of computers, or other machines, to exhibit intelligent behavior" (World Travel & Tourism Council, 2024, p.7). Artificial Intelligence originated from the fundamental inquiry into whether machines are capable of thinking. The concept intrigued scientists for many years, with renowned computer scientist Alan Turing famously raising the question in 1950. What began as a theoretical pursuit gradually developed into a formal discipline centered on building intelligent systems. This shift led to extensive research on how machines can replicate human cognitive tasks, involving advancements in algorithms, data analysis, and computing power. Today, AI is a fast-evolving field, playing an increasingly significant role in various areas of modern life.

Self-assessment plays a vital role in education as it encourages students to take an active and responsible approach to their own learning. By evaluating their own work, students become more aware of their strengths and areas that need improvement, which promotes self-awareness and helps them focus their efforts more effectively. This process also nurtures critical thinking and reflection, as students must analyze the quality of their work and consider how it meets learning objectives. David Boud (1995), defines self-assessment as:

> Whenever we learn we question ourselves. 'How am I doing?', 'Is this enough?', 'Is this right?', 'How can I tell? 'Should I go further?' In the act of questioning is the act of judging ourselves and making decisions about the next step. This is self-assessment. (p.1)

This definition emphasizes the active role of learners in evaluating their own performance, not just in terms of results, but in understanding the standards they are aiming for. Boud's perspective highlights self-assessment as a tool for deeper learning, reflection, and development of independent learning skills.

Numerous investigations have examined the connection between Artificial Intelligence (AI) and self-assessment in education, emphasizing AI's potential to improve reflective learning practices. Research has shown that AI-driven tools, such as intelligent tutoring systems and adaptive learning platforms, can support students in evaluating their own progress by providing immediate, personalized feedback. These systems often mimic aspects of teacher evaluation, enabling learners to compare their self-judgement with AI-derived insight, thereby promoting greater accuracy and self-awareness. Overall, the integration of AI into self-assessment practices has been found to encourage more independent learning, deeper engagement, and enhanced academic achievement. In Australia, scholars like David Boud have significantly contributed to understanding self-assessment, with more recent research exploring how AI can support these processes.

While numerous studies have investigated AI and self-assessment in international contexts, limited attention has been given to the role of AI in supporting self-assessment among EFL learners in Algeria. To address this gap, our study focuses on the attitudes of EFL students precisely Master's students in the Department of English at Mouloud Mammeri University of Tizi Ouzou towards the use of AI to assess themselves.

Aims and Significance of the Study:

The overall aim of this research is to explore the attitudes of EFL students of the Department of English at MMUTO towards using AI to assess themselves.

This study has two main objectives. First, to identify the factors that influence EFL student's attitudes towards using AI for self-assessment. Second, to explore the specific benefits that EFL students perceive in using AI tools for self-assessment.

This research gains its importance from its focus on a timely and rapidly evolving global trend: the integration of Artificial Intelligence (AI) into multiple facets of daily life. Once considered a futuristic concept, AI is now a reality with wide-reaching applications across various sectors and countries. In this context, exploring the role of AI in education, particularly in relation to EFL learner's self-assessment practices is both relevant and necessary.

Research Questions and Hypotheses:

Focused on achieving the previously stated objectives, our research will explore the following central questions:

- **Q1:** What are the attitudes of EFL master students at the Departement of English at MMUTO towards the use of AI for self-assessment?
- **Q2:** To what extent does AI help EFL students to assess themselves?

The following hypotheses are suggested to the questions mentioned before:

- ✓ **H1:** EFL master students will have positive attitudes toward using AI for self-assessment.

- ✓ **H2:** The use of AI self-assessment tools will increase student motivation and engagement in their learning.

Research Techniques and Methodology:

This research explores the attitudes of EFL master learners towards using AI to assess themselves at the Department of English at MMUTO. To conduct this study, a mixed -method approach has been adopted. It uses both qualitative and quantitative designs in order to collect and analyze data. Both questionnaire and interview are employed to report the student's feeling and the teacher's thoughts. The data collected are analyzed qualitatively by the transcribing recordings and analyzing discussions; and quantitatively by identifying a statistical software.

Based on David Boud's (1950) well-known work 'Enhancing Learning through Self-Assessment', using artificial intelligence in education can be a powerful way to help students become more independent. AI tools can make this easier by giving students quick, personalized feedback and creating learning environment that help them think about their progress.

The Structure of the Dissertation

This dissertation follows the simple traditional model ‘IMRAD’ which consists of a general introduction, four chapters and a general conclusion. This dissertation begins with a General Introduction that lays the groundwork for the entire study. It includes the statement of the problem, outlines the aim and significance of the research, and presents the research questions and hypotheses. This section also details the research techniques and methodology employed and provides an overview of the dissertation's structure. Following this, the first chapter, entitled Review of the Literature, delves into the main theoretical concepts relevant to this study. The second chapter, called Research Design and Methodology, offers a comprehensive explanation of the data collection and analysis procedures used throughout the research. The third chapter is the Presentation of the Findings and reports all the results obtained from the data collection and analysis. The fourth chapter that is the Discussion of the Findings, analyzes and interprets these results, directly addressing the research questions. Finally, the General Conclusion that summarizes the key findings of the research, highlights its contributions, acknowledges its limitations, and suggests avenues for future research.

Review of Literature

Introduction

The present chapter considers the key concepts and terminology of this research. It is divided into two sections. The first sheds light on the main definitions of Artificial Intelligence (AI), its components, and its use and benefits in education. The second section discusses the issue of Self-Assessment in learning by highlighting its models, and its use and benefits in various educational contexts. This section also reviews the work of David Boud (1995), whose framework of self-assessment represents the foundation of the current research.

1.1 Artificial Intelligence in Education

1.1.1 Background and Definition

The term Artificial Intelligence (AI) was formally coined during the 60's by Dartmouth Conference. The most significant event in history referred to as the birth of AI as a distinct scientific and academic discipline. In this landmark Conference, influential thinkers like John McCarthy (1927–2011), Marvin Minsky (1927–2016), Nathaniel Rochester (1919–2001), and Claude Shannon (1916–2001) postulated the axiomatic assumption that "every feature of learning or any other feature of intelligence can in principle be so sharply described that a machine can in some sense simulate it". With this assumption established, intellectual context was set for intellectual endeavor of subsequent decades to further elaborate the thought of how precisely the human thinking can be replicated by machines. The Stanford University (2016), state that:

> Over time, the development of AI has been significantly motivated by three facilitating factors: gains in computational algorithm refinement, exponential growth in the volume of digital data available, and increases in computing power. While the origins of AI research extend back over half a century, these

> advancements have catalyzed its transformation from a theoretical pursuit into a practical and pervasive technology. (p.12)

The conversions of these factors in recent years has driven significant breakthroughs across diverse domains including healthcare, finance, education and the creative industries; underscoring the transformative potential of AI to fundamentally redefine the functioning of society. (World Travel & Tourism Council, 2024).

Despite its increasing prominence, a universally accepted definition of AI remains elusive. The Oxford English Dictionary defines it as “the ability of computers, or other machines, to exhibit intelligent behavior” (World Travel & Tourism Council, 2024, p. 7).

In general terms, AI can be described as a branch of computer science dedicated to creating systems that can carry out tasks typically requiring human intelligence. Such tasks include, but are not limited to, natural language processing, recognizing patterns, making decisions, solving problems, and learning from experience. (Russell & Norvig, 2021).

Current AI systems are designed to process and learn from large and complex data sets. This enables them to identify patterns, make decisions, and perform tasks independently. In advanced cases, AI can equal or even surpass human abilities in specific areas, such as medical diagnosis using images, content generation, or self-driving technologies. Therefore, AI represents more than just a technological advancement; it marks a significant social and technical shift. This developement raises important ethical, legal and philosophical questions about autonomy, privacy and changing relationship between humans and machines (Floridi et al., 2018).

The development and functioning of Artificial Intelligence (AI) rely on three core components: algorithms, data, and computing power. Algorithms constitute as the brains of AI, providing structured instructions for processing and decision-making (Russell & Norvig, 2021). Data constitute the fuel that enables machines to learn and improve, with Goodfellow, Bengio, and Courville (2016) noting that big data is more important than algorithmic creativity in and of itself. Supporting this, a Statista survey in 2020 revealed that 83% of AI professionals considered data quality to be essential to project success (Statista Research Department, 2020). Computing power enables the execution of complex algorithms on big datasets, but LeCun, Bengio, and Hinton (2015) identify this as a requirement by stating that advances in deep learning came about through recent hardware advancements. Therefore, the synergy of these elements algorithmic thinking, learning with data, and computation is the pillar for the speedy growth of AI in areas such as medicine, finance, transport, and education.

1.1.2 The Integration of AI in Education

The application of Artificial Intelligence (AI) in education has radically changed traditional pedagogical models, going beyond passive methodologies to more active, adaptive, and personalized learning environments. AI technologies, such as intelligent tutoring systems, learning analytics, and automatic assessment systems, support personalized instruction by adapting to students' unique needs and learning rates (Luckin et al., 2016). In the view of Holmes et al. (2019, p. 10), “AI has the potential to improve learning outcomes by providing personalized feedback, diagnosing learning challenges, and suggesting personalized learning pathways”. This incorporation has changed the position of teachers from the only transmitters of knowledge to the providers of more interactive and student-centered learning experiences. For example, sites such as Squirrel AI and Duolingo utilize machine learning algorithms to

offer real-time assistance, increasing the understanding and skill acquisition of learners (Zawacki-Richter et al., 2019).

Additionally, AI-driven writing tools, including Grammarly and ChatGPT, help students build critical thinking and linguistic capabilities through instantaneous feedback and proposals, thereby developing a more active learning process (Baidoo-Anu & OwusuAnsah, 2023). A recent Educause (2023) research validated that nearly 88% of the students in colleges and universities have made use of AI-driven learning tools, demonstrating increased use of AI to facilitate academic success. Still, the extensive use of AI also brings about issues of academic integrity, data protection, and undermining students' autonomous learning ability (Smutny & Schreiberova, 2020). A controversial argument continues regarding whether the utility of AI-facilitated learning can be weighed against developing autonomous thinking and an ethical research skill in students (Selwyn, 2019). So, though AI has a great potential to transform education, its use needs to be thoughtfully considered to make sure that it actually augments, rather than detracts from, the learning experience.

1.1.3 Benefits of AI in Education

A broad set of benefits that enhance teaching and learning experiences and practice in education has been provided by Artificial Intelligence (AI). Of most significance among these is the ability of AI systems to tailor learning paths to the individual student’s need, preference, and acquisition pace (Holmes et al., 2019). Adaptive mechanisms powered by AI can monitor student behaviors and offer differential feedback to students and thereby enhance differential instruction and allow students to learn and acquire content with ease (Luckin et al., 2016).

Artificial Intelligence technologies also facilitate instant feedback and formative assessment that allow learners to correct misconceptions in a timely fashion and achieve deeper insights and longer retention of what is gained (Zawacki-Richter et al., 2019).

Furthermore, AI supports automated functions such as grading and timetabling to free teachers to focus on more meaningful interaction with students (Baidoo-Anu & OwusuAnsah, 2023). Virtual assistants and chatbots also support students in answering regular student questions constantly and taking users step-by-step through challenging material outside class time (Smutny & Schreiberova, 2020). Access to education by the disabled has also been improved by the use of AI in the form of captioning in near-real-time, text-to-speech software, and customized study materials and so enabling inclusive education (Educause, 2023). However, the gain is significant and it is important that AI is considerate and guided by ethics in its implementation in case it is to fully live up to its role in shaping education (Selwyn, 2019).

1.2 Self-Assessment in Learning

1.2.1 Definition

Self-assessment has long been defined as a process by which learners evaluate the quality of their own work and reflect on their own growth in learning and determine what to learn next based on informed judgment. According to Boud (1995), self- assessment "involves learners making judgments about their own work in relation to agreed standards and criteria" (p. 12). Self-assessment not only requires students to critique their product but also critically examine expectations of good performance. Importantly, however, self-assessment is not a straightforward exercise of judgment itself but a reflectivity practice in which learners

own up to their own study activity. According to Boud (1995), “whenever we learn we question ourselves: “‘How am I doing?’, ‘Is this enough?’, ‘Is this right?’” (p. 13), emphasizing that natural tendencies to learn underpin the practice of self-assessment.

Self-Assessment is a process of transformation; it challenges traditional instructor-focused methods of assessment by involving learners themselves in establishing what quality will be in the different environments in which students and teachers operate. According to Boud (1995), “self-assessment, much debated and argued as a way of promoting improved learning, is more transformational, elusive and problematic than is readily easy to acknowledge” (p. 24). Self-assessment is therefore a significant and enabling learning strategy that encourages greater autonomy, critical thinking and personal regulation of learners.

Beyond Boud's perspective, other scholars developed the concept of self-assessment further by illustrating the role that it plays in cultivating metacognitive skills. Andrade and Du (2007) characterize “self-assessment is a process of formative assessment during which students reflect and look over the quality of their work and learning” (p.3). This brings to the fore the role of self-assessment in facilitating continuous improvement and increased investment in learning outcomes. Students should be made to understand in advance the standards by which their work is being judged so that self-assessment is effective, Sadler (1989) contends. His contention is that “the indispensable conditions for improvement are that the student comes to hold a concept of quality roughly similar to that held by the teacher” (p.5). Self-assessment cannot be undertaken in a vacuum but forms part of a more complex process of building judgement of quality and commitment to scholarly standards.

Additionally, self-assessment practice can be modified to suit different learning environments and students. It can be informal as in the form of daily reflections on the tasks of learning or formal as in the form of exercises with rubrics, checklists, and portfolios. Effective self-assessment practice, as stated by Falchikov (2005), "is one that is thoughtfully embedded in the learning process and offers students opportunities to practice the evaluative skills several times throughout a period". (p.13)

Self-assessment is also a multifaceted and emergent concept with a number of various functions: It invites greater learner engagement, enhances the cultivation of critical and reflective thinking skills and fosters a more interactive model of learning where learners engage with and take part in their own development.

1.2.2 Self-Assessment Schedule Model

In independent or negotiated learning environments, structured reflection plays a vital role in empowering learners to take responsibility for their development. David Boud (2001) points out that it is less a judgment against external standards, and more a deeper and more active engagement with the process of their own learning. Structured process normally involves the following:

1.2.2.1 Goal Specification

Students begin with stating explicitly what it is that they aim to do. These may be negotiated with or established by the student and the teacher in turn, depending on context of

the learning process. In the opinion of Boud, proper goals formulated give a yardstick against which to measure oneself and allow students to monitor appropriately. “Students need to be in a position to state what it is that they are trying to learn and do, and not only in institutional terminology but in a way that is meaningful to themselves” (Boud, 1995, p. 15).

For example, in a reflective writing course, rather than stating a broad institutional goal like ‘improve academic writing,’ a student might define a personal learning goal as ‘learn to structure arguments clearly using evidence from at least three academic sources.’ This goal is specific, measurable, and meaningful, making it easier for the students to track progress and reflect meaningfully on their development.

1.2.2.2 Achievement Judgment Criteria

Students typically in collaboration with their peers and teachers decide the standards against which their performance is to be measured. Boud believes that involving students in deciding on standards leads to the deeper appreciation of standards and helps them internalize the standards. “For effective self-assessment learners should be provided with or should be involved in the formulation of standards upon which to judge” (Boud, 1995, p. 23).

For example, in a group project within a business studies course, students might work with the instructor to define clear criteria for success such as clarity of presentation, use of real-world data, teamwork, and feasibility of the proposed solution. By contributing to the creation of these standards, students gain clarity on expectations and are more likely to assess their own and others' contributions critically and fairly.

1.2.2.3 Evidence Collection

Students gain evidence of their performance in order to reflect effectively. Boud stresses that students learn to recognize, select and generate evidence to support their assertions of their own learning. “Students need to be in a position to call upon evidence from their own performance and experience which justify the judgements that they make” (Boud, 1995, p. 27).

For example, in a public speaking course, a student might use video recordings of their presentations, peer feedback forms, and personal notes to reflect on improvements in clarity, body language, and audience engagement. By reviewing and selecting this evidence, the student can make informed judgments about their progress and areas for further development.

1.2.2.4 Qualitative Judgment

Along with quantitative outcomes, students also practice formative qualitative judgment of their learning. According to Boud, what is required by self-assessment is complex critical judgment and not just self-grading. “Self-assessment is about making qualitative judgments about the nature and character of one’s work and of factors which contributed to performance” (Boud, 1995, p. 36).

For example, in a creative writing module, a student may reflect not only on the final story produced but also on their use of narrative voice, coherence of plot, and the influence of feedback during drafting. They might also consider how time management or emotional engagement with the topic affected their work. This kind of qualitative reflection encourages deeper insight than a numerical score alone can provide.

1.2.2.5 Plans for Future Improvement

Self-assessment is only done in so far as it is with regard to working towards improvement in the future. For Boud, improvement planning is the way of closing the gap between intended and actual performance. “Successful self-assessment leads to action: it helps students to recognize areas where improvement is needed and to plan further improvement and development” (Boud, 1995, p. 42).

For example, a student at a university is returned an essay on a history class with the mark lower than expected and with the following criticisms listed: indistinct argument structure, insufficient evidence, and lack of critical analysis. Instead of simply accepting the mark, the student goes through the process of reflection. They read their essay back over carefully, compare it to the marking criteria, and identify where they made mistakes in particular, in linking evidence to their overall argument.

Based on this process of reflection, the students formulate a plan for improvement: They intend to attend a workshop on academic writing. They set a goal to have an outline before starting upcoming essays so they can improve structure. They arrange a meeting with the lecturer to strategize on how to improve critical analysis. These actions make the student fill the gap between their current performance and the desired level, demonstrating how self-reflection leads to concrete improvement as Boud notes.

Visual Example – Self-Assessment Schedule Structure

1.2.3Self-Assessment Schedule

A self assessment schudule is a dcument which records your goals and achievements in a given area and judgements about them. It is a statement which needs to contain sufficient information in it to enable someone who is familiar with the general area of the subject to ascertain what learning activities the author has en gaged in and what he or she has learned. While the schedule itself is a summary, brief attachements may be appended to indicate, for example, scope of reding.

It may be presented in whatever from is considered appropriate (e.g. lists of items under each goal, tabulated in a chart, etc). Whatever else it includes it should address the following:

A. Specify the goals you are pursuing in this subject. These will include your initial goals, those which emerged during the course, and those which have been agreed by the class or your working group. Be as detailed as possible and list all your sub-goals.

B. Indicate the criteria which sould be applied to judge the extent to which these goals have been met. That is, what are the appropriate standards to be used for assessing your goals in this subject? (i.e. what is the yardstick againts which you are assessing your self with respect to each of your goals?) include both your own and any agreed as common criteria.

C. For each of the goals specified above (in A), and for each of the criteria indicated (in B) list the evidence which you have which relates to how well you have met each one. The main evidence on which you have you will draw will be your research proposal and outcomes from your reading and study in the subject matter area, but you may

include other items if you wish. Do not make any judgement at this stage, just indicate the information which you have available which enables you to make a judgement at this stage, just indicate the information which you have avialable which enables you to make judjement about your performance/achievements. (The evidence may take the form of items peers, etc.)

D. For each of the items listed above give your own judgement on the extent to which you have been successful in achieving what you have intended to achieve with respect to the criteria you have set and the evidence at your disposal. This should be a qualitative judgement based on your own criteria and should not refer to marks or making criteria.

E. For those goals which you believe you have not met sufficiently, indicate what you would need to do in order to meet them, i.e. further action.

1.2.4 Self-Assessment Implementation Framework

Boud (1995) has presented his framework for the effective implementation and encouragement of self-assessment in educational settings. Boud acknowledges the fact that self-assessment is not an innate skill, it has to be developed over time; therefore, Boud provides a hierarchy of activities which encourages critic evaluation of one's work and the ability to become a self-assessor. His guidelines displayed in Figure 9.2 of his book Enhancing Learning Through Self-Assessment, offers a developmental and participative approach to creating self-assessment practice.

1.2.4.1 Using Peer Feedback as a Springboard

Boud suggests that the process of self-assessment can be begun with the help of peer feedback activities. He asserts that getting students to assess their peers' work first offers a less hostile setting to develop evaluative judgement. Furthermore, by providing assessments of others' work, students will become knowledgeable about the standards for good quality and the process of critical appraisal, before moving to assess their own work. "Peer feedback has value because it gives students practice where they can be engaged in critical appraisal in a non-threatening environment, before they have to apply it to their own work" (Boud, 1995, p.191). This approach will not only provide learners with the confidence, but also encourage the sense of community of learners, where there is a respect for critical engagement and support for one another.

1.2.4.2 Using Checklists to Clarify Assessment Criteria

Checklists are also suggested as a way to make clear and transparent assessment criteria. Boud 1995's argues that the practice of making the assessment standards clear is critical for self-evaluation to be valid. The effective use of checklists, either collectively designed by students, or provided by instructors, breaks down complex assessment expectations into manageable pieces, making assessment less a mystery. "Using checklists based on agreed criteria help students to focus their attention on significant aspects of performance and minimizes uncertainty" (Boud, 1995, p.192). Checklists support learners in

internalizing the criteria against which their performance will be assessed, to the point that they are comfortable speaking directly about their performance against those criteria, and the criteria of others.

1.2.4.3 Guiding the Development of Reflective Narratives

Boud emphasizes the role of reflective practice in self-assessment, that is students reflecting on their learning and learning processes through reflective narratives. Reflective writing allows students to critically reflect upon their learning and learning processes, moving beyond surface criteria to deeper and more nuanced understanding of their strengths and weaknesses, enabling a conscious awareness, at least in part, of their metacognitive process. "When students are engaged in reflective writing they will be more aware of their own learning process and will establish a richer, more meaningful basis for self-assessement" (Boud, 1995, p. 193). The construction of reflective narratives is therefore an important aspect of developing student self-awareness and self-directedness as learners.

1.2.4.4 Including a Negotiated Element in the Grading Process

Boud (1995) also suggests a negotiated element of the grading process, which can help to strengthen ownership of their learning and evaluation. Allowing students to contribute to a grade of their own work indicates that their judgments are valued, which can help them take the learning process more seriously. "Negotiating aspects of grading improves student confidence and helps them accept responsibility for their learning" (Boud, 1995, p. 194). Only student self-assessment will be valuable if the relationships are sound and for that reason negotiated assessment can act effectively as a dialogue or discussion between the student and

teacher, accommodating institutional requirements and managing the student's perspective, thereby providing further credibility to the self-assessment process.

While Boud's model for introducing and supporting self-assessment activities is inherently progressive and learner-centered, it can be recognized in a series of steps that could be viewed as sequential in order: starting with peer feedback, describing the criteria for success with checklists, self-reflective accounts, and contract or negotiated grading systems, each of which is designed to build towards self-assessment skills. In addition to the direct benefits in the short-term, increasingly focusing on self-assessment promotes the long-term growth of learners who can become independent and reflective learners throughout their lifetime.

1.2.5 Guidelines for Assessment

The assessment framework for this subject rests on the principles of student-centered and reflective learning. The basic requirement is that the individual student is responsible for keeping a full learning portfolio. While the portfolio is owned by the compiler, it is nevertheless a valuable source of evidence for assessment purposes. Students must also create a 3,000-4,000-word research proposal that demonstrates the application of a specific research or evaluation model in their own practice. This aligns with practitioner inquiry ideals, which challenge students to become active learners and developers themselves (Cochran-Smith & Lytle, 2009).

In support of this, a collaboratively created checklist is created in class to provide clear and consensual criteria for assessing research proposals. Students are required to generate a detailed and descriptive self-assessment of their learning. This involves an

assessment of their own proposal using the checklist and a reflective assessment of their overall learning, in accordance with guidelines for reflective practice in education (Schön, 1983). Also, the students will need to contribute to the design and organization of at least one session, to be marked as part of the self-assessment.

Peer feedback is woven into the learning process. The students are encouraged to gather and use peer feedback, providing a collective learning situation that adheres to formative assessment standards (Black & Wiliam, 1998). Students must submit a full self-assessment, research proposal, and evaluation checklist prior to submitting at the last stage.

The marking and assessment process has aspects of negotiated learning (Boud, 1995). Students self-assess themselves, supported by a sound and evidence-based argument, considering comments provided and the norms of Master's level assignment grade distributions. Self-assessment promotes learner autonomy and critical thinking, aspects of effective higher education pedagogy (Boud & Falchikov, 1989).

Lecturers mark in their own right and stamp a provisional mark prior to comparing the student's self-mark. Where marks fall within the same grade band, the student's mark is validated. Differences between grade bands do, however, require formal discussion between lecturer and student to come to a consensus about resolving discrepancies. Where a consensus is not possible, the decision is made by the Subject Assessor on the basis of documentation only received.

The structured series of activities includes a peer review session in Week 11, collaborative development of the assessment checklist, production of self-assessments, and

posting of peer commentaries by Week 12. The deadline for final submissions will be Week 13, with a moderation process for ensuring equitable and uniform application of assessment criteria.

The approach is a benchmark of assessment for learning best practice founded on reflective practice, peer interaction, and negotiated assessment methods to promote deep and rich learning opportunities in higher education settings.

1.2.6 Self-Assessment Benefits

David Boud (1995) stipulates that self-assessment has many educational benefits that are essential to developing effective and independent learning. First, self-assessment promotes reflective thinking and metacognition. It involves students actively and critically reflecting on their own learning, which helps them understand not only the content but also the learning process itself. Learners gain greater awareness of their learning strategies as they engage in self-reflection, helping them plan, monitor, and authenticate their learning.

Second, self-assessment enables students to develop an understanding of their strengths and weaknesses. According to Boud (1995), empowering learners to critically evaluate their work is important because it encourages a more accurate self-assessment of what a student can achieve, and directs their energy to what needs improvement. This diagnostic function is important because realistic learning goals can be set, and forward development can be stimulated, both personally and academically.

In addition, self-assessment contributes significantly to the development of responsibility and independence in learners. Boud (1995) argues that as students shift from a reliance upon external evaluation to an internal locus of control, they assume increased

responsibility for their own learning. By repeating the self-assessment process, students become increasingly responsible and ultimately more independent learners, and gain confidence and skills for other lifetime learning activities.

Finally, self-assessment promotes engagement and ownership over learning. Boud also noted that when students are able to reflect and to assess their own work, they use more emotional and cognitive investment in their learning experience. This engagement can improve motivation, enhance learning, and leads to a stronger articulation of commitment to one's own academic goals.

Conclusion

In conclusion, this review of literature highlights the transformative potential of Artificial Intelligence (AI) and self-assessment in education, emphasizing how their integration can foster more personalized, adaptive, and student-centered learning experiences. AI's capacity to analyze vast data sets and provide individualized feedback enables tailored instruction and supports diverse learners, while also presenting new challenges related to ethics, data privacy, and academic integrity. Meanwhile, self-assessment, following models of researchers like David Boud, allows students to reflect critically on their learning, set valuable goals, and become more engaged with their own development. Together, these innovations not only enhance learning outcomes but also support autonomy, critical thinking, and lifelong learning skills, pointing to the need for thoughtful implementation to ensure that technology and reflective practices genuinely enrich the learning experience.

Research Design & Methodology

Introduction

The present chapter is devoted to the methodology adopted in this present study aiming at exploring the attitudes of EFL students towards the use of AI for self-assessment. It is divided into three major parts. The first part deals with the research design and plan. The second part, called 'the data collection procedure', explains how information is gathered, including who the students were and the tools used, which are the questionnaire and the interview. The last part comes at the end, which is 'the data analysis procedure', which describes how the collected information was analyzed.

2.1 Research Method and Design

2.1.1 Mixed -Method Research

The present study is based on Mixed-Method Research. It is a type of research where the researcher can get a big picture and detailed explanations which gives him a more complete and trustworthy understanding. This approach provides a richer understanding and fuller picture of how EFL learners use AI to assess themselves. "The integration of quantitative and qualitative data can dramatically enhance the value of Mixed-Methods Research" (Bryman 2006; Creswell & Plano Clark 2011, p.98). That is to say, Cresswell and Plano Clark (2011) advocate for a thoughtful and systematic approach to combining quantitative and qualitative method to gain a more comprehensive and nuanced understanding of complex research problem. The present research is a case study which is the empirical investigation of a contemporary problem within its real context. In relation to this context, it investigates the attitudes of EFL students towards using AI for self-assessment. It is also survey based, for its data collection instrument is the questionnaire consisting of well-

structured questions to collect specific information from different participants, by providing a representative view of their experiences related to AI and self-assessment. In addition, different interview are relied upon in order to report the thoughts of the teachers.

2.2 Data Collection Procedure

This section entails all the methodological instruments used in order to gather data. Pertinent to our study that investigate the attitudes of EFL students towards the use of AI for self-assessment at MMUTO Department of English. To meet this aim, a questionnaire as well as an interview have been used.

2.2.1 Context and Sample

This research took place at the Department of English at MMUTO during the 2024-2025 academic year. The participants involved in the study were 46 students completing their Master's degree in different specialties (Didactics of Foreign Languages, Language and Communication, Literature and Civilization). These students were chosen because their prior university experience gave them a stronger knowledge (foundation), and they were also interested in participating in such a research related to what they were studying.

In this research, the way students were chosen involved two methods: random selection and convenience sampling. The students were picked randomly from Master's one and Master's two degree to complete the questionnaire. The random selection means every student had a fair chance to be included in the sample. The idea was that every Master's student at MMUTO Department of English could be chosen, no matter their gender or

background. Four teachers at MMUTO Department of English on the other hand, were chosen to be part of this research and to be interviewed as they have accepted to be recorded. This convenience sampling is known to be simple and time-saving unlike other sampling strategies.

2.2.2 Data Collection Tools

2.2.2.1Definition of the Questionnaire

A questionnaire in simple terms is a list of hand written or digital questions used to collect information and data from a group of people (students, teachers, …) by which the researcher can find out what humans think, know, or do. "A questionnaire is a research tool consisting of a series of questions designed to gather information from respondents. It is a structured method used to collect data about people attitudes, beliefs, behaviors, or factual information" (Bryman,2012, p.231). Questionnaires can provide us with both quantitative (statistical) and qualitative (textual) data.

Description of the Questionnaire

The questionnaire is designed for Master's students at MMUTO department of English and includes 14 items that depict learner's attitudes towards the use of AI for self-assessement. The presented questionnaire combines both closed-ended and open-ended items in which the respondents are asked to select one pre-determination answer and elaborate it according to their personal experience.

The questionnaire uses a mix of different question types. Some questions are closed-ended, meaning students have to select pre-set answers 'Yes/No' questions (dichotomous questions) like question 4, as well as questions asking how often they do something

(frequency questions) like question 3, 8, 10, and 12. The questionnaire includes also Likert scale questions, which likely ask students to rate their agreement or importance on a scale like

question 5, 7, and 11. Additionally, there are open-ended questions like question 6, 9, 13, and 14, where students can provide more detailed written answers based on their own experiences and thoughts.

This questionnaire is divided into three main parts: an introductory paragraph and two sections. The first part describes the main objective of the research, as it asks the students to faithfully answer the items and making sure that their responses will be anonymous. The first section is about the 'Students Background Information', it comprises four (4) main items which investigates the student's level, the specialism and their use of AI in education in general. 'Student' Engagement with AI for Self-Assessment' is the second section, it

consists of ten (10) items that explores the description of the engagement of the learners with the AI for self-assessment.

Piloting the Questionnaire

To ensure the clarity, coherence, and usability of the questionnaire, a preliminary pilot test was conducted with a small sample of three EFL Master students. This initial feedback phase aimed to identify any potential ambiguities or difficulties in understanding the questions. Overall, the participants reported that the questionnaire was well-structured, the

questions were generally clear, and the layout was user-friendly, which contributed to a smooth answering experience. However, one student pointed out a problem with question 6 formulated as ‘How does the process of clearly defining specific goals contribute to effective evaluation of one’s performance and the measurement of progress towards intended outcomes?’. The student in fact found a difficulty in understanding the question and even answering it. This question has been reformulated as ‘In which way does goal specification help you assess your performance and achievements effectively? Overall, this small test helped to improve the questionnaire to better suit the student’s performance. This highlighted an important issue with the formulation, suggesting that it might be too abstract or complex for some respondents. This feedback was instrumental in revising the questionnaire. Based on the student’s input, the question was of course reformulated to add clarity and accessibility. The pilot testing thus played a crucial role in improving the overall quality of the questionnaire, ensuring that it would be better suited to the students’ level of comprehension and more effective in gathering accurate and meaningful responses.

2.2.2.2Definition of the Interview

An interview is a structured conversation where one participant asks questions, and the other provides answers. Bryman (2012), states that:

> An interview is a method of gathering information where a researcher asks questions to participants to gain insights into their experiences, opinions, or knowledge on a particular topic. Unlike questionnaires, interviews involve

direct interaction between the researcher and the participant, allowing for more in-depth exploration of responses (p.130).

"Interviews can be structured, semi-structured, or unstructured, depending on the level of flexibility the researcher wants to allow in the conversation" (Seidman, 2013, p.165).

Description of the Interview

The interview consists of 14 questions designed for 5 teachers at the English Department at MMUTO which describes their different thoughts about the students' use of AI for self-assessment. To put it better, the interview is done in order to know the different thoughts and experiences of the teachers that offer valuable insights into how students are using these tools and how effective or challenging they may be in the learning process.

2.3Data Analysis Procedure

Given the data collection procedure, both quantitative and qualitative data are gathered; consequently, the nature of the latter determines the data analysis procedure to adopt. The quantitative data gathered through the questionnaire are analyzed through a statistical software, and the qualitative gathered from the interviews will be analyzed by transcribing recordings and analyzing discussions.

2.3.1Statistical Software

Statistical Software refers to the specialized computer program designed to process, analyze, and interpret quantitative data. According to Peat (2001), statistical software allows researchers to perform a wide range of statistical analysis efficiently, ensuring greater accuracy and reliability in data handling. In the context of this study, statistical software was

used to analyze the responses to the closed-ended questions in the questionnaire distributed to Master's students at MMUTO Department of English. To interpret the results quantitatively, the rule of three was applied. This rule is basic mathematical formula used to convert raw numerical data into percentages, which simplifies the comparison and presentation of the results. The formula involves three known values and one unknown, following this structure (Value obtained*100)/ Total number of responses = Percentage. For example, if 15 out of 46 students selected a particular response, the percentage would be calculated as: (15*100)/46=32,60%. Using this approach allows for a clearer, more standardized presentation of the data, making it easier to interpret patterns and draw meaningful conclusions.

2.3.2Qualitative Data Analysis

In this study, Qualitative Data Analysis, as defined by Braun and Clarke (2006), 'The Thematic Analysis', is employed to interpret the qualitative data. Thematic Analysis is a flexible method used to identify, analyze, and report recurring patterns or themes within a data set. It allows researchers to make sense of rich, detailed information by systemically coding and categorizing data. This method is particularly effective for analyzing responses to open-ended questions and transcribed interviews, as it helps uncover underlying meanings, perspectives, and experiences expressed by participants. In this case, thematic analysis is applied to the answers from the questionnaire's open-ended sections and the teacher's recorded interviews, enabling a comprehensive interpretation of the qualitative input in the form of coherent, structured textual themes.

Conclusion

This chapter has outlined how the research was planned and carried out. First, it explained the overall approach, which involved using a combination of both quantitative and a qualitative research method (mixed-method). Second, it detailed how the information and data were collected, including where and from whom, and the tools that were used which consists of both questionnaire and interview. Finally, it described how the collected information were analyzed and interpreted.

Presentation of the Findings

Introduction

This chapter presents all the findings obtained from our investigation at the Department of English at MMUTO. It contains two main sections. The first section displays the results of the questionnaire which has been answered by 46 students. The second section shows the results of the recorded interview with 5 teachers at the Department of English at MMUTO.

3.1 Presentation of the Findings of the Questionnaire

The questionnaire is divided into two main sections; the first one is entitled ‘Students’ Background Information’ and the second is ‘Students’ Engagement with AI for Self-Assessement’.

3.1.1 Results of Section One: Students’ Background Information

Question (1): Please specify your education level

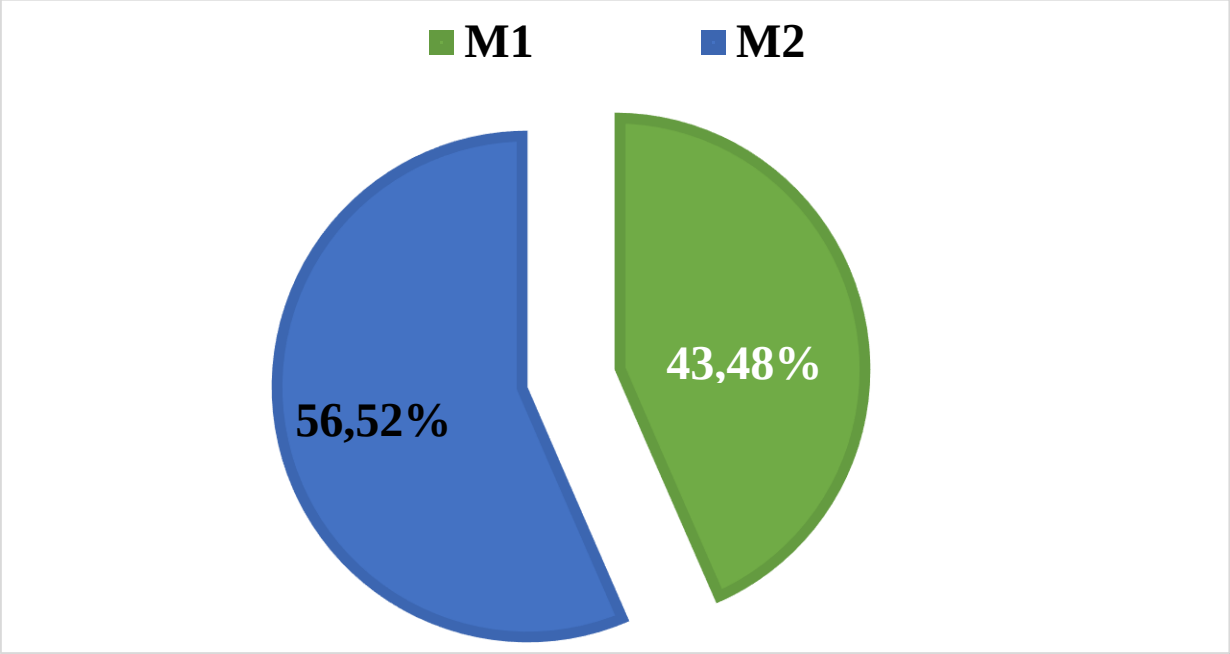

Diagram 1. Students' Education Level

Diagram 1 indicates the participants' study level. The 43,48% of them are M1 students, and the other participants 56,52% are M2 students.

Question (2): Please specify your major.

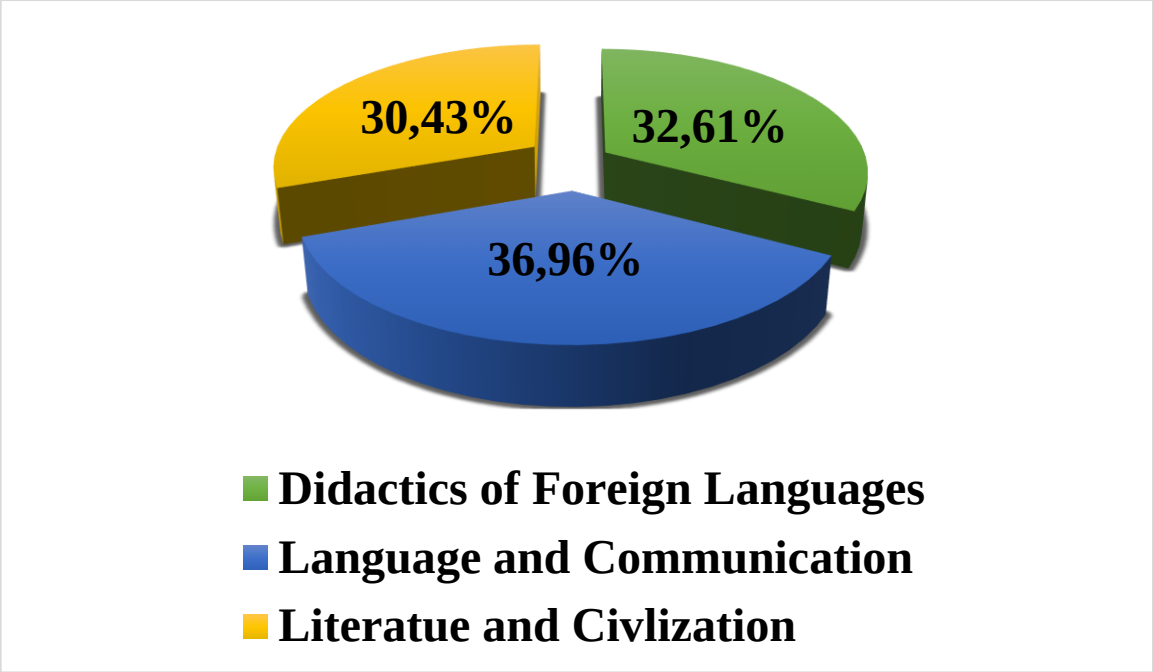

Diagram 2. Students' Major

This figure indicates that the major part of the participants 36,96% are specialized in Language and Communication, 32,61% of them are specialized in Didactics of Foreign Languages while 30,43% of them are Literature and Civilization' students.

Question (3): How often do you use AI for educational / language learning purposes?

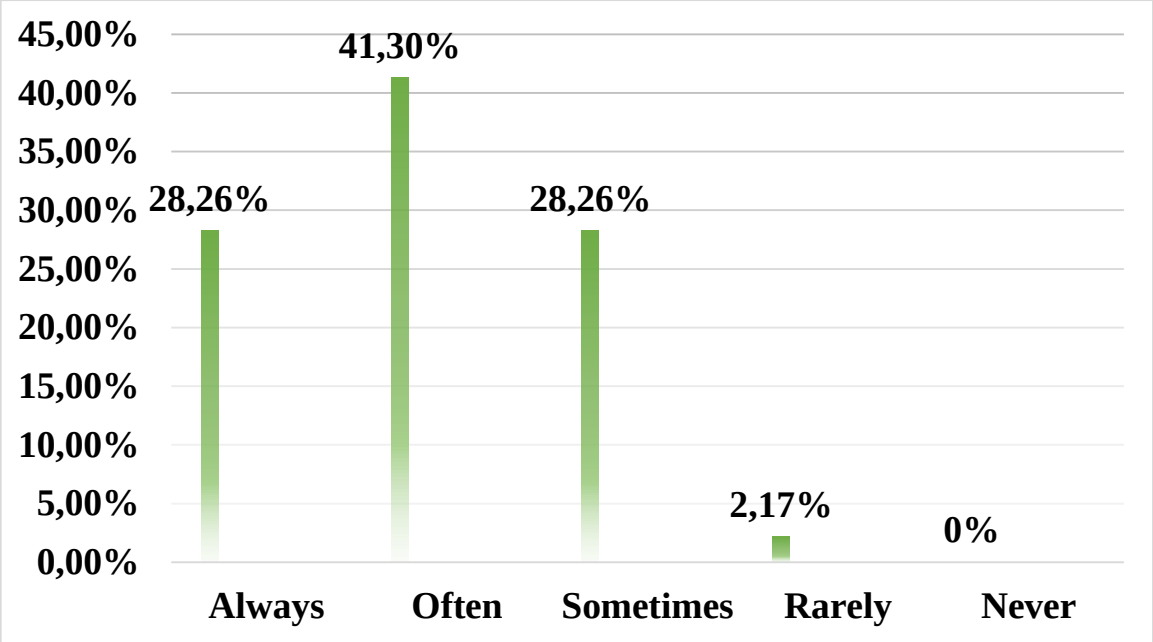

Diagram 3. AI Use for Learning Process

Question (4): In your opinion, is AI beneficial in education?

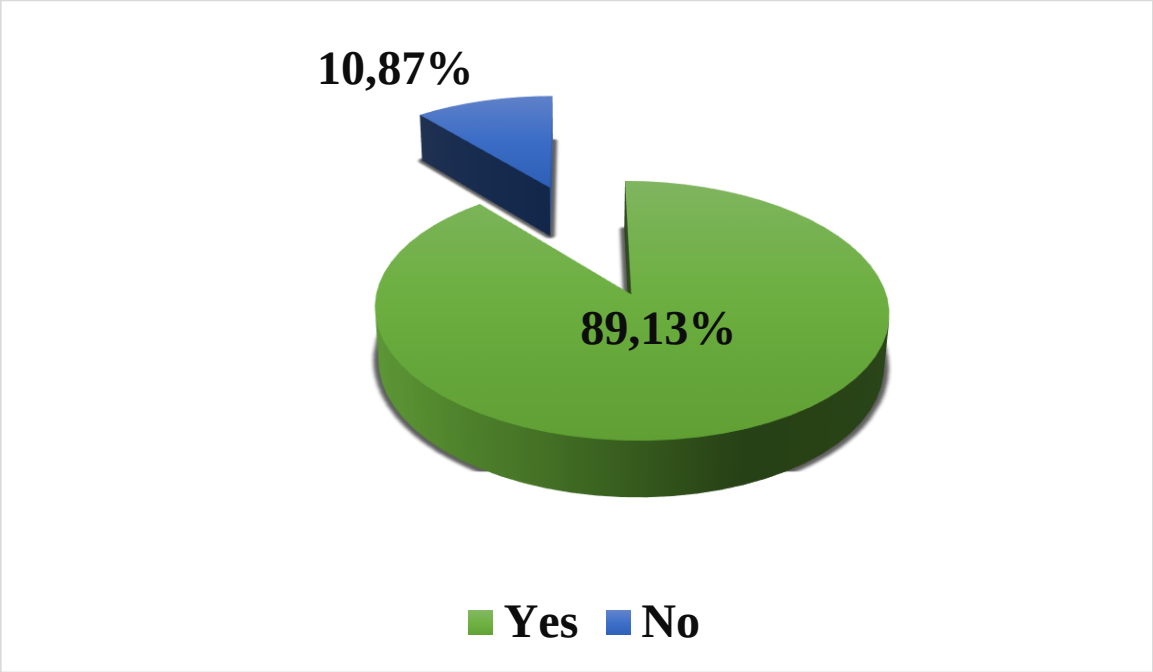

Diagram 4. Students' Perfection of AI

- If yes, please elaborate according to your personal experience.

The forty-one (41) participants out of forty-six (46), who have answered this question, consider AI to be beneficial in education. Some assume to always seek help from AI whenever they encounter difficulties during their learning process as it clarifies complex concepts for them. Other participants, moreover, state that AI provides immediate feedback about their performances by correcting their errors like grammatical ones and improving vocabulary. Moreover, another provided explanation is that AI contributes to the development of their academic skills by offering concise explanations and facilitating the correction of written works. It also assists with both summarizing content and providing detailed information, which supports the evaluation and improvement of their academic output, as well as the generation of new ideas. Additionally, respondents described AI as time-efficient and interactive, noting its ability to recommend diverse learning resources and platforms. Finally,

some participants highlighted that AI enables them to acquire new knowledge, enhance critical thinking, and improve their overall academic understanding and performance.

3.1.2 Results of Section Two: Students' Engagement with AI for Self-Assessement

Question (5): How important is goal specification for effective self-assessment?

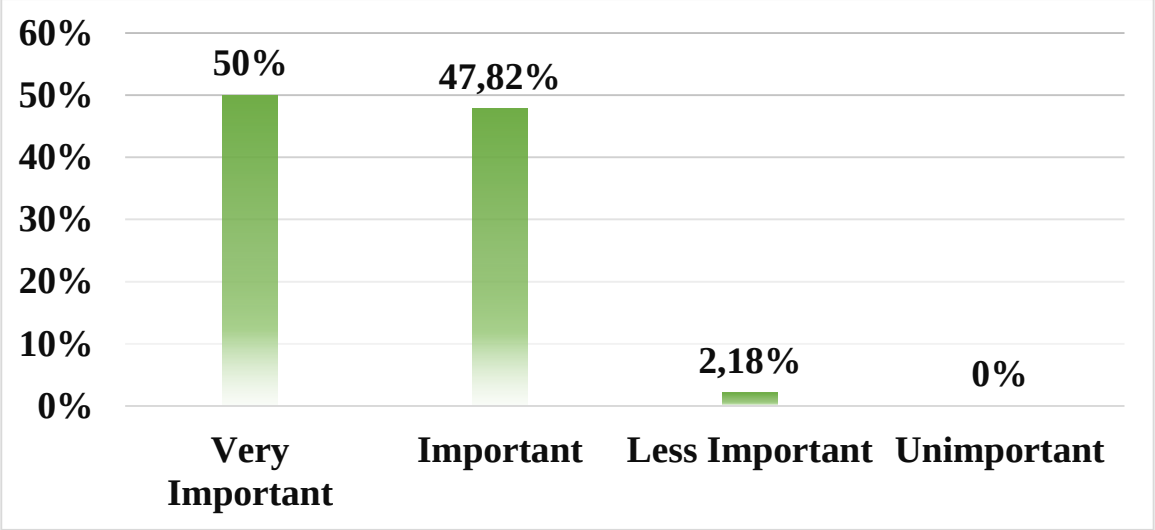

Diagram 5. Goal Specification

Question (6): in which way does goal specification help you assess your performance and achievements effectively?

The answers to this question differ from one participant to another regarding the role of goal specification in assessing performance and achievements reveal several consistent themes. Most participants emphasized that having clear and specific goals provides a focused direction, making it easier to achieve desired outcomes and enhancing overall performance.

Other respondents, moreover, noted that goal specification helps maintain a single focus, which in turn facilitates faster progress and improved results. Additionally, Others highlighted that setting clear goals promotes organization, sustained engagement with tasks, and structured self-evaluation, all of which contribute to better performance, particularly in academic contexts such as examination preparation. Furthermore, several answers indicated that goal specification offers tangible benchmarks for measuring progress, assists in identifying strengths and weaknesses, and highlights areas needing improvement. This process was also associated with increased motivation, more effective feedback, and greater self-reflection, ultimately supporting continuous personal and academic development. Overall, the findings suggest that participants perceive goal specification as a critical tool for effective self-assessment and achievement tracking.

Question (7): How important do you use AI to understand or generate clear criteria for evaluating your work?

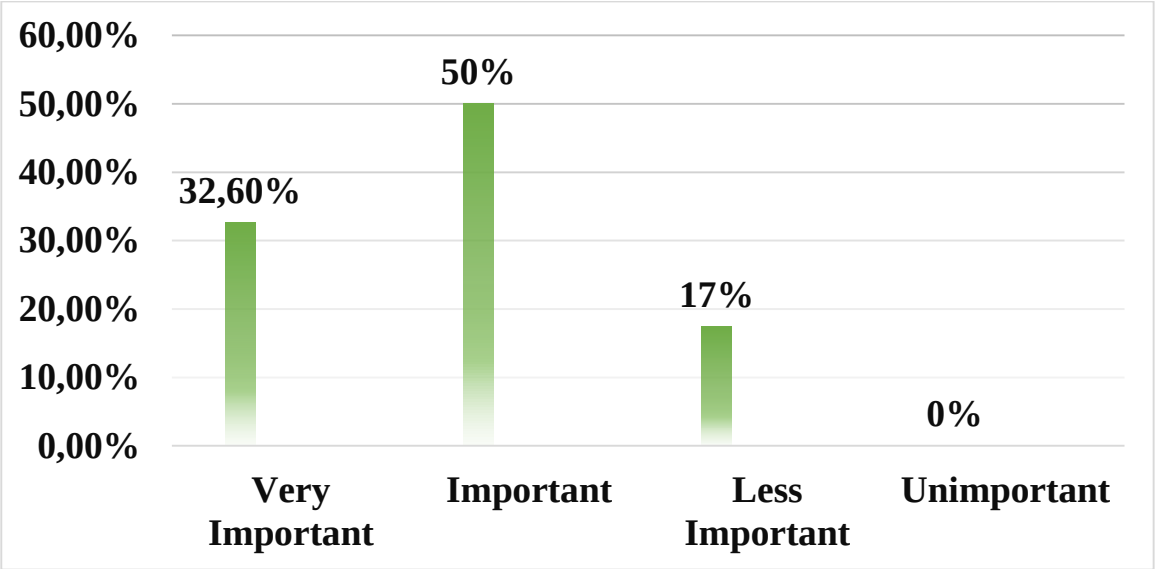

Diagram 6. Importance of Using AI

Question (8): How often do you consult AI to compare your work against standards, rubrics or ideas responses?

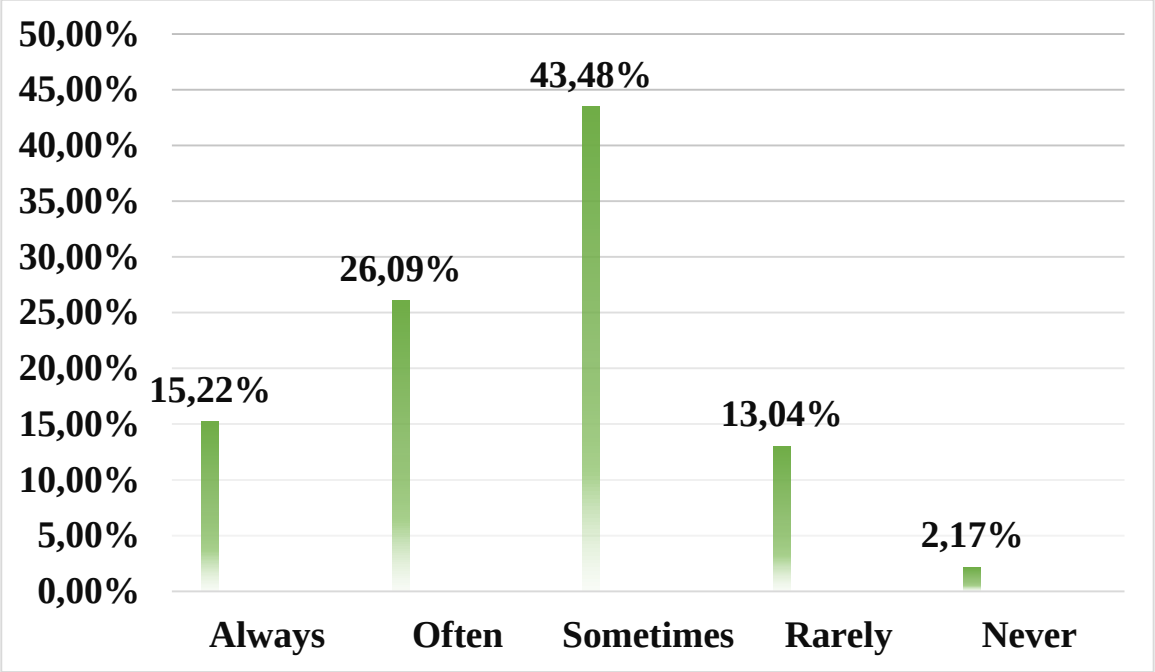

Diagram 7. Consulting AI to compare Work

Question (9): How could AI provide you with evidence that allows you to get engaged in assessing your own performance? Please provide examples or describe your experience.

This question is asked for the purpose of exploring how AI can provide evidence that enables learners to engage in assessing their own performance. Some students assume that AI offers valuable feedback by analyzing various aspects of their writing, such as grammar, vocabulary, and overall coherence. Other respondents mentioned using AI tools to check if their essays meet academic criteria and to ensure their work is free from errors. Others highlighted that AI helps them track their progress, identify discrepancies, and suggest

specific areas for improvement, which supports their self-evaluation in an open and reflective manner. Additionally, some participants emphasized that AI allows them to compare their work against required standards and make targeted adjustments, thereby enhancing their academic writing skills through timely and actionable feedback. Overall, the findings

demonstrate that AI plays a significant role in fostering independent self-assessment and continuous development among learners.

Question (10): How often do you rely on AI tools to summarize, reflect or log your progress with examples?

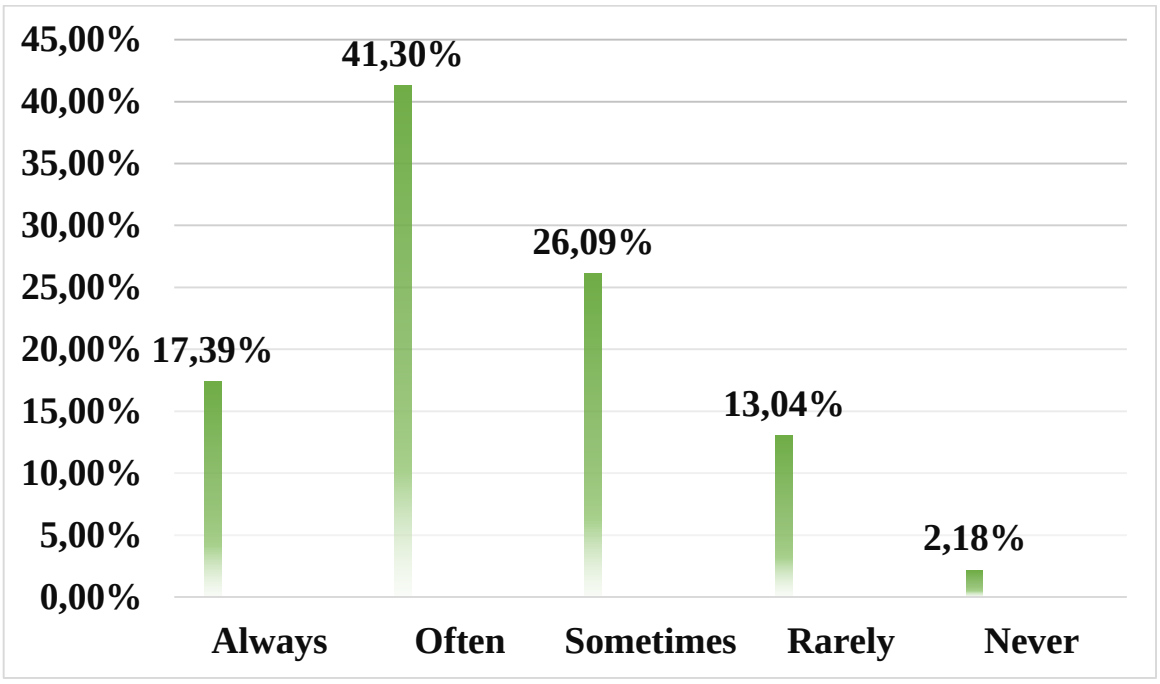

Diagram 8. Relying on AI

Question (11): How important is it to use AI to help you critically evaluate the quality of your work?

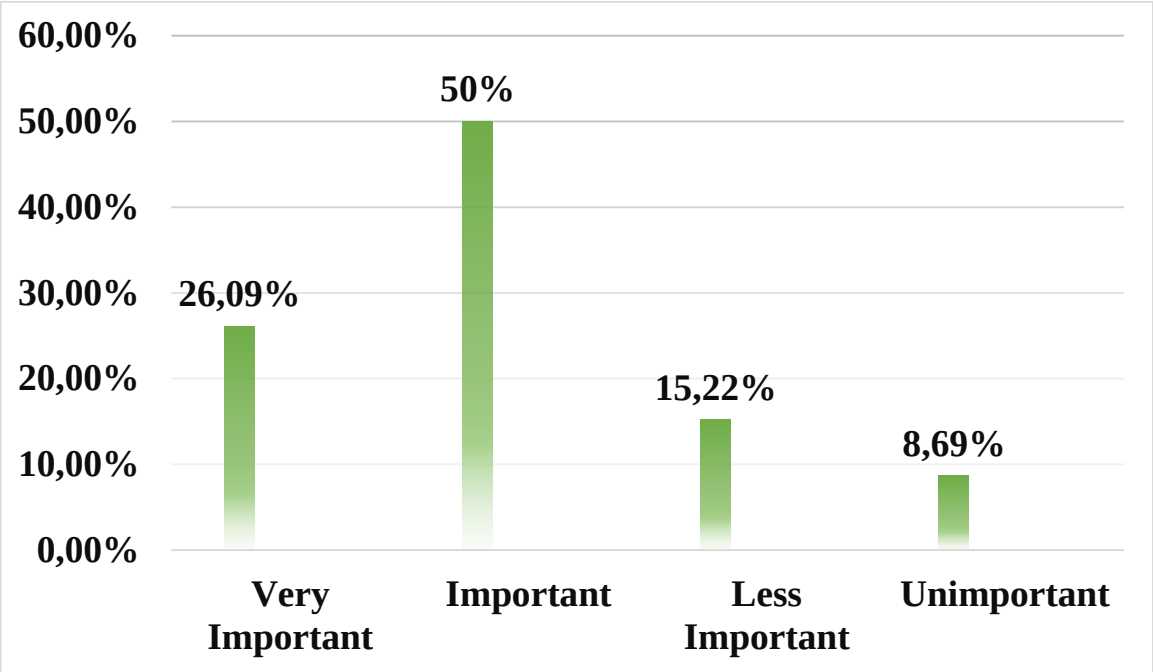

Diagram 9. Importance of Using AI

Question (12): How often do you seek AI feedback (e.g. logic checking…) before making a final judgement?

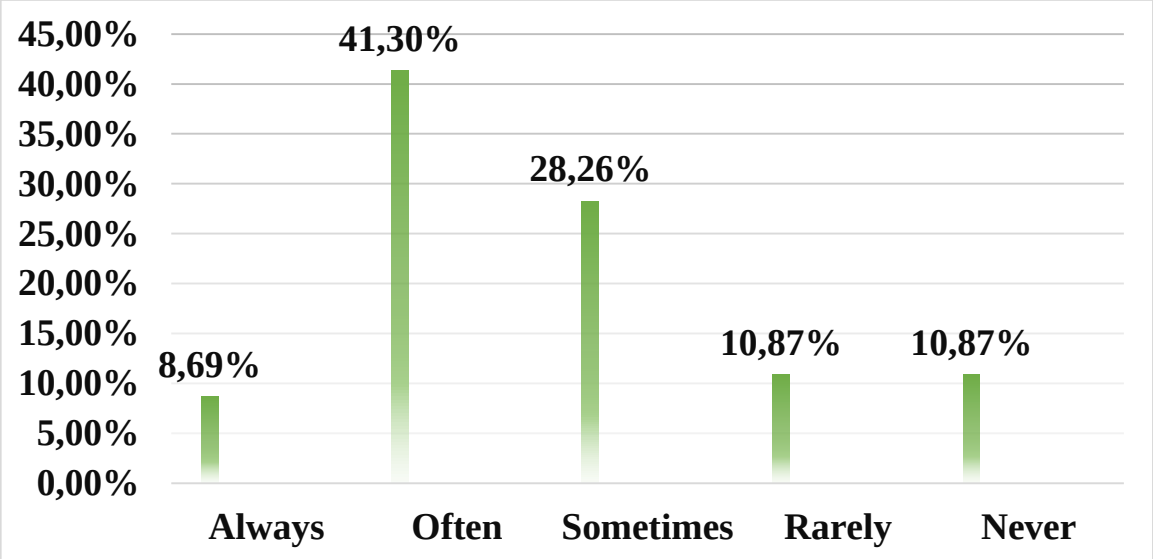

Diagram 10. Frequency of Seeking Feedback

Question13: How could AI be used to plan for future improvement?

This question brought out a range of thoughtful responses from students about how AI can support planning for future improvement. Many participants noted that AI is effective at analyzing information and providing continuous feedback, which can motivate learners to develop specific skills. It was also pointed out that AI can design learning paths tailored to individual needs, helping students improve their academic performance. Some participants mentioned that AI is useful for creating daily plans or structured routines, making it a valuable tool for guiding and monitoring progress during the learning process. However, several respondents warned against relying entirely on AI and emphasized that it should be used as a support tool rather than a complete solution. There was also broad agreement that AI can help learners develop better time management and organizational skills, with some describing it as similar to having a personal tutor. Overall, the findings suggest that participants view AI as a powerful aid for self-improvement, personalized learning, and strategic planning, while also recognizing the importance of combining it with human judgment and reflection.

Question (14): For which purposes do you use AI tools? List any activities or tasks.

This question is asked to ascertain the purposes for which students utilize AI tools. The majority of the participants commonly reported employing AI tools to facilitate the comprehension of complex concepts, assist in task completion, and enhance their overall understanding of challenging subject matter. A significant number of respondents indicated that they rely on AI to obtain constructive feedback on written assignments, refine their writing style, and generate concise summaries of textual content. Additionally, several

students disclosed that they use AI tools to support their academic pursuits in fields such as philosophy, ethics, and religious studies. AI was also cited as a valuable resource for developing rhetorical competencies, acquiring proficiency in foreign languages particularly

English and cultivating cognitive skills, such as strategic thinking through activities like chess. Furthermore, AI tools are widely used for practical academic purposes, including paragraph composition, text summarization, error correction, and the critical analysis and evaluation of scholarly work. Participants also noted the use of AI in the creation of digital content, such as images and videos, as well as in lesson planning, data analysis, text translation, and the simplification of curricular materials. Lastly, students highlighted the role of AI in facilitating access to specialized research sources, definitions, and general knowledge, thereby supporting a more enriched and efficient learning experience.

3.2 Presentation of the Findings of the Interview

3.2.1 Teacher's Background Information

Question 01: Can you please introduce yourself and tell us about your experience teaching English at MMUTO?

This Question aimed to gather background information about the participants' teaching experience. The responses revealed that the majority of the teachers (three out of five) have over ten (10) years of experience teaching English at MMUTO, while the remaining two have taught for less than ten (10) years.

Question 2: In your experience, what are EFL students' general attitudes towards self-assessement in language learning?

This question explored teachers' perceptions of EFL students' attitudes toward self-assessment. Several teachers indicated limited direct experience with AI supported self-assessment but speculated that students do engage with it and benefit to some extent. Other teachers observed that students are not yet fully familiar with self-assessement concepts, particularly when using AI tools. They noted that students tend to rely more on teachers or software rather than evaluating their work independently.

Question 3: What are your initial thoughts on the potential of using AI tools for self-assessement in EFL learning?

This question intends to discover the initial thoughts on the potential of using AI tools for self-assessment in EFL learning. All participants agreed that AI tools have significant potential in supporting self-assessment, provided students know how to use them effectively. However, they also observed that students often misuse AI tools, treating them as shortcuts for generating content rather than as aids for learning. Some students use AI primarily for quick answers or even for dishonest purpose, such as cheating.

3.2.2 Insights on AI and Students Self-Assessment

Question4: In your opinion, how important is the specification of goals for effective student self-assessment?

This question aims to show what teachers think about the importance of setting goals for effective students' self-assessment. All teachers strongly emphasized the importance of goal setting in fostering effective self-assessment. They agreed that clear goal help students develop autonomy, confidence, and initiative skills essential to academic success and real world application.

Question 5: How do you think clear goal setting helps students evaluate their performance and achievements?

This question is asked to explore how teachers think about clear goal setting helps students evaluate their performance and achievement. Teachers unanimously believed that having well defined learning goals enables students to track their progress and recognize their improvements. One teacher added some students may not consciously set goals but still have implicit objectives guiding their learning, while others are more structured and systematic from the beginning.

Question 6: Do you find AI helpful in guiding students to understand or generate clear criteria for evaluating their work? Why or Why not?

This question aimed to know if the teachers find AI helpful in guiding students to understand or generate clear criteria for evaluating their work. The results of this question indicate three teachers agreed that AI tools are useful, especially in writing and grammar focused tasks. These tools provide immediate, targeted feedback on elements such as grammar, coherence, and clarity. However, they noted that teacher guidence remains crucial for interpreting and applying such feedback. The remaining teachers expressed reservations

about AI, citing its misuse and students' overreliance on it, which may hinder the development of independent learning skills.

Question7: How often do your students make use of AI tools to compare their works against standards, rubrics, or modal responses?

The purpose of this question is meant to determine the thoughts of teachers about the frequency of the EFL student's use of AI to compare their works against standards, rubrics or modal responses. Teachers reported that students frequently use AI, although not necessarily for comparison with rubrics or modal. In many cases, students use AI generated content directly, bypassing the opportunity for meaningful self-evaluation. One teacher

mentioned that this question this question might be better directed at students themselves for accurate insights.

Question8: In your experience, how can AI provide students with concrete evidence that supports their self-assessment progress?

This question looks at how AI provides students with concrete examples that supports their self-assessment progress. Most teachers agreed that AI tools can offer concrete, actionable feedback, such as identifying grammar and vocabulary errors and suggesting improvements. This kind of feedback allows students to pinpoint weaknesses and monitor progress. However, one teacher emphasized that the usefulness of AI depends on the quality of the prompts students use when interacting with the tools.

Question 9: How often do your students rely on AI tools to summarize content, reflect or track their learning progress?

The results of this question show that many teachers think that Master's students at MMUTO are increasingly using AI tools to summarize academic content. However, one teacher, particularly in the field of Phonetics, noted that AI tools are less useful in modules focused on pronunciation due to their complexity and potential for misinformation. In such cases, direct teacher guidence remains essential.

Question 10: How important is the use of AI in helping students critically evaluate the quality of their work?

This question investigates the importance of AI in helping students critically evaluate the quality of their work. All teachers agreed that AI can be an important support tool for critical self-evaluation, especially when students use it responsibly. It helps students identify areas for improvement, such as awkward phrasing or limited vocabulary.

Nevertheless, they stressed that AI should complement, not replace, human judgement and critical thinking.

Question 11: How often do your students often seek feedback from AI tools (e.g. logic checking, grammar suggestions, …) before finalizing their work?

This question aims to investigate the frequency of seeking feedback from AI before finalizing the work. While some teachers found it difficult to assess this due to restrictions on AI use in classrooms, others estimated that students frequently seek AI feedback before submitting assignments. These students typically use AI to check grammar and coherence, especially in final revisions.

Question 12: From teacher's perspective, how could AI be integrated to support students in planning for future improvements?

This question looks at how AI could be integrated to support students in planning for future improvements. All participants acknowledged the value of integrating AI into the educational systems to support learning and planning for improvement. They advocated for a more structured and positive use of AI in Algerian universities, emphasizing the need for training students on how to use AI tools effectively and ethically.

Question 13: What specific educational tasks or activities do your students typically use AI tools for?

This question aims to cite some activities or tasks where AI is used. Teachers reported that students primarily use AI for writing assignments, especially for grammar and structural correction. Additionally, AI is often used in critical analysis tasks, such as interpreting literary texts or applying theoretical framework in literature and civilization courses.

Conclusion

This chapter has presented the key findings of the study conducted with a total of 46 participants at the Department of English at Mouloud Mammeri University of Tizi-Ouzou by means of a questionnaire and an interview. The results provide insights into students' use of AI for self-assessment.

Discussion of the Findings

Introduction

This chapter addresses the research questions outlined in the general introduction. It presents the findings derived from the study's questionnaire and interview data, subsequently discussing and interpreting these results in light of our literature review and the analytical framework underpinning this research.

Additionally, this chapter evaluates the validity of Hypothesis Three, which was formulated at the outset of this inquiry. The chapter is structured around the two primary research questions: firstly, it examines the attitudes of EFL Master students towards using AI for self-assessment at the MMUTO Department of English; and secondly, it investigates the extent to which AI assists EFL students in their self-assessment practices.

4.1 Answer to research question N #1: EFL Master's Students' Attitudes towards AI in Self-Assessment

This section addresses Research Question #1 by integrating findings from both the questionnaire and the interview. It particularly highlights several key areas: students' familiarity with AI, their approaches to goal specification, the application of achievement judgment criteria, methods of evidence collection, the practice of qualitative judgment, and strategies for future improvement.

4.1.1 Students' Familiarity with AI

The findings from Questions 1, 2, and 3 of the questionnaire reveal that a significant majority, estimated at 89.13%, of Master's 1 and Master's 2 students across Didactics of Foreign Languages, and Language, Communication, and Literature and Civilization at

MMUTO's Department of English, actively use AI for educational and learning purposes (see Diagram 3).

Furthermore, results from Question 4 indicate a strong student perception of AI's benefits in education. Participants frequently reported that AI clarifies complex concepts and offers immediate performance feedback, including grammatical corrections and vocabulary improvements. Additional explanations provided highlight AI's role in developing academic skills through concise explanations, facilitating the correction of written works, assisting with content summarization, providing detailed information, and supporting the evaluation, improvement, and generation of new academic ideas. Respondents also lauded AI for its time-efficiency, interactivity, and its ability to recommend diverse learning resources and platforms. Crucially, some participants emphasized that AI aids in new knowledge acquisition, enhances critical thinking, and improves overall academic understanding and performance.

These findings resonate strongly with those presented in the empirical study, ‘An Introduction to AI Technology’ (see review of literature chapter). Specifically, Lucken et al., Baidoo-Anu & OwusuAnsah, Zawacki-Richter et al., and Smutny & Schreiberova have collectively demonstrated the significance of AI as a tool for: supporting personalized instruction by adapting to students' unique needs and learning rates; helping students build critical thinking and linguistic capabilities through instantaneous feedback and proposals, thereby developing a more active learning process; facilitating instant feedback and formative assessment that allow learners to correct misconceptions in a timely fashion and achieve deeper insights and longer retention of what is gained; supporting learners in answering regular student questions constantly and taking users step-by-step through challenging material outside class.

Based on this compelling evidence, it is concluded that AI is progressively increasing in importance within the Algerian educational landscape.

4.1.2 Students' Engagement in Goal Specification

Student engagement with goal specification refers to the degree of involvement students demonstrate in defining, pursuing, and achieving their personal learning objectives. This involves a deliberate process of conceptualizing desired outcomes, establishing clear targets, and maintaining the motivation and focus necessary for their attainment. Questions 5 and 6 of the questionnaire, alongside Questions 4 and 5 of the interview, were designed to ascertain the importance of goal specification for effective student self-assessment and to understand the mechanisms through which it aids learners in evaluating their performance and achievements.

The questionnaire findings reveal compelling insights from students. When asked about the importance of goal specification for self-assessment, 50% of students across various specialties deemed it 'very important' (see Diagram 5). Furthermore, in explaining how goal specification aids their performance assessment, most participants emphasized that clear and

specific goals provide focused direction, facilitating the achievement of desired outcomes and enhancing overall performance. Other respondents noted that goal specification helps maintain a singular focus, which accelerates progress and improves results. Additionally, students highlighted that clear goals promote organization, sustained task engagement, and structured self-evaluation, all contributing to superior performance, particularly in academic contexts such like examination preparation. Several responses also indicated that goal specification offers tangible benchmarks for measuring progress, assists in identifying

strengths and weaknesses, and pinpoints areas for improvement. This process was further linked to increased motivation, more effective feedback, and enhanced self-reflection, collectively fostering continuous personal and academic development. Overall, these findings underscore students' perception of goal specification as a critical tool for effective self-assessment and achievement tracking.

Teacher perspectives, gathered through the interview, strongly corroborate these student views. All participating teachers unequivocally emphasized the importance of goal setting in cultivating effective self-assessment. They unanimously agreed that clear goals empower students to develop essential autonomy, confidence, and initiative skills crucial for both academic success and real-world application. As one teacher articulated: 'It’s very important. When students self-assess, it gives them the tool to become autonomous. If we don’t teach them how to self-assess, they will always depend on others, lack confidence, and lack the initiative skills needed in real-world settings...'. Teachers also believed that well-defined learning goals enable students to effectively track their progress and acknowledge their improvements. One teacher added a nuanced observation that while some students may not explicitly set goals, they often possess implicit objectives guiding their learning, whereas others adopt a more structured and systematic approach from the outset.

These findings align robustly with previous research, particularly an empirical study titled 'Enhancing Learning through Self-Assessment.' In the opinion of Boud, proper goals formulated give a yardstick against which to measure oneself and allow students to monitor appropriately. Boud (1995, p. 15) further emphasizes: “Students need to be in a position to

state what it is that they are trying to learn and do, and not only in institutional terminology but in a way that is meaningful to themselves".

In conclusion, the evidence strongly suggests that setting clear goals profoundly aids students in self-assessing their performance, cultivating greater independence and confidence, and effectively tracking their progress. Even in instances where goals are not consciously articulated, a clear sense of purpose demonstrably enhances learning outcomes. This assertion is robustly supported by existing research, which consistently indicates that meaningful goals empower students to understand and guide their own learning journey effectively.

4.1.3 Student's Engagement with Evidence Collection

The findings from Question 9 of the questionnaire consistently demonstrate that AI offers valuable feedback to students by analyzing various aspects of their writing, including grammar, vocabulary, and overall coherence. Respondents further indicated that AI tools are utilized to verify adherence to academic criteria and ensure work is free from errors. Moreover, participants highlighted AI's contribution to tracking progress, identifying discrepancies, and suggesting specific areas for improvement, thus supporting self-evaluation in an open and reflective manner. Additionally, some emphasized that AI enables them to compare their work against required standards and make targeted adjustments, thereby enhancing their academic writing skills through timely and actionable feedback. Overall, these findings underscore AI's significant role in fostering independent self-assessment and continuous development among learners.

Complementing these insights, Question 8 of the interview revealed a broad agreement among teachers that AI tools can offer concrete, actionable feedback, such as identifying

grammar and vocabulary errors and proposing improvements. This type of feedback, they concurred, empowers students to pinpoint weaknesses and monitor their progress. However, one teacher judiciously emphasized that the usefulness of AI is contingent upon the quality of the prompts students employ when interacting with the tools.

These contemporary observations align strongly with established pedagogical principles. According to previous researches, students gain evidence of their performance in order to reflect effectively. Boud stresses that students learn to recognize, select and generate evidence to support their assertions of their own learning. As Boud (1995, p. 27) asserts: "Students need to be in a position to call upon evidence from their own performance and experience which justify the judgements that they make."

This analysis leads to the conclusion that while AI significantly facilitates the process of identifying and understanding personal performance evidence more rapidly and effectively, the foundational idea of actively engaging with one's own work for the purpose of improvement remains an enduring truth.

4.1.4 The Practice of Qualitative Judgement

The data obtained from Questions 10 to 12 strongly support the relevance of David Boud's (1995) Self-Assessment Schedule Model, particularly its emphasis on qualitative judgment. According to Boud, self-assessment is not merely a process of quantifying performance but involves thoughtful, qualitative evaluation of one's learning progress, quality of work, and decision-making. Responses from the questionnaire indicate that students are actively using AI tools to engage in metacognitive activities such as summarizing, reflecting, and evaluating their work. These practices align closely with the qualitative judgment

component of Boud's model, which emphasizes the learner's active role in interpreting and reflecting on their academic development to make informed decisions.

In response to Question 10, a combined 84.78% of students reported using AI tools at least occasionally to summarize or reflect on their progress. This finding highlights students' engagement in monitoring and making meaning of their learning a core element of Boud's conception of qualitative judgment (see diagram 8).

Question 11 revealed that 76.09% of students consider AI to be important or very important in evaluating the quality of their work. This demonstrates learners' critical engagement with standards and criteria, reinforcing the reflective dimension central to Boud's model (see diagram 9).

Similarly, responses to Question 12 showed that 70.25% of participants seek feedback from AI tools at least occasionally before making final judgments. This behavior underscores a commitment to informed and reflective decision-making, another key tenet of qualitative self-assessment as conceptualized by Boud (see diagram 10).

Boud (1995) asserts that the development of qualitative judgment is fundamental to fostering learner autonomy the ability to self-regulate and adapt learning strategies independently. The findings of this study suggest that AI tools are being employed not as a substitute for learner judgment but as a means of enhancing it, particularly through the provision of feedback, structure, and scaffolding.

Although a minority of students reported rare or no use of AI tools (ranging from 2.18% to 10.87% across the three questions), this may reflect individual differences in

confidence, digital literacy, or personal preference factors that Boud also acknowledges as influential in the depth and authenticity of self-assessment practices (see diagrams 8,9,10).

The qualitative insights drawn from teacher interviews offer a valuable layer of triangulation to the quantitative data collected through the student questionnaire, enriching the overall interpretation of the findings. Teachers broadly acknowledged the potential of AI as a supportive mechanism for promoting critical self-evaluation among students, particularly when integrated thoughtfully and used with discernment.

Participants in the interviews noted that AI tools assist students in identifying areas for improvement in their work, such as awkward phrasing, limited vocabulary, or structural inconsistencies. In doing so, AI facilitates meaningful reflection and contributes to students' development of evaluative judgment. These observations align with the principles articulated in Boud's (1995) model, where qualitative judgment is not merely about assessing outcomes, but about engaging deeply with one's learning process. However, teachers also expressed important reservations. They consistently emphasized that AI should function as a complement, not a substitute, for human judgment and critical thinking. This caveat reflects Boud's argument that authentic self-assessment must remain learner-driven and cognitively active, underscoring the importance of maintaining students' autonomy in the evaluative process.

While some educators reported difficulties in gauging the extent of AI use often due to institutional constraints or limited visibility into students' independent learning practices others observed that students frequently utilize AI tools to improve coherence, grammar, and clarity, particularly during the final stages of writing. These behaviors reflect an emerging

pattern of self-regulated learning, consistent with the processes of metacognitive monitoring and qualitative assessment described in Boud's framework.

Taken together, the perspectives of both students and teachers converge on the conclusion that AI tools are increasingly instrumental in supporting the development of qualitative judgment. Rather than displacing reflective engagement, AI appears to scaffold it offering timely, structured feedback that students can leverage to inform revisions and enhance the quality of their academic work. Notably, both data sources underscore the importance of using AI tools critically and judiciously, a stance that resonates strongly with Boud's (1995) emphasis on learner autonomy, responsibility, and the internalization of evaluative standards.

It is also important to consider the minority of students (between 2.18% and 10.87%) who reported minimal engagement with AI tools. This variation may be attributable to differences in digital confidence, technological access, or personal learning preferences, all of which Boud identifies as potential influences on the depth and authenticity of self-assessment practices. These findings suggest the need for continued pedagogical support to ensure that all learners can access and benefit from AI enhanced reflection within a balanced, learner centered framework.

4.1.5 Strategies for Future Improvement

The data obtained from the student questionnaire reveal significant insights into the role of artificial intelligence (AI) in facilitating future-oriented planning for self-improvement. These findings align closely with the 'planning for future improvement' dimension of David Boud's (1995) Self-Assessment Schedule Model, which posits that effective self-regulated

learning requires structured reflection, goal-setting, and strategic planning. The analysis below synthesizes student perspectives with Boud's theoretical framework, demonstrating how AI can serve as an enabler of self-directed learning while also highlighting areas requiring critical engagement.

Boud (1995) underscores the necessity of formative feedback in self-assessment, arguing that learners must critically evaluate their progress to identify areas for development. Questionnaire responses indicate that students perceive AI as instrumental in this process, citing its capacity to analyze performance data and deliver real-time feedback. This supports Boud's assertion that meaningful self-assessment relies on external inputs that prompt reflection. However, while AI enhances the efficiency of feedback, Boud's model reminds us that internalization and critical interpretation remain the learner's responsibility.

A prominent theme in the responses was AI's ability to generate tailored learning plans, adapting to individual strengths and weaknesses. This aligns with Boud's emphasis on strategic planning as a core component of self-assessment. AI's role in scaffolding goal-setting and adaptive learning trajectories mirrors Boud's view that learners must actively construct actionable strategies for improvement. Nevertheless, the model cautions against over-reliance on external systems, emphasizing that agency and self-regulation must remain learner-driven.

Several respondents highlighted AI's utility in fostering time management and structured routines, which Boud (1995) identifies as critical for sustained self-improvement. By assisting learners in organizing tasks and monitoring progress, AI functions as a metacognitive aid, reinforcing Boud's view that self-assessment necessitates deliberate

practice and self-monitoring. However, the model also stresses that true competency development requires learners to internalize these skills independently, suggesting that AI should complement rather than replace autonomous planning behaviors.

While students acknowledged AI's benefits, many cautioned against uncritical dependence, advocating for its use as a support tool rather than a substitute for human judgment. This perspective aligns with Boud's (1995) model, which frames self-assessment as an active, reflective process, not a passive reception of external guidance. The findings suggest that AI is most effective when integrated into a learner-centered framework, where technology supports data-driven decision-making while preserving human agency and intentionality.

The interview data collected from educators in response to question 12 concerning the role of AI in supporting students' planning for future improvement offers critical insights into both the opportunities and challenges of AI adoption in higher education particularly within the Algerian context. These findings can be meaningfully interpreted through David Boud's (1995) self-assessment framework, which underscores the importance of reflective practice, goal-setting, and iterative enhancement. Educators consistently acknowledged AI's potential to enhance students' forward-looking learning behaviors, aligning with Boud's assertion that effective self-assessment must be grounded in structured reflection and the formulation of concrete improvement strategies. Teachers observed that AI tools, such as grammar checkers and coherence analyzers, enable students to refine their writing prior to submission. This functionality reflects Boud's concept of formative feedback loops, wherein learners continuously revise their work in response to external input. In addition, several participants noted that AI applications can identify individual skill gaps and recommend tailored

resources. These affordances resonate with Boud's vision of learner-specific improvement planning, where data informs targeted and autonomous progression. Importantly, Boud emphasizes that effective planning for improvement must be both data-informed and interpretive. While AI offers diagnostic input such as highlighting error patterns or coherence issues the educational value ultimately hinges on students' ability to critically analyze and act upon this feedback, a point that educators strongly reinforced during the interviews.

A recurring theme across the interviews was the lack of structured training on AI usage within Algerian higher education institutions. Educators emphasized the importance of pedagogical scaffolding to ensure that students engage critically with AI-generated feedback rather than adopting automated suggestions unreflectively. This concern reflects Boud's caution against over-reliance on external tools, emphasizing instead the need to cultivate metacognitive awareness and reflective judgment. In parallel, participants underscored the necessity of ethical literacy, calling for the integration of guidance on responsible AI use including issues related to plagiarism, authorship, and academic integrity. This aligns with Boud's emphasis that self-assessment must be authentic, learner-driven, and grounded in ethical responsibility. However, while AI has the potential to democratize access to formative feedback, educators cautioned that without adequate scaffolding, its use may encourage surface-level engagement rather than the deep, reflective learning Boud envisions.

In addition to pedagogical concerns, educators highlighted structural and cultural barriers that hinder effective AI integration in Algerian universities. Unequal access to AI technologies across institutions risks exacerbating existing educational disparities, thereby undermining the equitable application of Boud's learner-centered model. Furthermore,

resistance to pedagogical change among some faculty who perceive AI as a threat to traditional assessment methods impedes progress toward more reflective, student-driven practices. For AI-supported feedback to fully align with Boud's self-assessment framework, institutional policies must be reimagined to support a blended approach that values the complementary roles of both human and AI input in the learning process.

4.2 Answer to Research Question N#2: To what Extent does AI support EFL Students in Self-Assessment

4.2.1 Student's Use of AI

The responses to question 14 of the questionnaire indicate that most participants frequently use AI tools for several key academic purposes. Primarily, students leverage AI to grasp difficult concepts, complete tasks more easily, and deepen their understanding of challenging subjects. Many respondents also reported using AI to get helpful feedback on written work, improve their writing, and create brief summaries of texts. A number of students shared that AI tools assist them in specific academic areas like philosophy, ethics, and religious studies. Beyond subject-specific help, AI is seen as a valuable tool for developing rhetorical skills, learning foreign languages (especially English), and building cognitive abilities such as strategic thinking through activities like chess. For practical academic tasks, AI tools are widely employed for writing paragraphs, summarizing texts, correcting errors, and critically analyzing scholarly work. Students also noted using AI for creating digital content (like images and videos), planning lessons, analyzing data, translating text, and simplifying course materials. In addition, students emphasized AI's role in providing

easier access to specialized research sources, definitions, and general knowledge, which ultimately contributes to a richer and more efficient learning experience.

The results from the questionnaire align perfectly with the empirical study, ‘An Introduction to AI Technology’ (as discussed in the literature review). Artificial intelligence (AI) has dramatically transformed traditional teaching methods in education. It's moving us past passive learning models towards more active, adaptable, and personalized educational settings. AI tools, like intelligent tutoring systems, learning analytics, and automated assessment systems, help personalize instruction by adjusting to each student's specific needs and learning pace (Luckin et al., 2016). As Holmes et al. (2019, p. 10) put it, “AI has the potential to improve learning outcomes by providing personalized feedback, diagnosing learning challenges, and suggesting personalized learning pathways”. This shift has changed teachers' roles from being the sole source of knowledge to becoming facilitators of more interactive, student-focused learning experiences. For instance, platforms like Squirrel AI and Duolingo use machine learning to offer real-time help, boosting learners' understanding and skill development (Zawacki-Richter et al., 2019). In essence, AI is making education more customized for individual students, giving them more control and feedback. It's also reshaping the role of teachers to be more supportive and interactive.

AI-powered writing tools like Grammarly and ChatGPT are helping students develop critical thinking and language skills. They do this by offering instant feedback and suggestions, which fosters a more active learning approach (Baidoo-Anu & OwusuAnsah, 2023). In fact, a recent Educause (2023) study confirmed that nearly 88% of college and university students have used AI-driven learning tools, highlighting their growing role in academic success. However, the widespread use of AI also raises concerns about academic

integrity, data privacy, and potentially undermining students' ability to learn independently (Smutny & Schreiberova, 2020). There's an ongoing debate about whether the benefits of AI-supported learning outweigh the potential drawbacks for developing autonomous thinking and ethical research skills in students (Selwyn, 2019). Therefore, while AI has immense potential to transform education, its implementation requires careful consideration to ensure it truly enhances, rather than detracts from, the learning experience.

Based on this compelling evidence, it is concluded that AI is changing school by making learning more personal and active, instead of just listening to a teacher. It's like having a smart helper that gives you feedback and adjusts to how you learn best. This means teachers can focus more on guiding students. However, we need to be careful to make sure AI helps learning and doesn't just do the work for students, and that student information stays safe.

Interview findings from question 13 indicate that students mostly use AI for their writing assignments, particularly for correcting grammar and improving structure. Additionally, AI is frequently employed for critical analysis tasks, like interpreting literary texts or applying theoretical frameworks in literature and civilization courses.

In conclusion, Artificial Intelligence is rapidly reshaping the educational landscape, offering exciting possibilities for more personalized, engaging, and efficient learning experiences. While AI tools provide numerous benefits like tailored content, immediate feedback, and administrative support for teachers, their integration also presents challenges,

including concerns about academic integrity, data privacy, and the potential for over-reliance that could hinder students' critical thinking. Therefore, a balanced and thoughtful approach is essential to harness AI's full potential to enhance education, ensuring it serves to empower both learners and educators rather than replace the fundamental human elements of teaching and learning.

Conclusion

This chapter has meticulously examined and interpreted our research findings, drawing insights from David Boud's 'Enhancing Learning through Self-Assessment' and the World Travel and Tourism Council's 'An Introduction to AI Technology'. We've successfully addressed our two primary research questions, confirming the initial hypotheses. Specifically, our data supports the idea that EFL students hold a positive attitude towards using AI for self-assessment, particularly when it offers immediate feedback (hypothesis of the first question). Furthermore, both of our hypotheses for the second research question that AI self-assessment tools boost student motivation and engagement, and that students utilizing these tools show greater skill improvement than those who don't have been substantiated. This confirmation stems from the comprehensive information gathered through a questionnaire administered to Master's 1 and Master's 2 students in Didactics of Foreign Languages, Language and Communication, and Literature and Civilization at MMUTO's Department of English, as well as from interviews conducted with English teachers in the same department. The discussion and analysis of these results definitively prove and confirm that the vast majority of students are indeed highly familiar with and frequently use AI not only for self-assessment but for a multitude of other academic purposes.

General Conclusion

General Conclusion

This dissertation has explored the attitudes of EFL students toward the use of artificial intelligence (AI) for self-assessment. The study was conducted with Master's students enrolled in language studies at the Department of English, Mouloud Mammeri University of Tizi-Ouzou (MMUTO).

This study aims to achieve two main objectives. First, it seeks to identify the factors that influence EFL students' attitudes toward the use of artificial intelligence (AI) for self-assessment. Second, it endeavors to explore the perceived benefits associated with the use of AI tools in self-assessment among EFL students. To guide the investigation, the study draws on David Boud's (1995) model of self-assessment, which comprises five key components: goal specification, achievement judgement criteria, evidence collection, qualitative judgement, and plans for future improvement.

A mixed-methods approach has been used, as data have been collected and analyzed both quantitatively and qualitatively. The data collection has been done using two tools: a student questionnaire answered by forty-six (46) randomly selected master's students specializing in Didactics of Foreign Languages, Language and Communication, as well as Literature and Civilization; and interviews conducted with five (5) English teachers from the Department of English at MMUTO. As for the data analysis, it has been done through a descriptive statistical analysis of the close-ended items of the questionnaire, in addition to the qualitative content analysis for the open-ended items of the questionnaire and the interviews.

The analysis of the data gathered from the abovementioned instruments reveals that EFL learners generally hold a positive attitude toward the use of AI for self-assessment, particularly when it provides immediate feedback. Learners reported utilizing AI to

comprehend complex concepts, complete tasks more efficiently, receive constructive feedback on written assignments, enhance their writing skills, and generate concise summaries of texts. Moreover, participants' responses indicate that AI tools are beneficial not only for general academic support but also for subject-specific areas such as philosophy, ethics, and religious studies. Beyond disciplinary assistance, AI is perceived as a valuable resource for developing rhetorical competence, acquiring foreign language skills particularly English and enhancing cognitive abilities such as strategic thinking through activities like chess. In terms of practical academic applications, learners use AI for creating digital content (e.g., images and videos), lesson planning, data analysis, text translation, and the simplification of course materials.

By answering the research questions and confirming the hypotheses raised in the General Introduction, this study has proven effective the role of AI as a means for EFL (English as a Foreign Language) students to self-evaluate their language skills, particularly emphasizing the importance of immediate feedback. This is aligned with David Boud’s (1995) emphasis on learner autonomy through self-assessment, as presented in Enhancing Learning through Self-Assessment. Students may rely on its capacity to provide personalized learning experiences along with immediate feedback so as to take proactive roles in their learning. As for teachers, they may use artificial intelligence as an authentic tool capable of helping them innovate in terms of their teaching methods. It also sets the stage for syllabus designers and decision-makers to originate strategies and materials allowing the integration of AI into the educational framework all by upholding academic integrity.

By addressing the research questions and confirming the hypotheses outlined in the General Introduction, this study has effectively demonstrated the potential of artificial

intelligence (AI) as a valuable tool for English as a Foreign Language (EFL) students to self-assess their language proficiency, with particular emphasis on the benefits of immediate feedback. This finding aligns with David Boud's (1995) advocacy for learner autonomy through self-assessment, as articulated in Enhancing Learning through Self-Assessment. Students may rely on its capacity to provide personalized learning experiences along with immediate feedback so as to take proactive roles in their learning. For educators, AI presents an opportunity to innovate pedagogical practices and enhance instructional effectiveness. Moreover, it offers a foundation for syllabus designers and policy-makers to develop strategies and instructional materials that integrate AI into educational systems while maintaining academic integrity.

Like any scientific study, our research encountered a number of limitations, particularly during the data collection phase, which coincided with the examination period in our department. As previously mentioned, we employed both a questionnaire and interviews as data collection instruments. Consequently, we initially faced difficulties in recruiting a sufficient number of participants for each tool especially for the teacher interviews. This challenge stemmed from the requirement for teachers to dedicate time to respond to thirteen (13) questions regarding their perceptions and experiences with students' use of AI for self-assessment within our department, in addition to consenting to be recorded. Furthermore, the limited number of interview participants five (05) in total may limit the generalization of our findings.

Notwithstanding these limitations, this study opens new avenues for further inquiry. The incorporation of AI in education is a timely and globally relevant issue that is

attracting considerable attention. In the Algerian context, we suggest that future research investigate the impact of AI use on EFL learners' self-evaluation. This proposed topic could also be examined through the lens of self-assessment theories, employing different methodologies and data collection procedures. A case study design, in particular, may be well-suited to observing learners' experiences with this technology and assessing its impact on their autonomy.

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Appendices

"Students Questionnaire"

Dear students,

The present questionnaire was set to investigate the attitudes of EFL students towards the use of AI (Artificial Intelligence) to assess their own work in the Department of English at Mouloud MAMMERI University of Tizi Ouzou. Thus, you are kindly requested to faithfully answer the questions. Make sure that all your responses will be anonymous. Thank you in advance.

Section 1: Students' Background Information

Q1- Please specify your level of study:

M1 □ **M2** □

Q2-Please specify your major (specialization): …….

Q3-How often do you use AI for educational/ language learning purposes?

Always □ **Often** □ **Sometimes** □ **Rarely** □ **Never** □

Q4- In your opinion, is AI beneficial in education?

Yes□ **No**□

-If yes, please explain according to your personal experience

……

……

Section 2: Students' Engagement with AI for Self-Assessment

NB: In the context of our research, the term 'self-assessment' in the context of your English language acquisition denotes either a structured evaluation or a self-selected activity, such as summative revision for examinations or reflective analysis of instructional content.

Q5: How important is goal specification for effective self-assessment?

Very Important □ Important□ Less Important □ Unimportant □

***Q6*:** In which way does goal specification help you assess your performance and achievements effectively?

……

……

……

……

Q7: How important is the use AI to understand or generate clear criteria for evaluating your work?

Very Important □ Important □ Less Important □ Unimportant □

Q8: How often do you make use of AI to compare your work against standards, rubrics or ideas responses?

Always □ Often □ Sometimes □ Rarely □ Never □

Q9: How could AI provide you with evidence that allows you to get engaged in assessing your own performance? Please provide examples or describe your experience.

……

……

……

Q10: How often do you rely on AI tools to summarize, reflect on or log your progress with examples?

Always □ Often □ Sometimes □ Rarely □ Never □

Q11: How important is the use of AI to help you critically evaluate the quality of your work?

Very Important □ Important □ Less Important □ Unimportant □

Q12: How often do you seek AI feedback (e.g.: logic checking …) before making a final judgement?

Always □ Often □ Sometimes □ Rarely □ Never □

Q13: How could AI be used to plan for future improvement?

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Q14: For which purposes do you use AI tools? List any activities or tasks.

……

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……

"Interview"

Research Title:

'Attitudes of EFL Students Towards the Use of AI (Artificial Intelligence) for Self-Assessment: The Case of Master English Students at the Department of English, MMUTO'.

Introduction

Good morning/afternoon. Thank you for devoting time and accepting to be part of this interview. We are carrying out a research on the attitudes of EFL students towards the use of AI tools for self-assessment. As a teacher, your thoughts and experiences will offer valuable insights into how students are using these tools and how effective or challenging they may be in the learning process. Your responses will remain anonymous. With your consent, we'd like to record the session for accuracy.

Part 1 : Background Information

1. Could you introduce yourself and tell us about your experience in teaching English at MMUTO?
2. According to you experience, what are EFL students' general attitudes towards self-assessment in EFL?
3. What are your initial thoughts on the potential of using AI tools for self-assessement in EFL learning?

Part 2: Insights on AI and Students' Self-Assessment

4. How important is the specification of goals for effective students' self-assessment?

6. To what extent do you think that clear goal-setting helps students evaluate their performance and achievements?
7. Do you find AI helpful in guiding students to understand or generate clear criteria for evaluating their work? Why or why not?
8. How often do your students make use of AI tools to compare their work against standards, rubrics, or modal responses?

8. In your experience, how can AI provide students with concrete evidence that supports their self-assessment process?
9. How often do your students rely on AI tools to summarize content, reflect, or track their learning progress?
10. How important is the use of AI in helping students critically evaluate the quality of their work?
11. How often do your students often seek back from AI tools (e.g. Logic checking, grammar suggestions) before finalizing their work?
12. From a teacher's perspective, how could AI be integrated to support students in planning for future improvement?
13. What specific educational tasks or activities do your students typically use AI tools for?
14. You are free to add any comment.

Closing:

We truly appreciate your time and the valuable insights you've shared. Your input is a significant contribution to our research. If you're interested, we'd be glad to share the findings with you once the study is finished.