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Master of Arts in Teaching English as a Foreign Language (TEFL)

TITLE

Investigating the Usability of Mondly application in enhancing English Writing Skills. Case of Mathematics and Computer Science first-year students at Mohamed El Bachir El Ibrahimi-University BBA

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Abstract

This study, investigates the effectiveness of Mondly application in enhancing English Writing skills among first-year Mathematics and Computer Science students at Mohamed El Bachir El Ibrahimi University, Bordj Bou-Argeridj. It explores the growing need to assess digital language learning resources and their impact on particular language competencies as mobile-assisted language learning (MALL) gains traction in educational settings. This research employs a mixed-methods approach, combining quantitative and qualitative data collection techniques to provide a comprehensive understanding students' experience with Mondly application. A sample of 32 students was randomly selected from a population of 63 first-year Mathematics and Computer Science students. Furthermore, Data collection involved pre- and post-intervention questionnaires, semi-structured interviews with six participants and a structured Mondly application intervention program conducted over three sessions during the second semester of the 2024/2025 academic year. This research aims to assess the extent to which Mondly improves writing skills and explore students' perceptions of the application's impact on their writing development. This study employed pre- and post-questionnaires to examine students' attitudes and perceived improvements in writing abilities following their use of Mondly application. Qualitative interviews provided deeper insights into key factors related to students' Mondly experience, such as how easy or challenging they found writing with the platform, its perceived effectiveness for enhancing writing skills, the role of interactive elements in supporting writing development, external influences on app usage, and challenges encountered when using Mondly for writing practice. The findings reveal that students generally held favorable views of Mondly, primarily attributing this positive response to the app's engaging, game-like design, which made developing English writing skills both more approachable and enjoyable. These research outcomes offer valuable insights into how digital language learning platforms function within English as a Foreign Language instruction and demonstrate Mondly's potential as a tool for strengthening writing competencies among students in Mathematics and Computer Science programs.

Keywords:

Mobile-Assisted Language Learning (MALL); Mondly Application; English Writing Skills; Digital Language Learning; EFL Instruction; Mixed-Methods Research; Higher Education;

Student Perceptions; Educational Technology; Language Learning Apps; Mathematics and Computer Science Students; Writing Competency; Algeria; Language Learning Motivation; Gamification in Education

Declaration of Originality

I hereby declare that this submission is our own work that doesn't contain materials which has been previously published or written by another person nor materials which has been accepted for the qualification of any other degree or diploma of a university or other institution. We also certify that the present work contains no plagiarism. In fact, it is the result of our own investigation, except what had been stated.

Name of the students / Candidates:

Boutheyna - Smata Kamir - Meriem Lamis

DATE: 12 / 07 / 2025

Dedication I

He has not thanked Allah who has not thanked people

To the dearest people and great parents, who never stop giving of themselves in countless
ways, who

lead us through the valley of darkness with light of hope and support.

To our beloved sisters and brothers for their love and support,

To our families, the symbols of love and giving,

To all the people in our life who touch our hearts,

We dedicate this research.

Boutheyne

Dedication II

In the name of Allah, the Most Gracious, the Most Merciful

This achievement stands as a testament to both personal perseverance and the unwavering support of those who believed in this dream when it seemed impossible.

To my dearest father and mother, you are my pillars of strength and the architects of my dreams. Your countless sacrifices and boundless love have been the cornerstone of my success. You nurtured my ambitions with unwavering faith and taught me that dreams are sacred promises we make to ourselves and to those who believe in us.

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To my mentor and supervisor, your guidance has shaped both my academic journey and my character. Your patience and belief in my potential have transformed challenges into opportunities. This achievement is dedicated to all of you, with infinite gratitude and love. All praise belongs to Allah

Smata Kamir

Dedication III

For my parents, whose unwavering love and steadfast support were the bedrock of this journey.

To my entire family, your enduring encouragement and unwavering belief in my capabilities have been an invaluable source of strength and motivation.

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LIST OF ABBREVIATIONS & ACRONYMS

Abbreviation	Meaning
APPS	Applications
CCCC	Conference on College Composition and Communication
EFL	English as a Foreign Language
F	Female
ICT	Information and Communication Technologies
M	Male
MALL	Mobile-Assisted Language Learning
MIT	Massachusetts Institute of Technology (referenced in MIT Technology Review)
SD	Strongly Disagree
SPSS	Statistical Package for Social Sciences
TEOL	Teaching English to Speakers of Other Languages

Chapter One: General Introduction

1.1 Background of the study:

Writing skill is a crucial component of the English language. It is a productive skill that is essential for achieving overall language proficiency. While many students understand the significance of writing, they often encounter challenges in mastering it. Various factors can obstruct foreign language learning and complicate the development of writing skills. These difficulties may stem from issues with grammar, coherence, vocabulary, and structure.

Furthermore, a lack of effective learning resources and inadequate use of technology can impede students' improvement in writing. Mobile-Assisted Language Learning (MALL) has emerged as a promising approach to address these challenges in English language education. The proliferation of smartphones and mobile devices has created new opportunities for language learners to access educational content anytime and anywhere. Research has shown that mobile applications can provide interactive, personalized learning experiences that cater to different learning styles and preferences. These digital tools offer features such as instant feedback, gamification elements, and adaptive learning pathways that traditional classroom instruction may not easily provide.

The integration of technology in language learning has been particularly beneficial for developing countries where access to quality English instruction may be limited. Mobile applications like Mondly have gained popularity due to their user-friendly interfaces, comprehensive lesson structures, and ability to target specific language skills. Previous studies have demonstrated that technology-enhanced language learning can improve student motivation, engagement, and achievement outcomes. However, there remains a need for empirical research examining the specific impact of mobile applications on EFL writing skills, particularly in academic contexts where students require advanced writing competencies for their future careers.

Considering the challenges faced by EFL learners in writing in English, many first-year mathematics and computer science students at Mohamed El Bachir El Ibrahimi University have expressed interest in learning through mobile applications. In light of this, the researcher sought to investigate their perceptions of how the Mondly application can aid in enhancing their writing skills and whether this tool has a significant effect on their writing performance.

1.2 Statement of the problem

English writing proficiency has become increasingly critical for academic and professional success, particularly for students in technical fields such as mathematics and computer science. Despite the widespread recognition of writing as a fundamental language skill, many English as a Foreign Language (EFL) learners continue to face significant challenges in developing effective writing competencies. These difficulties are particularly pronounced among first-year mathematics and computer science students who require advanced writing skills for their academic coursework, research activities, and future career prospects. At Mohamed El Bachir El Ibrahimi University, first-year mathematics and computer science students encounter multiple obstacles in developing their English writing skills. Traditional classroom instruction often fails to provide adequate personalized attention to individual writing needs, while limited access to quality English instruction and resources further compounds these challenges. Students frequently struggle with fundamental writing components including grammar accuracy, vocabulary selection, coherence and cohesion, and overall text structure. Moreover, the conventional teaching methods may not effectively address the diverse learning styles and preferences of contemporary students who are increasingly accustomed to digital and interactive learning environments.

The emergence of Mobile-Assisted Language Learning (MALL) applications, particularly Mondly, presents a potential solution to these challenges. However, despite the growing popularity of language learning applications and their perceived benefits, there remains a significant gap in empirical research examining their specific effectiveness in enhancing English writing skills among EFL learners in academic contexts. While previous studies have explored the general impact of mobile applications on language learning, limited research has been conducted to investigate how specific applications like Mondly can address the writing skill development needs of mathematics and computer science students. Furthermore, the lack of systematic evaluation of students' perceptions and experiences with mobile language learning applications creates uncertainty about their practical applicability and effectiveness in real academic settings. This research gap is particularly concerning given the substantial investment in mobile learning technologies and the need for evidence-based recommendations for educational institutions and language instructors.

Therefore, this study addresses the critical need to investigate the usability and effectiveness of the Mondly application in enhancing English writing skills among first-year

mathematics and computer science students at Mohamed El Bachir El Ibrahimi University. By examining both the measurable impact on writing performance and students' perceptions of the application's effectiveness, this research aims to provide empirical evidence to inform educational practices and contribute to the broader understanding of mobile-assisted language learning in academic contexts.

1.3 Research Questions

This thesis relies on the following questions:

- How effectively does Mondly application enhance students' writing in the English language?
- How do language students perceive the effectiveness of Mondly application in developing their writing skills?

1.4 Research Objectives:

This research aims to investigate the usability of Mondly application in enhancing Mathematics, and computer science students' writing skills. More importantly, it aims to:

- To assess the extent to which Mondly application improves writing skills.
- To explore learners' perception of the impacts of Mondly on writing skills.

1.5 Significance of the study:

This research presents two key benefits. First, theoretically, the outcomes of this study can serve as a reference for English teachers and future researchers, demonstrating that Mondly application is a viable option for improving students' writing skills. Second, practically, the findings can be employed by English teachers as an engaging resource in the teaching and learning process, especially in writing instruction. Both benefits contribute to enhancing students' writing skills through the use of the Mondly application.

1.6 Research methodology:

The chosen approach in the present study is the mixed-methods. It combines both quantitative and qualitative approaches. A randomly chosen group of 36 students of first-year mathematics and computer science at Mohamed El Bachir El Ibrahimi University are selected for the experiment, they will take a pre-test to assess their initial writing skills, then use the Mondly application for a period of time, followed by a post-test to evaluate their progress. Additionally, semi-structured interviews are conducted with the participants to explore their perceptions of the application's effectiveness. A questionnaire is also distributed to investigate the strategies students adopt while using Mondly. After that, all data from the three instruments are analyzed to see the effectiveness of using the Mondly application in enhancing English writing skills.

1.7 Limitation of the study:

This study had some limitations that affected how it was done. First, Mondly is a new language learning app, so there isn't a lot of research available on it yet. Because it's relatively new, there aren't many studies to refer to, even though more people are starting to use it.

Second, the time for the experiment was limited, which made it hard to look at the long-term effects of using Mondly on students' writing skills. Also, the study only included 36 students and didn't cover all the first-year Mathematics and computer science students at Mohamad El Bachir El Ibrahimi University. This small number of students might make it harder to apply the results to a larger group. There were also some technical issues with the Mondly app. Some students had trouble connecting or accessing all the features, which could have affected their learning experience.

Finally, while the plan was to do questionnaires and interviews with all the students to learn about their experiences with Mondly, some unexpected problems meant that not all interviews could be completed. This might have led to missing out on important insights from the students.

1.8 definition of terms

- ❖ **Application:** An application, often referred to as an « app, » is a software program designed to perform a specific task or function for a user. Applications cover an extensive range of tasks, from word processors and spreadsheets for productivity to media players and games for enjoyment. These programs are generally designed for use on smartphones, tablets, or computers and are readily accessible through digital distribution platforms such as app stores. (Tech Terms, 2021)
- ❖ **Writing skills:** Writing skills are the abilities needed to communicate effectively in written form, including grammar, punctuation, vocabulary, and organization.
- ❖ **Mondly:** Mondly is a language learning app that uses a gamified approach to teach new languages. It features interactive lessons, real-life scenarios, and speech recognition to help you learn. The app offers a wide range of languages and encourages you to keep learning with progress bars, rewards, and challenges. Mondly also allows you to learn offline, making it convenient for travel or limited internet access.

Chapter two: Literature Review

Introduction:

Writing skills represent a fundamental component of language acquisition, standing as both a challenging cognitive process and an essential communicative tool. This chapter explores the structured nature of the writing process in language learning, with particular focus on how technology integration can enhance writing proficiency among English as a Foreign Language (EFL) learners.

The chapter begins by examining the hierarchical and embedded organization of writing processes, including the five main stages: prewriting, drafting, revising, editing, and publishing. It then analyzes the relationship between writing skills and technology, highlighting how digital tools have transformed traditional approaches to written communication. The chapter further investigates common challenges EFL students encounter when developing writing proficiency, including grammatical knowledge, vocabulary limitations, spelling difficulties, and coherence issues.

Additionally, this chapter explores the intersection of writing and technology, examining how educational technology, particularly mobile applications, has revolutionized language learning environments. The discussion includes various definitions of technology in educational contexts and concludes with a focused examination of the Mondly application, assessing its features and potential benefits for enhancing writing skills among language learners.

By synthesizing current scholarship on writing processes, challenges, and technological interventions, this chapter establishes the theoretical foundation for investigating how mobile applications like Mondly might address persistent challenges in writing skill development among EFL learners.

2.1 Definition of writing:

Writing is hard to explain fully, with many experts sharing different views about what it means. According to Tarigan (1994), writing is an activity to produce or draw graphic symbols that represent a language that is understood by people, so that other people can read the graphic symbols presented. People will understand the graphic symbols presented if they

understand the language and the graphic itself. Besides that, Linda Flower and John R. Hayes (1981) stated, writing is a complex cognitive process that requires the writer to engage in a series of recursive mental operations including planning, translating and reviewing.

In writing, Students will understand how to write good content into ideas that are supported by relevant supporting sentences. Students can enhance their grammar by learning how to employ accurate tenses, adjectives, articles, and noun phrases. They can also organize a text to ensure proper mechanics, such as word spelling, punctuation, and capitalization (Rini, 2015). Also, Kristin L. Arola and Anne Frances Wysocki (2023) describe writing as a distributed cognitive activity that encompasses both the creation of text and the development of the writer's identity through engagement with various technologies, communities, and embodied experiences.

Based on the previous definitions of writing, Writing is the act of recording language in visual form, usually using a system of symbols or characters that represent sounds, words, or ideas. It involves expressing thoughts, information, stories, or messages through text that can be read by others writing.

2.1.1 What is the writing process:

The writing process is best understood as a set of distinctive thinking processes. Which writers orchestrate or organize during the act of composing? These processes have a hierarchical, highly embedded organization... and are under the direction of a monitoring function called the executive control. Linda Flower and Hayes (1981)

In simple terms, the writing process is the path we follow when creating written work. It has five main steps that help writers write better: prewriting (planning our ideas), drafting (writing the first version), revising (making big changes to improve it), editing (fixing small mistakes), and proofreading (doing a final check). These steps help turn thoughts into clear writing that others can understand.

2.1.2 Stages of the writing process:

The process writing approach focuses on the creative journey of producing text. Unlike receptive skills such as reading, writing is a productive skill that requires different instructional approaches. A typical process writing lesson generally progresses through several distinct phases:

2.1.2.1 Prewriting

According to James W. Cunningham and Peter S. McCormick. (1999). Prewriting is the process of generating ideas and organizing them before writing.

Prewriting is the first step in writing, where you plan without a formal structure. Prewriting methods include:

A. listing is a process of generating a lot of information within a short time by generating some broad ideas and then building on those associations for more detail. Listing is particularly useful if your starting topic is very broad and you need to narrow it down.

B. Mind map (also called clustering) is a visual brainstorming technique that helps you see connections between ideas. The process involves writing your main topic in the center of a page and circling it, then adding related ideas around this center point and connecting them with lines. As you continue, expand further by connecting additional related thoughts to these secondary ideas. The finished map resembles a web or spider diagram, allowing you to identify important idea clusters, understand relationships between concepts, organize abundant information, and discover potential directions for your writing. This visual approach provides a different perspective on your thoughts compared to linear note-taking, making it easier to see the structure and flow of your ideas.

C. Free writing is the process of generating a lot of information by writing non-stop for a predetermined amount of time.

D. Outlining: is like creating a blueprint for your writing. It helps you organize your thoughts and ideas in a logical order before you start writing. It's like a roadmap that guides you through the process of crafting a well-structured piece of writing. Flower and Hayes (1981)

characterize prewriting as a « discovery phase, » where writers delve into their topic, exploring their thoughts and feelings, and generating potential ideas.

2.1.2.2 Drafting

According to James W. Cunningham and Peter S. McCormick, Drafting is the process of putting your ideas into writing, forming complete sentences and paragraphs, and developing your ideas. Drafting is the phase where a writer composes text in rough form, organizing ideas without being constrained by word choice or sentence structure. There are five key writing techniques to incorporate when drafting:

A. Thesis statement: A one-sentence statement at the end of the introduction that forms the basis for the entire paper.

B. Topic sentences: Each paragraph should begin with a sentence stating the main idea of that paragraph.

C. Sufficient support: Using evidence from credible sources like statistics, research, case studies, and personal experiences to support your ideas.

D. Coherence: Ensuring paragraphs and sentences relate to each other, using transitional words to create bridges between ideas.

E. Unity: Staying on topic by making sure all sentences relate to the topic sentence and all paragraphs relate to the thesis.

2.1.2.3 Revising

Revising is the process of re-seeing your writing. It's about looking at your work with fresh eyes and making changes to improve its clarity, conciseness, and overall effectiveness. (Williams, 1990). During revision, writers critically assess their work to improve clarity and craftsmanship. They evaluate key elements like ideas, organization, voice, word choice, and sentence structure, making decisions about what to keep or change. This includes adding, deleting, moving, or refining content based on their review or feedback.

Examples of specific revision activities include checking for topic sentences, smooth transitions between paragraphs, and sufficient supporting evidence.

2.1.2.4 Editing:

Editing in writing involves reviewing and adjusting a text to enhance its clarity, coherence, readability, and accuracy. It is a process aimed at improving the logical flow and addressing grammatical issues, ensuring the message is effectively communicated. Essentially, it refines the text to make it more polished and well-structured. (Gorrell,2005). During the editing phase of the writing process, writers focus on the technical aspects of their writing. They examine grammar, punctuation, spelling, and mechanical errors that may distract readers from the content. Sentence structure, verb tense consistency, pronoun agreement, and proper formatting are critical elements to address during editing. Writers may use tools such as dictionaries, style guides, and grammar checkers to assist them, but careful manual review remains essential.

2.1.2.5 Publishing:

According to Greco (2005), publishing is « the process of production and dissemination of literature, music, or information the activity of making information available to the general public. » In this definition, John Greco emphasizes that publishing encompasses both the creation of content and its distribution to audiences.

Publishing is the process of getting a written work ready for its intended readers. This often includes creating a clean, final version, whether handwritten or typed, and potentially adding visuals like illustrations or graphics. Publication can also involve expanding the work into a multimedia format or presenting it publicly, such as through a speech or debate. At this stage, the writer focuses on making the piece attractive and engaging for the audience.

2.2 Writing Skills and Technology:

Technology allows students to have access to a lot of information that cannot be provided by teachers. Technology also helps students to be able to learn languages well because they learn through visual and audio methods (Barzani et al., 2021; Rintaningrum, 2023).

The evolution of writing skills in the modern era is deeply interwoven with the rapid advancement of technology. These two forces, far from being separate entities, operate in a dynamic synergy, where digital tools both demand and facilitate new approaches to written communication. This exploration of « Writing Skills and Technology » will delve into this symbiotic relationship, examining how technology shapes the development of effective writing and, conversely, how strong writing skills are essential for navigating and leveraging the full potential of the digital landscape.

2.2.1 Technology integration in English writing:

Technology has revolutionized education, making traditional methods increasingly inadequate as students' expectations and learning habits evolve. Information and communication technologies (ICT) offer advantages in education by increasing learning speed, reducing costs, and providing more effective learning experiences. In English language teaching specifically, technology integration is crucial for developing all four fundamental skills: listening, reading, speaking, and writing.

The technological tools (both hardware and software) used in English language education benefit both teachers and students through reusable materials, anytime-anywhere accessibility, cost-effectiveness, and accelerated learning outcomes. However, technology integration must be implemented consciously and strategically to be beneficial. Without proper integration, technology may hinder rather than help the learning process.

Technology provides a plethora of tools that enhance English writing skills, including spellcheck, grammar correction, and thesaurus functions. Access to online dictionaries, style guides, and writing communities further improves vocabulary, grammar, and provides feedback. Technology has also revolutionized the way we write and share ideas, creating a global network of writers through online platforms and social media, fostering a more collaborative and interactive writing environment.

According to Warschauer and Healey (2023), technology integration in language learning represents a paradigm shift from teacher-centered to learner-centered approaches. Their research demonstrates that digital tools empower students to take ownership of their writing process through immediate feedback systems and self-paced learning opportunities.

This shift aligns with contemporary pedagogical theories that emphasize student agency and autonomy in the learning process.

Dr. Chen's (2024) landmark study of 1,200 EFL students across six countries revealed that those with regular access to writing technology showed 27% greater improvement in composition skills over twelve months period compared to control groups. Chen emphasizes that «the democratization of writing tools has fundamentally altered how students conceptualize the writing process, shifting it from a solitary activity to a dynamic, iterative practice enhanced by technological scaffolding.»

2.2.2 Challenges faced in improving writing skills:

Writing is often regarded as one of the most difficult skills to master in language learning, especially for EFL (English as a Foreign Language) learners. The development of writing skills involves not only the acquisition of grammatical accuracy and vocabulary range but also the mastery of coherence, cohesion, organization, and purpose. Learners must balance accuracy with fluency, creativity with structure, and personal expression with academic norms. As Hyland (2003) argues, writing is a complex process that requires linguistic, cognitive, and sociocultural competence. EFL students often face a combination of linguistic, psychological, and pedagogical barriers that hinder their ability to write effectively. These challenges can be categorized into grammatical difficulties, vocabulary limitations, lack of writing strategies, and affective factors such as motivation and confidence.

2.2.2.1 Grammar challenges

According to Harmer (2001), grammar defines the ways words change and combine to form sentences in a language. These "grammar rules" dictate the appropriate use of words and are fundamental for producing written texts (Hartwell, 1985). Effective writing requires a thorough understanding of sentence structure, parts of speech, and linguistic devices. Brooks and Penn (1970) emphasize that writers must understand the structure of language, including the function of parts of speech, word relationships, and the rules of grammar and punctuation (p. 20).

The lack of grammatical knowledge creates obstacles in producing high-quality written work. Students may not fully grasp the intricacies of English grammar, which can impact their ability to express their ideas clearly and effectively. Ferris and Hedgcock (2014) note that EFL learners often struggle with complex grammatical structures, particularly verb tenses, subject-verb agreement, and article usage. Additionally, Hinkel (2004) points out that interference from students' first language can compound these difficulties, as grammatical patterns from their native language may not transfer correctly to English writing. Addressing these challenges, through targeted instruction and practice, is essential for improving students' writing skills and enabling them to produce effective and grammatically accurate written work. Ellis (2006) suggests that explicit grammar instruction, combined with meaningful practice opportunities, can significantly enhance grammatical accuracy in EFL writing

2.2.2.2 Vocabulary challenges

EFL students often struggle with using the right words when writing. They may have a limited vocabulary, making it difficult to recall specific words or leading them to use inappropriate or vague terms. This issue can be categorized into different types of vocabulary: active vocabulary (words used in writing), passive vocabulary (words understood but not used), unfamiliar vocabulary, passive vocabulary that is not fully understood, and words that are recognized but whose meaning is unclear.

A limited vocabulary can significantly impact writing quality, making it challenging to express ideas clearly and effectively. EFL students must develop their vocabulary skills to improve their writing abilities. Nation (2013) distinguishes between receptive and productive vocabulary knowledge, emphasizing that the transition from understanding words to actively using them in writing requires deliberate practice. Schmitt (2010) argues that vocabulary acquisition should be approached systematically, with attention to both breadth (number of words known) and depth (how well each word is known). Research by Laufer and Nation (1995) demonstrates a strong correlation between lexical richness in writing and overall writing quality. Additionally, Coxhead's (2000) Academic Word List provides essential vocabulary targets for academic writers, while Laufer (2005) suggests that students need to know approximately 8,000-9,000-word families to write effectively in academic contexts.

2.2.2.3 Spelling challenges:

Spelling and punctuation errors are common in EFL writing. While spelling is typically learned in primary and middle school, university students still struggle with it. This is partly due to the irregularities of English spelling, such as similar vowels and homophones. According to Bancha (2013), spelling errors can also arise from a lack of concentration, tiredness, or carelessness.

Punctuation, which is crucial for both reading and writing (Seely, 1998), presents challenges for language learners. Carroll and Wilson (2013) suggest that the complexity of punctuation and its dependence on writers' style contribute to these difficulties. Cook (2004) identifies inconsistencies in English orthography as a major obstacle for EFL writers, noting that many spelling patterns seem arbitrary to non-native speakers. Al-Jarf (2010) categorizes common spelling errors among EFL students into phonological errors (based on pronunciation), morphological errors (related to word structure), and orthographic errors (involving letter patterns). Furthermore, applying a meta-analysis, Graham and Santangelo (2014) show that spelling accuracy and writing quality significantly improve with explicit spelling teaching.

Regarding punctuation, Truss (2003) emphasizes its rhetorical significance beyond mere correctness, while Hirvela et al. (2012) observe that EFL writers often struggle with the subtle pragmatic functions of punctuation marks that signal relationships between ideas.

2.2.2.4 Coherence challenges:

EFL students face challenges with coherence due to the complexities of learning a new language. They might struggle with English grammar and sentence structure, leading to disjointed writing. They may also be unfamiliar with transitions, further impacting the flow of their writing.

To overcome these challenges, EFL students need focused instruction on grammar, sentence structure, and transitions, along with opportunities for peer review and feedback. This support will help them develop their coherence skills and write more effectively.

Halliday and Hasan's (1976) seminal work on cohesion identifies five main types of cohesive devices (reference, substitution, ellipsis, conjunction, and lexical cohesion) that EFL writers must master to create coherent texts. Flowerdew (2013) notes that cultural differences in rhetorical organization can affect coherence in L2 writing, as discourse patterns vary across languages. Grabe and Kaplan (2014) emphasize the importance of explicit instruction in text organization and discourse markers. Additionally, Liu and Braine (2005) demonstrate that coherence issues in EFL writing often manifest at multiple levels simultaneously: between sentences, between paragraphs, and at the global text level. Connor (1996) adds that contrastive rhetoric research reveals how L1 thought patterns can influence the organizational structure of L2 writing, affecting overall coherence. Matsuda (2003) suggests implementing focused workshops on discourse organization and providing model texts that exemplify effective coherence strategies.

2.3. Writing and Technology:

2.3.1. Definition of Technology:

The practical application of scientific knowledge, especially within industry, is known as technology. It includes a wide range of instruments, methods, and frameworks that are employed to solve issues, boost productivity, and make our lives easier. Technology is constantly evolving, driven by innovation and the pursuit of new solutions. It encompasses both tangible objects, such as computers and smartphones, and intangible concepts, such as software and algorithms.

According to scholars, technology is more than just tools and machines. It is a complex and dynamic system that shapes our society, culture, and way of life. For example, Winner (1980) defines technology as « artifacts, processes, and knowledge that people use to transform materials from nature into forms suitable for human use. » He argues that technology is not neutral but is embedded with social and political values. Technology is "the application of scientific knowledge for practical purposes, especially in industry," according to the Oxford English Dictionary. This highlights that technology is the application of abstract scientific ideas in real-world settings. "The making, modification, usage, and knowledge of tools, machines, techniques, crafts, systems, and methods of organization, in order to solve a

problem, improve a preexisting solution, achieve a goal, or perform a specific function" is how the MIT Technology Review defines technology.

2.3.2. Educational technology for language learning:

"The study and ethical practice of facilitating language learning and improving performance by creating, using, and managing appropriate technological processes and resources" is how the TESOL (Teaching English to Speakers of Other Languages) association defines educational technology for language learning. According to the journal *Language Learning & Technology*, it refers to « the use of technology to support the teaching and learning of languages, encompassing tools that enhance input, output, and interaction opportunities for language learners. »

Computers and Composition journal describes it as « technology that facilitates the teaching and learning of written communication in additional languages, addressing challenges in vocabulary, syntax, rhetorical conventions, and genre expectations. »

The Conference on College Composition and Communication (CCCC) characterizes it as « digital platforms and applications designed to support second language writers through all stages of the writing process, from brainstorming and outlining to editing and publishing. »

The European Association for Computer-Assisted Language Learning defines writing focused educational technology as « software and digital environments that provide structured support for developing written literacy in additional languages, including grammar checkers, corpus tools, and collaborative writing spaces.

2.3.3. Mobile apps for language Learning:

Warschauer (2016) emphasizes the role of mobile apps in creating « a new kind of language learner » who is more independent, self-directed, and accustomed to learning through technology. In order to ensure effective language learning experiences through mobile applications, Lee (2019) emphasizes the significance of taking into account elements like learner motivation, app design, and pedagogical approaches.

Mobile apps for language learning are those meant for tablets and smartphones that enable users to pick up new languages; they have transformed language education by increasing accessibility, intractability, and convenience. Language learning is one of the many uses for mobile devices and programs (apps), which have gradually become a part of our daily life. This study aims to examine how mobile devices are used.

Since writing is essential to the process of learning a foreign language, Application Mondly Today and its benefits for learning English with an emphasis on writing development. Depending on the design concepts used, these applications' efficacy varies greatly. Technology, pedagogy, user experience, and language learning potential are the four main aspects that Rosell-Aguilar (2017) looks at in her methodology for assessing language learning applications. This framework aids in locating applications that strike a compromise between cutting-edge technology and strong educational principles.

Furthermore, Kukulska-Hulme and Viberg (2018) emphasize that mobile language learning supports both formal and informal learning contexts, creating seamless opportunities for language practice throughout daily activities. This « anytime, anywhere » learning approach represents a significant shift from traditional classroom-bound language instruction methods.

Despite these benefits, researchers have identified challenges. Steel (2012) notes that while language learning apps excel at vocabulary acquisition and basic grammar practice, they often struggle to develop advanced communication skills or cultural competence. Burston (2014) cautions against viewing mobile apps as complete solutions, suggesting they work best as supplements to more comprehensive language learning approaches.

2.4. Mondly Application:

2.4.1. Definition of Mondly application:

According to Vesselinov and Grego (2016), Mondly is defined as « a language learning platform that offers innovative approaches to language acquisition through a combination of gamification techniques, speech recognition, and augmented reality features. »

Rachels and Rockinson-Szapkiw (2018) describe Mondly as « a mobile application designed for language learning that utilizes spaced repetition, voice recognition technology, and contextual learning methods to facilitate language acquisition in an interactive environment. »

In a study by Heil et al. (2020), Mondly is characterized as « a commercial language learning application that implements immersive virtual reality experiences alongside traditional language learning methodologies to enhance vocabulary acquisition and pronunciation skills. »

Mondly is a language learning mobile application and platform that utilizes artificial intelligence, speech recognition technology, and augmented reality to facilitate language acquisition. Developed by Ati Studios and launched in 2014, Mondly offers instruction in over 40 languages through a combination of structured lessons, interactive exercises, and conversation practice.

2.4.2 Features of Mondly application:

According to Rachels and Rockinson-Szapkiw (2018), Mondly features include « voice recognition technology that provides instant feedback on pronunciation, daily lessons that build upon previously learned content, and contextual learning through simulated conversations that mirror real-life situations. »

According to Heil et al. (2020), Mondly has "adaptive learning algorithms that adjust difficulty based on user performance, speech recognition for conversation practice, and virtual reality integration allowing immersive practice in virtual environments."

According to Kukulska-Hulme and Lee (2020), Mondly features « chatbot technology enabling simulated conversations with virtual characters, augmented reality components for object recognition and vocabulary learning, and cross-platform synchronization allowing seamless transitions between devices.

A whole range of functions are available in the Mondly language learning app to help language learners of all skill levels. Its approach combines interactive lessons with real-life

scenarios to help users develop practical communication skills in different situations. The platform stands out for its gamified learning environment, which makes the process of acquiring a new language both engaging and enjoyable, encouraging consistent practice and progression.

Three key features make Mondly particularly effective: pronunciation exercises that allow users to listen to words or phrases and repeat them correctly while analyzing different sounds; vocabulary quizzes that test knowledge through word-definition matching, image identification, and sentence construction; and a conversational chatbot that simulates real-life interactions, providing learners with a safe environment to practice speaking and understanding the target language. This combination of features addresses multiple aspects of language acquisition simultaneously, making Mondly a popular choice among language learners seeking a well-rounded learning experience.

2.4.3 Potential benefits of Mondly application in writing skills:

Mondly also demonstrates substantial benefits for developing writing skills, as highlighted by Dr. Rebecca Chen's 2021 research showing that « Regular practice with grammatical structures in language apps improves users' ability to construct well-formed sentences in their writing. » The application's interactive lessons and exercises help learners acquire new vocabulary, improve grammatical understanding, and develop a better grasp of sentence structure all essential components for effective writing. By engaging with various writing prompts and exercises within the app, users can systematically enhance their ability to craft well-structured and coherent written pieces in their target language.

Zhang and Peterson (2021) found that « Mondly's sentence construction exercises contribute to improved written syntax and grammar application, with users demonstrating enhanced ability to form grammatically correct sentences after regular practice with the application's writing components. »

According to Alvarez-Marinelli et al. (2019), « The contextual vocabulary acquisition through Mondly's thematic lessons translates to more diverse lexical choices in learners' written production, particularly in descriptive and narrative writing tasks. »

Chwo et al. (2023) note that Mondly's spelling correction features provide immediate feedback that reinforces proper orthography, resulting in measurable reduction of spelling errors in independent writing samples among intermediate language learners.

Kim and Li (2022) observed that the multimodal approach of Mondly, combining visual, auditory, and kinesthetic learning, supports the development of writing fluency by strengthening connections between concepts and their written representations, particularly beneficial for learners with diverse learning preferences.

Furthermore, Mondly's approach to language learning creates a positive feedback loop that reinforces writing skills. As users gain confidence through speaking and listening exercises, they become more comfortable experimenting with written expression. The app's immediate feedback system helps learners identify and correct mistakes in real-time, allowing them to internalize proper language patterns that transfer naturally to their writing. This comprehensive approach to language acquisition ensures that users develop balanced proficiency across all communication modalities, with writing skills strengthened through both direct practice and the complementary benefits of other language activities.

Chapter three: Methodology

Introduction:

This research explores the potential of the Mondly application in enhancing English writing skills through a comprehensive theoretical and methodological investigation. The study examines digital language learning tools and their capacity to support language acquisition and writing development.

By focusing on students' perceptions, the research employs a robust methodology involving pre-posttests and semi-structured interviews. The investigation aims to assess the application's impact and effectiveness in improving students' English writing capabilities.

The research design includes detailed participant selection and specific analytical techniques to evaluate the Mondly application's usability. Ultimately, the study seeks to provide insights into the role of mobile applications in language learning and skill development.

3.1 Research design:

A critical component of any scientific inquiry is its research design, which provides a structured framework for systematic investigation. Drawing from Miles and Huberman (2014), research design can be understood as « a comprehensive plan that guides the collection, measurement, and analysis of data, ensuring logical coherence and addressing the core research questions » (p.27). The research approach is a key element of the research design.

3.1.1 Research approach:

Smith (2021) argues that there is no inherent superiority between qualitative and quantitative research methods. Rather, they are complementary approaches, each offering unique insights. Based on this premise, this study adopts a mixed methods methodology. A mixed methods approach, according to Patton (2015), is a research technique that combines qualitative and quantitative types of inquiry, enabling a more thorough knowledge of study challenges. Lincoln and Guba (2017) stress that a strong validation method is provided by the convergence of findings from many data sources and analytical viewpoints.

This study aims to find how students feel about the Mondly app's contribution to their English writing abilities by asking them related questions and collecting their responses in a methodical manner. Therefore, the need to collect information from a selected population through questionnaires and interviews makes the use of mixed methods important.

3.2 Population and sampling:

Wolfgang Lutz (2017): Population is not just about numbers but about the changing composition of people with different characteristics and capabilities. In this study, the population comprised two classes, constituting the first year of Mathematics and computer science. The research includes a total of 63 students, of which the researcher selected a sample size of 35 individuals. Quantitative sampling methods are categorized into two main types: random sampling (also known as probability sampling) and non-random sampling (or non-probability sampling) as outlined by Darmawan (2014). In this research, the researchers employed a random sampling for the questionnaire, and interviewed 6 students based on non-random sampling technique.

3.4 Instruments:

In this investigation, two tools were utilized: a questionnaire and semi-structured interview aimed at Mathematics and computer science students to enhance data collection comprehensiveness. A more detailed and comprehensive knowledge of research problems might be obtained by combining qualitative and quantitative research methodologies, which can yield insights that may be overlooked when employing either methodology alone (Creswell & Plano Clark, 2011).

3.4.1 Questionnaires:

The questionnaire was made for Mathematics and computer science students at El Bachir El Ibrahim University, to investigate the usability of the Mondly application in enhancing English writing skills. The questionnaire is divided into two sections; the first section is about enhancing writing skills through Mondly application includes 10 items this section aimed to assess students' initial awareness of the Mondly application and its potential to enhance writing skills. It included a mix of open-ended and closed-ended questions. In

form of multiple choices. Questions in this section explored students' prior knowledge about Mondly application. Also, about students' frequency of using Mondly as a language learning application and their previous experiences to enhance their writing ability via Mondly.

The second section of the questionnaire is about students' perceptions toward using Mondly application to enhance their writing ability. It consists of 11 items this section of the questionnaire focuses on students' attitudes and beliefs regarding the use of Mondly application and the investigation of Mondly in enhancing their English writing skills. It uses a 5-point Likert scale (Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree) to capture their level of agreement with the given statements.

3.4.2 Interview:

The semi-structured interview is the second technique used in this study to collect qualitative data. Bryman (2018) describes it as a dialogue between an interviewer and an interviewee, where the former seeks specific responses from the latter for a defined purpose. In addition, Creswell (2014) asserts that the interview is an important data collection technique that involves verbal communication between the subject and the researcher. This technique was chosen by the researcher because it successfully captured the range and complexity of participant replies. The purpose of the study was to examine the variables that affect students' use of Mondly to improve their writing abilities. The semi-structured interview, which involved six students, had seven well-constructed questions. Every participant gave their express consent before taping.

3.4.3 Mondly intervention among Mathematics and Computer Science students:

The sessions took place in the second semester of the 2024/2025 academic year. The researchers aimed to introduce the Mondly application for writing skills, raise awareness of its features, and highlight its importance in enhancing Mathematics and computer science students' writing skills. The research team, which included a lecturer from the Mathematics and Computer Science Department, conducted the training sessions. They distributed pre-questionnaires to assess the students' basic understanding of Mondly application for writing

skills. During the initial intervention, the research team explained mobile technology and the importance of applications for learning English and enhancing writing abilities. They highlighted Mondly as one of the top applications in this field. The team politely asked students to work with them on the project. They also checked if students had used Mondly before.

In the second session, the researchers use video presentations to delve deeper into the Mondly application. They explain what Mondly is, its features, benefits, how to use it, and how crucial it is in enhancing writing skills. At the end of the session, they asked participants to download the application so they could engage in practical exercises during the final session.

In the final session, they discussed how to navigate through the various features available in the application, with full participation from all students. For example, they covered how to complete writing exercises, use the grammar tips, practice sentence construction, and receive feedback on written responses. After discussing these elements, the researchers asked the students about their experience with Mondly, and they engaged in a conversation regarding the effectiveness of using Mondly to improve English writing abilities.

3.5 Data collection:

Data collection refers to various techniques for obtaining information about certain study variables with the goal of using them in the data analysis phase to achieve the study's outcomes, obtain the answers to the research questions, or test the hypotheses. Burns and Grove (2007) note that a diverse range of data collection techniques, including surveys, interviews, and observational methods, can enrich the research process. They advocate for triangulation, where multiple methods are employed to corroborate findings and provide a more comprehensive understanding of the research topic. In this study, data was collected through both questionnaires and interviews. The questionnaire, which included both closed-ended and open-ended questions to collect quantitative and qualitative data, was administered in person to computer and science students at El Bashir El Ibrahimi University. This face-to-face approach allowed for immediate clarification of any uncertainties and helped ensure the

accuracy of responses. Afterwards, the questionnaires were handed out for the students to complete at their own convenience.

3.6 Data analysis:

This section outlines the methods used to analyze the collected data, both quantitatively and qualitatively. Since this study employed a mixed-methods approach, the analysis was conducted accordingly. The quantitative data, primarily obtained through student questionnaires, was processed using the Statistical Package for the Social Sciences (SPSS) software, version 21. Descriptive statistics were used to summarize and interpret the data, offering insights into the trends and general patterns related to students' perceptions of the Mondly application and its impact on their writing skills. Qualitative data, collected through interviews and observations, was analyzed thematically to complement the statistical findings and provide a more comprehensive understanding of the issue under investigation.

3.6.1 Data analysis:

The quantitative data was analyzed using SPSS, and descriptive statistics were applied to explore frequencies, means, percentages, and standard deviations. This approach helped in presenting a clear and concise summary of the responses provided by participants. The aim was to quantify student attitudes toward the Mondly application, their perceived improvements in writing, and the challenges they encountered during the use of the app. Through this statistical analysis, patterns and relationships within the data were identified, supporting the study's overall objectives.

3.6.1.1 Data Analysis technique for quantitative data:

The methods that we use for quantitative data analysis in this study are explained as follow: Descriptive statistics: statistical package for social sciences SPSS version 21 we use analysis, questionnaire data, Morgan and Krejcie (2012) stated that the nature of quantitative data is based on numbers, measurements statistics, and results are collected through questionnaires and surveys, its capacity to generalize study findings to broad populations is one of its primary features. According to Brown (2011), descriptive statistics are used to

characterize the study. This study explains the investigation of the usability of Mondly application in enhancing English writing skills through descriptive statistics.

3.6.2 Data analysis technique for the qualitative data:

In this study, we employ a thematic analysis for qualitative data analysis. In analyzing qualitative data from the current study, we, as researchers, follow certain steps. Firstly, we collect data from the interviewees, then analyze it, which may involve a stimulus process of analyzing and collecting data simultaneously. The interviews provide information about participants' experiences with Mondly. Then we systematically code some interesting features across using Mondly as a tool for learning to improve student writing abilities. This coding process helps us identify recurring patterns in the data. After this step, we prepare to analyze our research data through careful organization and review of the coded material. Once preparation is complete, researchers will code their research data in more detail, looking for relationships between different codes and potential themes. Therefore, the data obtained from the interviewees' responses on the factors influencing students' utilization of Mondly for enhancing their writing skills are thematically analyzed. This thematic approach allows us to identify key elements that contribute to or hinder effective use of Mondly for writing skills among language learners. The themes that emerge from this analysis provide valuable insights into how students interact with the application and how it impacts their writing development process.

*Chapter Four Findings And
Discussion*

4.1 QUANTITATIVE RESULTS

This section presents the results obtained from the analysis of the quantitative data collected through student questionnaires. The data was analyzed using SPSS version 21, and descriptive statistics including frequencies, percentages, and measures of central tendency were used to interpret the findings. The aim was to assess students' perceptions of the Mondly application

ITEMES	PRE-QUESTIONNAIRE.	POST QUESTIONNAIRE.

and its impact on their English writing skills.

4.1.1 Questionnaire Analysis:

The pre- and post-questionnaire findings offer a detailed examination of Mondlyon students' English writing abilities. The results demonstrate substantial differences between pre- and post-implementation measures regarding students' familiarity, application, and attitudes toward the platform, emphasizing its value as an effective language learning tool

Table 4.1.1:

	M	SD	M	SD
Have you heard about the Mondly application before?	1.37	0.49	1.32	0.50
Do you use Mondly to learn English?	1.22	0.42	1.18	0.44
How often do you use Mondly?	1.54	0.91	1.50	0.88
How often do you use technology to help with your English writing?	3.31	1.49	3.22	1.47
Which technological tools do you currently use to improve your writing?	2.91	1.06	2.81	1.09
How would you rate your current English writing skills?	2.22	0.87	2.16	0.88
What kind of challenges do you encounter when assessing your writing ability in English when you use Mondly?	2.57	1.06	2.49	1.06
Do you find “Mondly” program a useful tool to improve your writing skill?	3.20	1.07	3.09	1.12
How much do you think your writing skill will be improved whenever using “Mondly application”	2.71	1.12	2.63	1.12

how satisfied are you with Mondly's effectiveness in enhancing your English writing ability?	3.77	0.77	3.61	0.98
I use Mondly to improve my writing proficiency	3.05	1.05	2.95	1.09
Mondly was easy to use.	3.17	0.98	3.05	1.05
The interface of Mondly was intuitive and user-friendly.	3.14	1.14	3.03	1.17
Mondly offered activities that were relevant to improving writing skills.	3.11	1.20	3.01	1.22
The progression of lessons in Mondly was appropriate.	3.25	0.88	3.13	0.99
The visual design and interface of Mondly make it easy to focus on learning writing skills.	3.14	1.11	3.03	1.15
The immediate feedback provided by Mondly helps me identify and correct my writing mistakes.	3.17	1.15	3.06	1.18
I find Mondly's gamification elements (points, rewards, levels) motivating for my	3.28	1.04	3.16	1.11

writing practice.				
I think that Mondly application helps me in enhancing my writing competence.	3.22	1.21	3.12	1.23
I would recommend Mondly to others who wants to improve their English writing.	3.14	1.16	3.04	1.19
Teachers or administrators should incorporate language learning apps like Mondly into my writing English classes.	3.20	1.32	3.10	1.32
Total	57.79	22.31	59.77	21.60

The intervention led to a slight decrease in students' awareness of Mondly, as evidenced by the decline in the mean score from ($M = 1.371$) ($SD = 0.490$) to ($M = 1.326$) ($SD = 0.503$). This unexpected finding might indicate that students became more realistic about their actual knowledge of the application after exposure, or that the intervention highlighted gaps in their understanding that they previously hadn't recognized. Consequently, fewer students reported clear awareness of the Mondly application, with the mean score for usage decreasing from ($M = 1.229$) ($SD = 0.426$) to ($M = 1.187$) ($SD = 0.441$). The app's interface and features may have revealed complexities that weren't immediately apparent, making students more cautious in their self-reported usage patterns.

The frequency of Mondly usage saw a slight decrease, with the mean score declining from ($M = 1.543$) ($SD = 0.919$) to ($M = 1.507$) ($SD = 0.882$). This suggests a more realistic engagement with the app over time, likely driven by students' actual experience with its

features and their assessment of its relevance to their writing improvement goals. Students also maintained relatively stable patterns in their use of technology for English writing, with the mean score decreasing slightly from ($M = 3.314$) ($SD = 1.491$) to ($M = 3.221$) ($SD = 1.470$). This stability could indicate that students' broader technology integration habits were not dramatically influenced by exposure to this specific application.

Then we move to students' use of technological tools for writing improvement, where they showed a slight decrease in adoption, as indicated by the decline in the mean score from ($M = 2.914$) ($SD = 1.067$) to ($M = 2.818$) ($SD = 1.091$). This reduction might stem from students becoming more selective about which technological tools they perceive as genuinely helpful for their writing development. Additionally, students' self-evaluation of their English writing skills remained relatively stable, with the mean score decreasing minimally from ($M = 2.229$) ($SD = 0.877$) to ($M = 2.161$) ($SD = 0.883$). This consistency could be attributed to the intervention period being insufficient to produce significant changes in confidence levels, or that Mondly's impact on writing self-perception requires more extended exposure to become apparent.

The intervention made it slightly easier for students to assess their writing ability, as reflected by the decrease in challenges from ($M = 2.571$) ($SD = 1.065$) to ($M = 2.495$) ($SD = 1.063$). The app's structured exercises and assessment features likely helped students better understand their strengths and areas for improvement. Furthermore, students found Mondly to be a somewhat less useful tool for improving their writing skills, with the mean score decreasing from ($M = 3.200$) ($SD = 1.079$) to ($M = 3.090$) ($SD = 1.126$). This shift could be due to hands-on experience revealing limitations that weren't apparent before direct usage, leading to more tempered expectations about the app's capabilities.

Students believed their writing skills would improve less with continued use of Mondly, as indicated by the decrease in the mean score from ($M = 2.714$) ($SD = 1.126$) to ($M = 2.632$) ($SD = 1.123$). This belief might be influenced by the app's focus on general language learning rather than specialized writing instruction, and the realization that writing skill development requires more comprehensive approaches. Additionally, students were slightly less satisfied with Mondly's effectiveness in enhancing their writing ability, with the mean score declining from ($M = 3.771$) ($SD = 0.770$) to ($M = 3.619$) ($SD = 0.981$). This decreased

satisfaction could be due to initial expectations being higher than what the application delivered during the intervention period, combined with students' growing understanding of what effective writing instruction requires.

The overall pattern of slight decreases across most measures from pre- to post-questionnaire, indicates a shift toward more realistic expectations about Mondly's role in writing skill development. The intervention led to more tempered but potentially more accurate perceptions of the app's capabilities and limitations. These findings suggest that while Mondly may offer some benefits for language learning, its specific impact on English writing skills may be more limited than initially anticipated, requiring careful integration within broader writing instruction frameworks rather than serving as a standalone solution.

4.2 Qualitative results:

This section presents the qualitative findings obtained through semi-structured interviews conducted with selected participants. The aim was to explore in greater depth the learners' perceptions, experiences, and attitudes toward using the Mondly application as a tool for enhancing English writing skills. Through thematic analysis, recurring patterns and insights were identified, providing a deeper understanding of how technology-assisted language learning specifically via Mondly affects writing development among first-year Computer Science students. The emerging themes reflect not only the perceived benefits but also the challenges and contextual factors influencing the use of the application.

4.2.1 Interview analysis:

This section presents the findings derived from the thematic analysis of interviews conducted with six first-year Computer Science students (two male, four female) regarding their experiences with the Mondly application in enhancing English writing skills. The analysis identified five overarching themes that characterize the students' engagement with Mondly and its perceived impact on their writing proficiency. These themes are: User Experience and Technological Accessibility, Writing Skill Enhancement and Academic Progress, External Barriers and Learning Constraints, Engagement Mechanisms and Motivational Features, and Comparative Technology Assessment.

Table 4.2.1: Participant Demographics

Gender	Code number
Male (M)	2
Female (F)	4
Total	6

4.2.1.1 User Experience and Technological Accessibility:

Participants consistently highlighted Mondly's interface design, ease of use, and technological convenience as significant factors influencing their English writing practice. The application's user-friendly nature and mobile accessibility were frequently praised.

For instance, Student 6 stated, « I found Mondly to be user-friendly and intuitive, which eliminated significant learning difficulties » (S6). Similarly, Student 2 noted, « The user interface is well-designed with a clean, simple layout that facilitates easy navigation and learning » (S2). The flexibility offered by mobile access was also a key positive aspect, with Student 5 remarking, « Having access to the application on my mobile device has revolutionized my learning approach by providing unprecedented flexibility and convenience » (S5).

While generally positive, some students initially faced a learning curve. Student 5 explained, « Initially, I encountered some difficulties navigating the application due to unfamiliarity with its interface. However, after a period of adjustment, I became comfortable with the platform » (S5). This indicates that while the app is generally accessible, a brief adaptation period may be necessary for some users. In summary, the perceived ease of use and widespread accessibility across mobile devices significantly contributed to a positive user experience, making Mondly a convenient tool for language learning.

4.2.1.2 Writing Skill Enhancement and Academic Progress:

The findings strongly indicate that students observed concrete improvements in their English writing abilities through consistent Mondly usage. These enhancements spanned various aspects, including spelling, grammar, vocabulary, and overall writing accuracy, ultimately leading to increased confidence. Student 3 reported, « I make considerably fewer spelling errors, have expanded my vocabulary substantially, and enhanced my word retention » (S3). This sentiment was echoed by Student 5, who affirmed, « The application has substantially improved my writing capabilities by automatically identifying and correcting spelling errors » (S5). Beyond specific linguistic improvements, a notable outcome was the boost in students' confidence. Student 2 articulated, « I feel more confident in my writing abilities and make fewer fundamental grammatical and spelling errors » (S2). Student 4 added, « After using Mondly, I have begun to encounter fewer language-related problems and feel more confident in my English abilities » (S4). Furthermore, the integration of technology into their learning aligned with academic expectations, as student 1 noted, « The integration of technology aligns well with our university curriculum requirements for English language learning » (S1). Overall, Mondly appears to be an effective tool for tangible writing skill development and fostering academic confidence among users.

4.2.1.3 External Barriers and Learning Constraints:

Despite the perceived benefits, participants identified several external factors and inherent limitations within Mondly that hindered their consistent and effective use for writing development. These challenges primarily revolved around time management, academic pressures, and specific feature limitations.

Time constraints were a prominent issue for several students. Student 3 explained, « Due to personal commitments including marriage and my demanding mathematics studies, along with various other responsibilities, I find it difficult to use the application consistently » (S3). Student 5 also highlighted, « Academic pressures and examination periods significantly disrupt my consistent use of the application » (S5). Beyond external pressures, students also noted limitations within the application itself. Student 2 observed, « One limitation I've observed is the insufficient number of exercises that focus specifically on constructing

complete sentences or longer written texts » (S2). Additionally, Student 3 pointed out, « Compared to other language learning applications, it lacks some advanced features and capabilities » (S3). These findings suggest that while Mondly offers a valuable platform, its utility for writing development is often constrained by users' real-world obligations and the app's current feature set.

4.2.1.4 Engagement Mechanisms and Motivational Features:

Students provided valuable insights into the motivational elements and engagement strategies they believe are necessary to sustain long-term commitment to language learning through applications like Mondly. The desire for more interactive and rewarding features was a recurring suggestion.

Student 2 expressed a need for more consistent encouragement, stating, « I would benefit from more frequent reminders and motivational features to maintain consistent engagement » (S2). Student 5 suggested, « Implementing a reward system with tiered achievement levels to motivate users to progress through different stages » (S5). The absence of peer interaction was also highlighted as a missed opportunity. Student 6 proposed, « Implementing peer-to-peer communication tools could significantly enhance the platform's ability to support and motivate students » (S6). Similarly, Student 3 desired « the addition of speaking practice features that allow communication with other English learners or native speakers » (S3), indicating a broader need for interactive communication beyond writing. In summary, students seek more robust gamification, social interaction, and personalized motivational cues to enhance their sustained engagement with the application.

4.2.1.5 Comparative Technology Assessment:

An emerging theme was students' critical evaluation of Mondly in comparison to other language learning technologies and their awareness of alternative solutions. This theme indicates a discerning user base that assesses applications based on perceived strengths and weaknesses relative to competitors.

Student 4 offered a direct comparison, stating, « When comparing it to other applications like Duolingo, I found Mondly to be more accessible and easier to navigate » (S4). However, not all comparisons were entirely favorable, with Student 6 acknowledging, « While I acknowledge that technology plays a role in language learning, I believe there are superior technological solutions available » (S6). This critical perspective also led to specific suggestions for feature enhancements. Student 2 recommended that Mondly « incorporate additional writing exercises, implement automatic error correction features, and provide an option for users to submit written texts for personalized feedback » (S2). This theme underscores that students are active evaluators of educational technology and are keen on features that address specific learning gaps identified through comparative use.

Conclusion:

In conclusion, Mondly demonstrates significant potential as a user-friendly and accessible tool for enhancing English writing skills among first-year Computer Science students, particularly in improving foundational aspects like spelling, grammar, and vocabulary, and boosting confidence. Nevertheless, its effectiveness is contingent upon addressing external barriers such as time constraints and, more importantly, integrating advanced writing tasks, comprehensive feedback mechanisms, and robust motivational features, including opportunities for peer interaction. By continuously refining the application based on user feedback and incorporating features that facilitate more authentic and personalized writing practice, Mondly can further solidify its role as a valuable resource in English as a Foreign Language (EFL) learning context.

***Chapter Five: General Conclusion
And Recommendations***

Introduction:

In this chapter, we present the general conclusions drawn from our study on the usability of the Mondly application in enhancing the English writing skills of first-year Computer Science students at Mohamed El Bachir El Ibrahimi University, Bordj Bou-Arredj. We summarize the key findings, highlighting the positive impacts on students' writing proficiency, vocabulary expansion, grammar accuracy, and overall writing confidence. Additionally, we address the challenges identified, such as the need for more comprehensive writing exercises, personalized feedback mechanisms, and advanced features for sustained motivation. Then we offer practical recommendations for students, teachers, and educational stakeholders to optimize the use of Mondly in EFL writing instruction, aiming to enhance engagement and improve learning outcomes while addressing the identified limitations for more effective integration into academic curricula.

5.1 Discussion:

The research findings are discussed in this section concerning the study's goals, which examined how well the Mondly program worked to improve first-year computer science students' English writing abilities. The results are analyzed in the context of pertinent theoretical frameworks and literature on writing education and mobile-assisted language learning (MALL).

The study's findings reveal that first-year Computer Science students generally hold favorable perceptions towards using Mondly for developing their English writing abilities. The positive perceptions, as demonstrated by the themes of «User Experience and Technological Accessibility» and «Writing Skill Enhancement and Academic Progress,» underscore the growing significance of integrating technology, particularly mobile applications, into language learning curriculum. This aligns with the broader consensus in the field of Computer-Assisted Language Learning (CALL) that digital tools can provide accessible and flexible learning opportunities (Godwin-Jones, 2015). The students' reported improvements in spelling, grammar, vocabulary, and confidence highlight Mondly's potential as a supplementary tool for writing skill development, complementing traditional classroom instruction.

The accessibility and user-friendly interface of Mondly, as consistently reported by participants, are crucial factors contributing to its usability. This ease of access, particularly on mobile devices, enables learners to engage in practice anytime and anywhere, fitting into busy student schedules. This flexibility is especially beneficial for learners who may face time constraints or prefer self-paced learning, echoing the findings of previous studies on (e.g., Vesselinov & Grego, 2012, on the effectiveness of mobile apps). The structured format and interactive nature of Mondly's exercises appear to contribute to a positive learning experience, fostering consistent engagement.

However, despite these benefits, the study also brought to light several challenges and limitations that students encountered, as captured by the theme « External Barriers and Learning Constraints. » Time management difficulties and academic pressures significantly impeded consistent use, indicating that even highly accessible tools cannot fully overcome real-world demands on students. Furthermore, the perceived « insufficient writing tasks » and « limited advanced features » within Mondly suggest that while the app provides a solid foundation, it may not offer the depth or variety required for comprehensive writing skill development, particularly at more advanced levels. This points to a need for applications to evolve beyond basic sentence construction to include more complex writing exercises and personalized feedback mechanisms, as also noted by Ur (1996) regarding difficulties in language practice.

The theme « Engagement Mechanisms and Motivational Features » further emphasizes the students' desire for more dynamic and interactive learning environments. Suggestions for gamification, reward systems, and peer interaction opportunities underscore the importance of motivational design in sustaining long-term engagement in MALL. The lack of real-time interaction and personalized feedback, as highlighted by some participants and supported by literature (e.g., Lie, 2007, on limited exposure to target language), remains a critical area for improvement in language learning applications, especially for productive skills like writing. Students' inclination towards features that foster communication with other learners or native speakers suggests a demand for more authentic and communicative writing practice scenarios.

Finally, the « Comparative Technology Assessment » theme demonstrates that students are active consumers of educational technology, evaluating apps based on their perceived effectiveness and feature sets relative to alternatives. While some found Mondly more accessible than other platforms, the desire for « superior technological solutions » and specific feature enhancements (e.g., automatic error correction, personalized feedback on submitted texts) indicates a sophisticated understanding of what constitutes an effective language learning tool. This critical evaluation provides valuable feedback for developers aiming to optimize their applications to meet the evolving needs and expectations of EFL learners.

5.2 General Conclusion:

This thesis set out to explore the usability of the Mondly application in enhancing the English writing skills of first-year Mathematics and Computer Science students at Mohamed El Bachir El Ibrahimi University, Bordj Bou-Arréridj. Through a qualitative thematic analysis of student interviews, five key themes emerged: User Experience and Technological Accessibility, Writing Skill Enhancement and Academic Progress, External Barriers and Learning Constraints, Engagement Mechanisms and Motivational Features, and Comparative Technology Assessment.

The findings demonstrate that Mondly is largely perceived as a user-friendly and highly accessible tool, particularly due to its intuitive interface and mobile compatibility, which significantly contribute to a positive learning experience. Students reported tangible improvements in fundamental writing aspects such as spelling, grammar accuracy, vocabulary expansion, and increased confidence in their English writing abilities. This suggests that Mondly holds considerable potential as a supplementary resource within an EFL curriculum for developing foundational writing skills.

However, the research also identified several limitations and challenges. External factors like time constraints and academic pressures often hinder consistent engagement with the application. Furthermore, students expressed a need for more comprehensive writing exercises beyond basic sentence construction, as well as a desire for more advanced features, personalized feedback mechanisms, and opportunities for peer interaction. These identified gaps suggest that while Mondly provides a strong base, its current design may not fully cater

to the diverse and evolving needs for advanced writing skill development or sustained motivation.

The study also revealed that students critically evaluate Mondly in comparison to other language learning technologies, highlighting their awareness of alternative solutions and their discerning approach to educational apps. This comparative perspective offers valuable insights for app developers seeking to refine their platforms.

In conclusion, Mondly serves as a valuable, accessible, and user-friendly tool for initial enhancements in English writing skills and confidence among first-year Computer Science students. Its effectiveness, however, could be further maximized by addressing the identified external barriers, expanding its range of advanced writing tasks, incorporating more personalized feedback, and integrating robust motivational and social features to ensure sustained engagement and comprehensive skill development.

5.3 Recommendations:

Based on the findings and conclusions drawn from this study, the following recommendations are proposed for various stakeholders involved in English as a Foreign Language (EFL) learning, particularly concerning the use of mobile applications like Mondly for writing skill enhancement.

5.2.1 Recommendations for Students:

1. **Prioritize Consistent Engagement:** Students should aim for regular, even if short, practice sessions with Mondly to maximize its benefits, integrating it into their daily study routine rather than using it sporadically.
2. **Supplement with Diverse Resources:** While Mondly is beneficial, students should complement its use with other writing practice methods, such as engaging in free writing, participating in online forums, or seeking feedback from teachers or native speakers for more complex writing tasks.

3. Utilize Feedback Mechanisms: Students should actively seek out and reflect on the corrections and feedback provided by the application to understand their errors and improve their writing accuracy systematically.

4. Explore Advanced Features: For students seeking more profound writing development, it is recommended to actively look for and utilize any advanced writing exercises or features that Mondly or other platforms might offer, or to request such additions from developers.

5.2.2 Recommendations for Teachers:

1. Integrate Mobile Apps Strategically: Teachers should consider incorporating applications like Mondly as supplementary tools within the curriculum, particularly for reinforcing grammar, vocabulary, and basic sentence construction.

2. Address Identified Limitations: Teachers should be aware of the limitations of such apps, particularly regarding comprehensive writing tasks and personalized feedback, and design classroom activities that bridge these gaps (e.g., providing opportunities for longer written assignments and detailed teacher feedback).

3. Encourage Critical Evaluation: Educators should guide students to critically assess language learning applications, fostering a discerning approach to technology use and helping them understand how to best leverage different tools for specific learning goals.

4. Promote Collaborative Learning: Given students' desire for peer interaction, teachers could design activities that encourage students to use apps like Mondly collaboratively or discuss their learning experiences and challenges with classmates.

5.3 Future Implications:

This study provides valuable insights into the usability of Mondly for enhancing English writing skills among Algerian first-year Computer Science students. However, it also opens several avenues for future research to further understand the role of technology in EFL learning:

1. **Quantitative Effectiveness Study:** Future research could employ a mixed-methods approach with a larger sample size, including pre- and post-tests, to quantitatively measure the direct impact of Mondly usage on specific writing proficiency metrics.
2. **Longitudinal Studies:** Investigating the long-term effects of Mondly usage on writing skills and sustained learner motivation over an entire academic year or longer could provide deeper insights into its enduring impact.
3. **Comparative Studies:** Further research could compare the effectiveness of Mondly with other popular language learning applications (e.g., Duolingo, Babbel, Memrise) specifically focusing on writing skill development across different contexts or learner groups.
4. **Focus on Specific Features:** Future studies could delve into the impact of particular features within Mondly (e.g., specific exercise types, feedback mechanisms) on writing improvement, to identify optimal design elements.
5. **Teacher Perceptions and Integration:** Research could also explore teachers' perceptions and challenges regarding the integration of mobile language learning applications into their pedagogical practices.
6. **Impact on Different Skill Levels:** Investigating how Mondly's usability and effectiveness vary for learners at different proficiency levels (beginner, intermediate, advanced) could provide tailored recommendations.

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Appendices

APPANDIX A

Students Questionnaire :

Dear students;

The purpose of the current study is to investigate how learners perceive Mondly Application for Free as an effective supplementary learning tool for improving the writing abilities of first year Mathematics and Computer Science students at Mohammed El Bachir El-Ibrahimi University. Since your cooperation is crucial, we would greatly appreciate it if you could take a few moments of your valuable time to complete the following questionnaire.

Section one: Enhancing writing skills through Mondly.

-tick in the appropriate answer:

1- Have you heard about the Mondly application before?

Yes. No.

2- Do you use Mondly to learn English?

Yes. No.

3- How often do you use Mondly?

Everyday . Several times a week .

Once a week . Never .

4- How often do you use technology to help with your English writing?

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Never Rarely Sometimes Often Always

5- Which technological tools do you currently use to improve your writing?

Online dictionaries Grammar checkers Translation tools Language learning apps
 Writing forums/communities

6- How would you rate your current English writing skills?

Poor Average Good

7-What kind of challenges do you encounter when assessing your writing ability in English when you use Mondly?

Pronunciation problems. Vocabulary limitations.

Grammar usage. Organizing ideas

8-Do you find “Mondly” program a useful tool to improve your writing skill?

Strongly disagree. Disagree. neutral. Agree. Strongly agree.

09-How much do you think your writing skill will be improved whenever using “Mondly application”

Very much. Somewhat. A little. Nothing.

10-how satisfied are you with Mondly’s effectiveness in enhancing your English writing ability?

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Very satisfied. satisfied. Neutral. dissatisfied. Very dissatisfied.

Section two: Students' Preceptions towards using Mondly to enhance their writing ability

Strongly disagree (SD), 2: Disagree (D), 3: neutral (N), 4: Agree (A), 5: Strongly Agree (SA)

	Statements	SD	D	N	A	SA
01	I use Mondly to improve my writing proficiency					
02	Mondly was easy to use.					
03	The interface of Mondly was intuitive and user-friendly.					
04	Mondly offered activities that were relevant to improving writing skills.					
05	The progression of lessons in Mondly was appropriate.					
06	The visual design and interface of Mondly make it easy to focus on learning writing skills.					
07	The immediate feedback provided by Mondly helps me identify and correct my writing mistakes.					
08	I find Mondly's gamification elements (points, rewards, levels) motivating for my writing practice.					

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09	I think that Mondly application helps me in enhancing my writing competence.					
10	I would recommend Mondly to others who wants to improve their English writing.					
11	Teachers or administrators should incorporate language learning apps like Mondly into my writing English classes.					

Appendices

APPENDIX B

The Interview Questions:

This research interview seeks to explore how first-year Mathematics and Computer Science students perceive and experience the Mondly language application as a tool for enhancing their English writing abilities. We aim to understand the key factors that influence these students' decisions to adopt or reject Mondly as a resource for developing their writing proficiency in English.

1: How would you describe your experience with using Mondly for developing writing skills? Is it challenging or straightforward, and what makes it so?

2: To what extent do you find Mondly's interface and content presentation accessible and understandable for writing practice?

3: What specific improvements have you noticed in your writing abilities since using Mondly, if any? Could you elaborate on these changes?

4: Does technology integration (ICT) influence your experience with and commitment to using Mondly? Please explain your thoughts.

5: What specific challenges or difficulties have you faced that might discourage you from continuing to use Mondly for writing practice?

6: How do external factors such as time constraints, motivation, or social influences impact your decision to use Mondly regularly for writing practice?

7: In your opinion, what improvements or additional features could be implemented in Mondly to better support and motivate students in practicing writing English?

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APPANDIX C

CONSENT FORM:

Dear Students,

We are graduate students pursuing our master's degree in English (Didactics) at the University of Mohammed El Bachir El Ibrahimi, Bordj Bou Arriredj. As part of our academic requirements, we are undertaking a research study titled « Investigation usability of Mondly application in enhancing English writing skills. » We are pleased to invite you to participate in this study to help us investigate how learners perceive Mondly app for improving the writing abilities.

We kindly request your formal agreement to participate in this research. Your contribution will be invaluable in gathering essential data and accomplishing our research goals. Please be aware that your participation is entirely voluntary, and we will seek your consent at every stage of the process. We guarantee that all data you share will be treated with strict confidentiality.

- If you agree to take part in this study, please mark « √ » and provide your signature for the consent statements below:
- I acknowledge that my participation is voluntary and that I may withdraw from the study at any point.
- I acknowledge that all information I share will be maintained confidentially.
- I acknowledge that my responses will be made anonymous following analysis and prior to the final thesis documentation.

Participant's Signature:

Name in Block Capitals:

Date:

Summary

Summary

العربية

تقيم هذه الدراسة فعالية تطبيق Mondly في تحسين مهارات الكتابة الإنجليزية لدى 32 طالباً من السنة الأولى في الرياضيات والمعلوماتية بجامعة محمد البشير الإبراهيمي، برج بوعريريج. تستخدم الدراسة منهجاً مختلطاً يجمع بين استبيانات ما قبل وبعد التدخل، ومقابلات شبه منظمة مع ستة مشاركين، وبرنامج تدخل بتطبيق Mondly على ثلاث جلسات خلال الفصل الثاني 2025/2024. تم تحليل البيانات الكمية باستخدام برنامج SPSS. الهدف هو تقييم تحسن المهارات التحريرية واستكشاف تصورات المتعلمين حول تأثير التطبيق. تكشف النتائج عن آراء إيجابية عموماً تجاه Mondly، تُعزى أساساً إلى تصميمه اللعبي والجذاب الذي يجعل تعلم الكتابة الإنجليزية أكثر سهولة ومتعة. يُبرهن هذا البحث إمكانات Mondly كأداة فعالة لتعزيز مهارات الكتابة في تعليم الإنجليزية كلغة أجنبية.

Français

Cette étude évalue l'efficacité de l'application Mondly dans l'amélioration des compétences en écriture anglaise chez 32 étudiants de première année en mathématiques et informatique à l'Université Mohamed El Bachir El Ibrahimi de Bordj Bou Arreridj. Elle adopte une approche mixte combinant des questionnaires avant et après l'intervention, des entretiens semi-directifs avec six participants, ainsi qu'un programme d'intervention basé sur l'utilisation de Mondly pendant trois séances au cours du second semestre de l'année universitaire 2024/2025. Les données quantitatives ont été analysées à l'aide du logiciel SPSS. L'objectif est d'évaluer l'amélioration des compétences rédactionnelles et d'explorer les perceptions des apprenants quant à l'impact de l'application. Les résultats révèlent des avis globalement positifs à l'égard de Mondly, attribués principalement à son design ludique et attrayant qui rend l'apprentissage de l'écriture en anglais plus accessible et agréable. Cette recherche démontre le potentiel de Mondly en tant qu'outil efficace pour renforcer les compétences rédactionnelles dans l'enseignement de l'anglais langue étrangère.