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Title

**Teachers' Attitudes Towards Online Teaching via Moodle
Platform: A Case Study of EFL Teachers at the Department of
English, Mouloud Mammeri University of Tizi-Ouzou**

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Dedication

I dedicate this special work

To my beloved family; my parents, my brothers and sisters, my friends

This dissertation is a reflection of your collective influence, and I am eternally grateful.

Khales Inas

I dedicate this special work

To my beloved family

Tahrat Karima

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Abstract

This study explores the adoption of Moodle as the primary online learning platform at Mouloud Mammeri University of Tizi-Ouzou, particularly in the context of English as a Foreign Language (EFL) instruction. It investigates teachers' experiences and attitudes towards Moodle through a combination of questionnaire and interviews with teachers from the Department of English. Findings reveal that while a majority of university teachers recognise Moodle's effectiveness in managing course materials and facilitating communication, significant challenges such as technical difficulties, notably unreliable internet connections and inadequate training, student engagement_ particularly among those in remote areas_ hinder its full potential. Using the Technology Acceptance Model (TAM), the study shows that teachers' initial scepticism towards Moodle has evolved into more positive attitudes with increased familiarity, though dissatisfaction with its assessment tools persists. Recommendations include tailored training, fostering collaborative teaching communities, and strategies to address connectivity issues. The study underscores Moodle's transformative potential in EFL education but highlights the need to overcome barriers to fully enhance the online learning experience for teachers and students alike.

Key words: English as Foreign Language (EFL), Moodle, Teachers' attitudes, Technology Acceptance Model (TAM)

List of Abbreviations

AT: Attitude towards the technology

BI: Behavioural intention

CMC: Computer-Mediated Communication

CMS: Course Management System

DBS: Direct Broadcast Satellites

EFL: English as a foreign language

ELM: Elaborating Likelihood Model

H: Hypothesis

ICT: Information and Communication Technologies

LMS: Learning Management Systems

Moodle: Modular Object Oriented Dynamic Learning Environment

PEU: Perceived ease of use

PU: Perceived Usefulness

Q: Question

SCORM: Sharable Content Object Reference Model

TAM: Technology Acceptance Model

VLE: Virtual Learning Environment

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General Introduction

General Introduction

Background of the Study

The COVID-19 pandemic, declared by the World Health Organization in early 2020, caused widespread disruption across various sectors worldwide, including education. As lockdowns and social distancing measures were implemented to contain the virus, educational institutions at all levels were forced to suspend in-person instruction. This unprecedented situation prompted a global shift towards online and distance education, with many universities and schools adopting digital tools and platforms to maintain academic continuity. Learning management systems (LMSs), video conferencing software, and online communication platforms became essential components of emergency remote teaching during this period.

This global experience revealed both the opportunities and challenges associated with online education. In some countries, where institutions had already incorporated digital learning to varying degrees, the shift was relatively smooth. However, in other contexts especially where infrastructure, training, and access to technology were limited the change posed considerable difficulties. These disparities highlighted issues related to digital literacy, equitable access, and institutional preparedness for online education on a large scale.

In Algeria, the Ministry of Higher Education and Scientific Research responded to the crisis by encouraging universities to adopt digital tools to support remote instruction. Among the platforms recommended was Modular Object-Oriented Dynamic Learning Environment (Moodle), an open-source learning management system designed to support flexible and collaborative teaching. During the early months of the pandemic, many Algerian universities, including Mouloud Mammeri University of Tizi-Ouzou, began using Moodle to provide course materials, facilitate communication between teachers and students, and support learning activities. The university made the platform accessible through its academic web portal (<http://teleensm.ummtto.dz>), enabling students and instructors to engage in learning despite physical campus closure.

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While this emergency measure helped maintain some level of academic activity, it also presented various challenges for both students and instructors. Many users were unfamiliar with operating virtual learning platforms, and the sudden reliance on digital tools exposed broader limitations, such as unstable internet connections, unequal access to technological devices, and a lack of training and support. Students, in particular, faced difficulties related to financial constraints and limited access to laptops or smartphones, which hindered their ability to fully participate in online courses. These early experiences raised important questions about the feasibility and sustainability of online education in Algerian higher education.

At the Department of English at Mouloud Mammeri University of Tizi-Ouzou, the use of Moodle introduced significant changes to pedagogical practices, moving instruction from a traditional classroom setting toward a model that integrated digital tools. Although initially implemented in response to an emergency, the continued use of Moodle has created a context where educators and students are adapting to new teaching and learning methods. This evolving situation offers an opportunity to explore how users perceive Moodle, what challenges they encounter, and how the platform is shaping their educational experiences.

A number of studies have explored the use of Moodle and other digital platforms in Algerian higher education, shedding light on teachers' attitudes, experiences, and the challenges they face in adopting online teaching tools. Nait Ramdane El Hacene (2015) investigated the attitudes and motivation of teachers towards e-learning in the Department of English at Mouloud Mammeri University of Tizi-Ouzou (MMUTO), using Davis' Technology Acceptance Model (TAM) and Self-determination Theory (SDT). The study revealed that while many teachers exhibited initially positive attitudes towards e-learning, barriers such as lack of adequate training, limited materials, and infrastructure challenges

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hindered the broader adoption of e-learning tools. The study concluded that overcoming these external obstacles was essential for the successful integration of e-learning at MMUTO.

Building on this, Berbar (2020) explored English as a Foreign Language (EFL) teachers' perceptions and experiences with Moodle during its early implementation at MMUTO. Despite Moodle's potential, most teachers expressed negative attitudes, preferring face-to-face instruction. The study identified several key challenges, including lack of proper training, limited technological knowledge, and insufficient user support. Berbar's findings highlighted the importance of professional development programs to improve teachers' competencies and enhance Moodle's effectiveness as an educational tool.

A more recent study by Mokraoui Sonia and Saadi Dihya (2022) further explored Moodle's adoption among teachers at MMUTO. While the study found that there were some improvements in teachers' attitudes compared to previous years, significant barriers such as institutional support, technical issues, and limited access to resources still affected its integration. This study suggested that continued institutional support and training were critical to enhancing the effectiveness of Moodle in improving EFL instruction.

In addition to these studies at MMUTO, research in other Algerian contexts has provided valuable insights into the challenges and opportunities associated with Moodle and e-learning. For instance, Gouider (2023) reviewed studies on teachers' and students' attitudes towards virtual instruction in English as a Foreign Language (EFL) pedagogy in Algerian universities. This synthesis of findings from six universities revealed a range of difficulties encountered during online learning, particularly concerning technology access, training, and the motivation of both instructors and students. Similarly, Zekri and El Moussaoui (2024) examined the motivations and perceptions of 205 Algerian university teachers towards online platforms, finding that teachers' willingness to adopt digital tools was significantly influenced by their access to technology, institutional support, and previous training. Their

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findings underscored the importance of contextual factors in shaping the success of Moodle and similar platforms in Algerian higher education.

Furthermore, studies beyond Algeria have provided a global perspective on teachers' attitudes towards Moodle. For example, Ally and Tsinakos (2014) conducted an international study that found teachers' attitudes towards Moodle were largely shaped by their level of experience with technology, their pedagogical philosophy, and the availability of technical support. This study highlighted the importance of teacher readiness and institutional support in determining the success of Moodle adoption in online education. Similarly, Keller et al. (2021) conducted a study in the European context that revealed that teachers' perceived usefulness of Moodle was positively correlated with their motivation to use it. The study also pointed out that teachers' attitudes were significantly impacted by the availability of continuous training and technical assistance, reinforcing the findings of previous studies conducted in Algeria.

The transition from mandatory to voluntary use of Moodle at Mouloud Mammeri University of Tizi-Ouzou provides a unique opportunity to examine the evolution of teachers' attitudes towards the platform. Initially mandated to ensure continuity during the pandemic, Moodle is now used on a voluntary basis, offering a richer context to explore how teachers' perceptions have changed over time. While several studies have explored teachers' attitudes during the early phases of Moodle's introduction, there has been little research on how teachers' perceptions have evolved once Moodle became voluntary and after the emergency context of the pandemic.

To our knowledge, no study has specifically tracked the long-term changes in teachers' attitudes towards Moodle at MMUTO, particularly in the context of voluntary usage. This research aims to fill this gap by examining how teachers' attitudes have shifted since the mandatory use of Moodle during the pandemic and whether the perceived barriers to Moodle

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adoption have changed over time. By considering both the challenges and successes of Moodle implementation, this study will contribute to the broader understanding of how digital platforms are integrated into Algerian higher education.

Statement of the Problem

The adoption of online teaching platforms like Moodle has become a critical aspect of higher education, especially in response to the challenges posed by the COVID-19 pandemic. At Mouloud Mammeri University of Tizi-Ouzou (MMUTO), Moodle was implemented in 2020 to maintain educational continuity during the pandemic. However, despite its potential to facilitate effective online learning, several challenges emerged. These included disparities in teachers' technological skills, resistance to adapting traditional teaching methods to the digital environment, and a lack of adequate training and support.

Despite the potential benefits of online teaching facilitated by platforms such as Moodle, a significant challenge lies in bridging the gap between teachers' varying technological skills and their willingness to fully embrace and effectively use Moodle for online teaching. This gap must be addressed to ensure a consistent and high-quality learning experience for all students. Additionally, resistance among certain teachers to adapt their instructional practices to the digital environment hinders the realization of a seamless and engaging online learning experience.

While previous research has addressed teachers' initial reactions to Moodle and other online platforms, there is a gap in understanding how teachers' attitudes towards Moodle have evolved since its initial adoption. Existing studies have primarily focused on the early implementation phase, but little attention has been given to how teachers' experiences and perceptions have changed since then. The ongoing use of Moodle in a voluntary capacity presents a unique opportunity to examine these evolving attitudes, which could provide

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valuable insights into the platform's impact on teaching practices and its long-term integration into educational settings.

This study seeks to address this gap by exploring the factors that influence teachers' willingness to use Moodle effectively, such as perceived usefulness, ease of use, and the adequacy of training and technical support. Understanding these factors is crucial for improving Moodle's integration in the long term, as well as for shaping professional development strategies that will better equip educators with the tools and knowledge they need. By investigating the ongoing attitudes and experiences of teachers, this research will provide valuable insights into the potential future of Moodle as a tool for enhancing online teaching at MMUTO and other institutions in Algeria.

Aims and Significance of the Study

This study aims to investigate Mouloud Mammeri University of Tizi-Ouzou teachers' attitudes towards Online teaching via Moodle platform and to track changes in these attitudes since the platform was introduced in 2020. By exploring teachers' perceptions of Moodle's usability, usefulness, and overall effectiveness, the study seeks to achieve the following objectives. The first objective is to identify EFL teachers' present attitudes towards online teaching via Moodle. The second objective is to examine how teachers' attitudes towards Moodle have evolved since the platform was mandated for online teaching.

The significance of this study lies in its potential to provide valuable insights into the factors affecting technology adoption in higher education, particularly by examining the attitudes of EFL teachers towards online teaching via Moodle platform. By understanding these attitudes, the research will inform future strategies for the implementation and support of educational technologies, finally offering recommendations for improvement and aiding in the development of effective teaching modalities for the future.

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Research Questions and Hypothesis

This work attempts to give answers to the following questions:

Q1. What are the attitudes of EFL teachers towards online teaching via the Moodle platform?

Q2. Is there a significant change in EFL teachers' attitudes towards Moodle since its initial implementation in 2020 at Mouloud Mammeri University of Tizi-Ouzou?

To answer our research questions, we have advanced the following hypotheses:

H1. Most teachers hold positive attitudes toward the integration of distance education in EFL teaching with the use of Moodle platform.

H2. There is a significant change in EFL (English as a Foreign Language) teachers' attitudes towards Moodle.

Research Techniques and Methodology

To achieve the objectives of this research, we have conducted an exploratory study, a mixed method is employed by merging both quantitative and qualitative methods of data collection and analysis. For data collection procedure have been through two instruments: a structured questionnaire and a semi-structured interview, interviewing with listening and speaking EFL teachers of the English department at Mouloud Mammeri University of Tizi-Ouzou to find out and determine their views and experiences on online teaching with the use of Moodle platform. A questionnaire has been distributed to EFL teachers in order to explore their attitudes and changes towards online teaching via Moodle platform with focusing on the challenges and improvements for the support of this online platform to enhance teaching experience. This study adopts the Davis (1989) technology acceptance model as the analytical framework, which is used to describe the actual use of technology. It is used to predict the users' acceptance or rejection of technology. Therefore, it represents teachers' acceptance of e-learning through perceived usability, perceived usefulness, attitude towards technology use, and outcome variables. In addition, interview will be conducted to provide

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qualitative data and a deeper understanding of the experiences and attitudes of selected teachers. For data analysis procedures are carried out through the use of descriptive statistical methods. Likewise, thematic analysis is employed for analysing the interviews and complementing the results derived from the quantitative analysis of the data related to the questionnaire.

Structure of the Dissertation

This dissertation is structured according to the conventional IMRAD format and comprises a General Introduction, four chapters, and a General Conclusion. The General Introduction presents the background, problem statement, research questions, hypotheses, and objectives, along with the methodology and an overview of the structure. Chapter One, the Literature Review, explores key concepts related to distance education, educational technologies, and teacher attitudes, with a specific focus on the Moodle platform. It establishes the theoretical framework by adopting Davis's (1989) Technology Acceptance Model (TAM), while also integrating additional theories such as Cognitive Dissonance Theory, the Theory of Reasoned Action, and the Expectancy-Value Theory to offer a comprehensive understanding of attitude formation and change. Chapter Two outlines the research methodology, justifying the use of a mixed-methods approach that combines quantitative questionnaires and qualitative interviews. It details the research setting, sampling, data collection, and analysis methods. Chapter Four discusses the findings in the light of the theoretical framework and previous research, analyzing how teachers' attitudes towards Moodle have evolved at Mouloud Mammeri University of Tizi-Ouzou, the factors shaping these attitudes, and challenges faced in online teaching. The **General Conclusion** summarizes the study's key outcomes, addresses the research questions and hypotheses, and offers practical recommendations and suggestions for future research in educational technology.

Chapter 1:
Literature Review

Literature Review

Introduction

The increasing integration of educational technologies in higher education, particularly in response to the COVID-19 pandemic, has transformed traditional teaching practices worldwide. Learning Management Systems (LMS) such as Moodle have become essential tools in supporting online instruction, especially in institutions where face-to-face interaction has been restricted. In this context, the attitudes of EFL teachers towards these platforms are critical to understanding the success or failure of technology adoption in educational settings.

To ground the present study, this chapter first defines and contextualizes distance education, highlighting its evolution and core characteristics. It then critically reviews existing research on technology adoption in education, with special attention to the use of Moodle in EFL contexts. The chapter further discusses theoretical models related to attitude formation and technology acceptance, including Davis's (1989) Technology Acceptance Model (TAM), along with complementary frameworks such as Festinger's (1957) Cognitive Dissonance Theory, Ajzen and Fishbein's (1980) Theory of Reasoned Action, and Eccles and Wigfield's (2002) Expectancy-Value Theory.

By situating the present investigation within this theoretical and empirical landscape, the literature review aims to clarify the complex interplay between teachers' digital literacy, institutional support, pedagogical needs, and their attitudes towards Moodle. This sets the foundation for analyzing how such attitudes have evolved at MMUTO since Moodle's implementation in 2020.

1.1 Defining Distance Education

Distance education, also referred to as online or remote teaching, involves instructional delivery by a teacher to learners who are not physically present in a traditional classroom setting. It typically occurs in virtual environments and relies on a range of technological tools

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to facilitate interaction and content sharing. This mode of instruction enables learners to engage with teachers and peers either synchronously or asynchronously, depending on the technologies used and the instructional design. Negash and Wilcox (2008) identified six classifications of e-learning: with physical presence and without communication (face-to-face), e-learning without presence and communication (self-learning), e-learning without presence but with communication (asynchronous), e-learning with virtual presence and with communication (synchronous), e-learning with occasional presence and with communication (blended/hybrid asynchronous), and e-learning with presence and with communication (blended/hybrid-synchronous) . For Horton (2006) e learning is the use of information and computer technologies to create the learning experience.

Simonson (2009, 2010) defined distance education as institution-based, formal education where the learning group is separated, and where interactive telecommunications systems are used to connect learners, resources, and instructors. The Association for Educational Communications and Technology has published a monograph that explains this definition (Schlosser & Simonson, 2010). In the *2009 Encyclopaedia Britannica Book of the Year*, distance education is explained and defined on page 231 as:

Four characteristics distinguished distance education. First, distance education was by definition carried out through institutions, it was not self-study or non-academic learning environment. Second, geographic separation was inherent in distance learning and time might also separate students and teachers. Third, interactive telecommunications connected the learning group with each other and with the teacher. Most often, electronic telecommunications, such as e-mail, were used, but traditional forms of communication, such as the postal, might also play a role. Finally, distance education, like any education, established a learning group, sometimes called a learning community, which was composed of students, a teacher and instructional resources. (Encyclopaedia Britannica, 2009, p.231)

In other words, Distance education is a multifaceted concept that can be broken down into four main components: the institutional basis, the separation of teacher and student,

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interactive telecommunications, and the sharing of data voice, and video learning experiences. These components are crucial for understanding the dynamics of online teaching, especially in context of the Moodle platform used at Mouloud Mammeri University of Tizi-Ouzou.

1.1.1 Institutional Basis

A key aspect distinguishing distance education from self-study is the presence of a formal institutional framework. Unlike self-directed learning, which lacks structured oversight, distance education involves the coordinated delivery of content, assessment, and student support through organized systems (Moore & Kearsley, 2012). During the COVID-19 pandemic, Algerian universities adopted platforms like Moodle to maintain control over academic delivery and ensure continuity in student engagement and evaluation (Gherbaoui, 2023; Lamri, 2024). These digital tools provided a means to uphold institutional standards while adapting to remote learning conditions.

Equally important is the accreditation of such platforms and educational programs. Accreditation plays a critical role in verifying the quality and legitimacy of academic offerings, distinguishing them from illegitimate providers or diploma mills (Council for Higher Education Accreditation [CHEA], n.d.; U.S. Department of Education, 2024). The presence of formal accreditation safeguards educational standards, enhances institutional credibility, and protects students and employers from fraudulent credentials. The risks associated with unaccredited institutions and the rise of online diploma mills have been well-documented, highlighting the need for ongoing vigilance in maintaining academic integrity (Lambert, 2000; U.S. Government Accountability Office, 2004).

1.1.2 Separation of Teacher and Student

The second essential component of distance education is the physical and temporal separation between teacher and learner. In Algerian universities during the COVID-19

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pandemic, platforms like Moodle broke traditional classroom bonds: teachers and students were no longer co-located, and much of the interaction occurred asynchronously (Belkacemi et al., 2023; Kerrouzi, 2024). This asynchronous flexibility allowed students to access materials and complete assignments at their convenience (Wikipedia, n.d.; Derakhshandeh & Esmaeili, 2020).

However, this separation introduced significant challenges, including maintaining student engagement, fostering effective communication, and bridging the intellectual and motivational distance between instructors and learners (Elkateb, 2022; Wikipedia, n.d.). Research from Algerian higher education highlights that many students accessed Moodle simply to download files, with interaction levels varying considerably due to infrastructure limitations, unfamiliarity with online learning, and weak asynchronous communication (Elkateb, 2022; Kerrouzi, 2024). Moodle provides tools—forums, quizzes, multimedia content, video conferences—to mitigate this gap, but their effectiveness depends heavily on reliable internet, training for faculty and students, and proactive pedagogical design (Belkacemi et al., 2023; Hadjeris, 2021).

1.1.3 Interactive Telecommunications

The third component of distance education is the use of interactive telecommunications, which is essential for maintaining communication and engagement in a virtual learning environment. In platforms like Moodle, interaction can occur synchronously—via real-time discussions, video conferencing, and virtual classrooms—as well as asynchronously—through forums, messaging, and feedback tools (Garrison et al., 2010; Anderson, 2008).

Synchronous communication replicates face-to-face dynamics by enabling immediate feedback, heightened social presence, and more active participation. Participants report feeling more motivated and connected during live sessions (Hrastinski, 2006; Kock, 2008).

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Asynchronous communication, in contrast, offers flexibility, allowing learners to engage on their own schedule through discussion boards, emails, and recorded lectures (Field Zoom, 2023; Wikipedia, 2025). While asynchronous methods promote reflection and self-paced learning, they can also feel isolating unless balanced with real-time interaction (Field Zoom, 2023; Bousaaid et al., 2015).

The efficacy of interaction on Moodle depends on how well instructors and students leverage its communication tools. Research shows that positive outcomes arise when educators establish clear norms such as prompt feedback, virtual office hours, and scheduled real-time sessions to support engagement and learning (Hentea et al., 2003; Anderson, 2008).

Moodle supports both synchronous (e.g., video conferencing, live chat) and asynchronous (e.g., forums, quizzes, email) modalities. Successful integration of these technologies maintains connection and fosters collaboration—but only when combined with reliable infrastructure, instructional design aligned with communication goals, and active facilitation by instructors (Bousaaid et al., 2015; Wikipedia, 2025).

1.1.4 Sharing of Data, Voice, and Video Learning Experiences

The fourth core component of distance education is the integration of media and content-sharing tools, which enriches the learning environment with dynamic and engaging resources. In Algerian universities, Moodle enabled educators to disseminate recorded lectures, instructional videos, PowerPoint slides, and other multimedia materials, empowering students to engage with the content at their own pace (Tangirov & Abdullayeva, 2024; Lazhar & Karima, 2023). Additionally, real-time video conferencing tools—such as Zoom, Google Meet, and Microsoft Teams—were integrated into Moodle to facilitate synchronous interactions, helping to foster a sense of connection and immediacy between instructors and students despite geographical separation (Lazhar & Karima, 2023; University teachers report, 2020).

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While these media tools significantly improved content accessibility and learner engagement, their effectiveness varied due to constraints such as inconsistent internet connectivity, limited technical infrastructure, and differing levels of digital literacy among teachers and students (University teachers report, 2020; “The E-Learning in Times of Covid-19 in the Algerian University,” 2022) . Some educators relied on external platforms (e.g., WhatsApp, YouTube) to share course materials, supplements, or live sessions when Moodle’s multimedia features were underutilized (Nyatsanga et al., 2022). Despite these challenges, combining recorded content with live media remained essential for delivering rich, flexible, and pedagogically sound distance learning experiences.

In conclusion, analyzing the four pillars of distance education, the institutional foundation, teacher-learner separation, interactive telecommunications, and multimedia integration, provides a comprehensive understanding of how Moodle was leveraged in Algerian universities during the pandemic. This framework allows for a nuanced evaluation of Moodle’s efficacy in facilitating distance education and highlights areas such as technical readiness, instructional training, and platform usage where further improvement is needed.

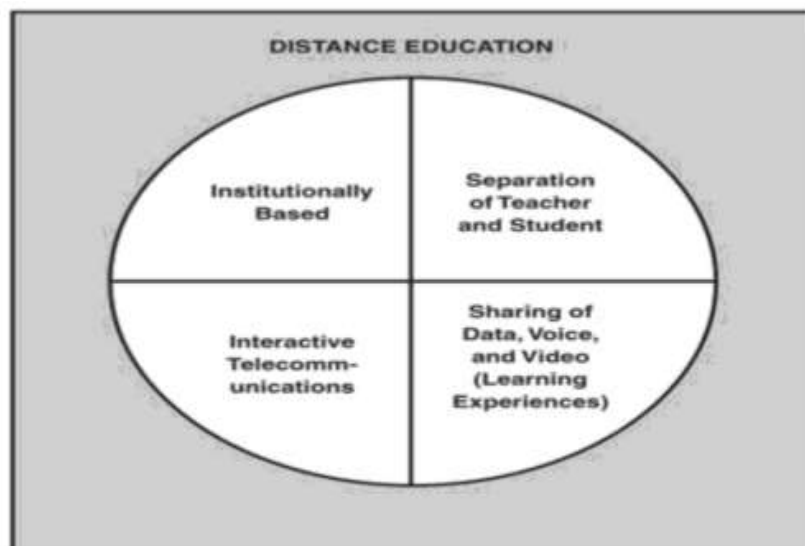


Figure 1. Components of the Definition of Distance Education

Adapted from Encyclopaedia Britannica (2009, p. 231)

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1.2 Historical Roots of Distance Education

Distance learning has evolved significantly over time, from its early beginnings to its current digital form. From correspondence education to web-based platforms, its development reflects the ongoing advancement in communication technologies and educational practices (*Encyclopaedia Britannica*, 2009).

1.2.1 Early Methods of Distance Education

As previously discussed in the definition, distance education is not a new concept. It can be traced back to the 19th century, and its evolution over the past 200 years has paralleled innovations in communication technologies. While distance education became more widespread in the late 1800s, its most rapid growth occurred in the late 1990s with the advent of the online technological revolution. This development began with correspondence education delivered by parcel post and later progressed through the use of radio, television, and ultimately internet-based technologies (*Encyclopaedia Britannica*, 2009; Moore & Kearsley, 2012; Daniel, 1995).

1.2.1.1 Correspondence Education

Distance education is not a recent innovation; its origins can be traced back to the 19th century with the introduction of correspondence education. One of the earliest documented efforts occurred in Great Britain, where Isaac Pitman taught shorthand by mail in the 1840s (Simonson et al., 2019).

In the United States, the University of Chicago established one of the first major university-level correspondence programs in the 1890s (Moore & Kearsley, 2012). Throughout the 20th century, distance education evolved alongside developments in communication technologies, including the use of radio and educational television (Anderson & Dron, 2011). The most significant transformation occurred in the late 1990s and early

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2000s, when internet-based platforms enabled real-time interaction and access to rich multimedia content, leading to a global expansion of online learning (Garrison, 2003; Bates, 2005). These technological milestones collectively shaped distance education into the dynamic and interactive system it is today.

1.2.1.2 Radio

The use of radio in education can be categorised into two main periods: the One-Way Communication Period and the Two-Way Audio and Video Interactive System. The One-Way Communication Period focused on instructional radio broadcasts, reaching wide audiences and overcoming geographical barriers. In contrast, the Two-Way Audio and Video Interactive System period introduced interactive learning via audio and video conferencing, enabling real-time engagement between instructors and learners. These stages demonstrate the evolution of radio from a basic broadcasting tool to an interactive medium in education (Moore & Kearsley, 2012).

a) One-Way Communication Period

Wireless radio, invented in 1895, became a tool for education due to its ability to reach remote areas where formal schools are not available. Marconi sent the first transatlantic message in 1901, and the Radio Act of 1912 regulated interstate communication by requiring licenses for broadcasters (Buckland and Dye, 1991, p.4). St. Joseph's College in Philadelphia received the first license that year, inspiring other schools to follow. By 1916, the National University Extension Association was organised at the University of Wisconsin (Mackenzie and Christensen, 1971, p.53) used radio combined with postal services for instruction. In the mid-1920, the British Department of Education supported radio-based instruction, with 10,000 schools using BBC broadcasts (Kenworthy, 1991, p.12). Although the global use of radio in distance education spread after 1925, it was gradual due to the slow development of radio technology.

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b) Two-Way Audio and Video Interactive System

The period from 1960 to 1990 in distance education was marked by the development of two-way audio and video conferencing, known as ‘audio-conferencing’ or ‘video-conferencing’. This innovation allowed real-time interaction between students and teachers across multiple remote locations. The University of Wisconsin pioneered this approach in the 1970s with audio teleconferencing, enabling instructors to teach several sites simultaneously. Later, advancements in satellite technology allowed for video signal transmission to remote classrooms, an approach that grew steadily in popularity across the United States and internationally, as seen with the National Technological University.

Another significant development during this period was the diversification of media used for correspondence education. Efforts to broaden access to higher education were supported by public television and radio networks, leading to varied media options for distance learning. The UK Open University, which received strong political backing, became a leading example of effective and high-quality distance education, utilising a mix of different media to reach a broad audience (Daniel, 1995, p.7).

1.2.1.3 Future Technologies

Advancements in telecommunication technologies, such as satellites, computers, television, and fiber optics, are rapidly transforming distance education by enhancing opportunities for face-to-face interactions. By the year 2000, it was projected that at least 80 percent of off-campus instruction was expected to be delivered through these emerging technologies (Buckland and Dye, 1991, p.63). These tools serve as tool to reach teachers and help students to improve their learning.

Two-way communication systems, supported by technologies like satellites, are considered essential for effective long-distance education and are expected to become more widespread. Satellite technology, the fastest growing tool for global distance education,

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enables direct communication between schools and allows for teleconferencing. For instance, ‘Direct Broadcast Satellites’ (DBS) allow programming reception via satellite dishes (Grant, 1994, p, 78). This technology facilitates receiving educational content and enable students to interact with teachers and peers from various locations, such as home or office.

1.2.2 The Digital Age and Technological Advancement during the 21 Century

The integration of Information and Communication Technologies (ICT) in education has become essential in modernising teaching and learning, particularly in the context of e-learning and distance education. As digital tools and the internet become integral to education, a “new pedagogy” is required to adapt to the evolving landscape (Martin & Madigan, 2006).

The use of modern technology in education, especially in language teaching, has increased significantly over the past decade. The World Wide Web allows teachers to access current and effective instructional materials (Moore, Morales & Carel, 1998). Online communication tools can enhance cognitive abilities, reduce stress, and foster interaction between teachers and students, acting as “cognitive amplifier”.

1.3 Teachers Attitudes towards Online Teaching

Teachers’ attitudes towards online teaching are crucial for the successful integration of digital tools in education. These attitudes are shaped by cognitive evaluations, which refer to teachers’ beliefs and judgments about how useful and easy online platforms are to use, affective responses involving emotional reactions, and behavioural intentions concerning their actual or intended use of these tools (Ajzen, 1991; Teo, 2011). Examining these dimensions involves understanding how teachers perceive the value of digital tools, their feelings towards using them, and how their behaviours reflect their attitudes. Theories of attitude formation and change, such as the Theory of Planned Behaviour, help explain how these attitudes are developed and adjusted over time, influencing the adoption and

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effectiveness of online teaching methods (Ajzen, 1991). By exploring these components, educators and policymakers can better understand the factors that affect teachers' engagement with technology and create strategies to support their successful implementation.

1.3.1 Definition of attitude

In psychology, an attitude refers to a set of emotions, beliefs, and behaviours directed toward a particular object, person, situation, or event. It can be described as the way we evaluate something or someone, often resulting in positive or negative responses. Attitudes are typically composed of three components: cognitive (thoughts and beliefs), affective (feelings), and behavioural (actions) (Eagly & Chaiken, 1993). These components reflect how attitudes are formed and how they influence our behaviour across different situations. Although attitudes are generally stable, they can change over time due to personal experiences or social influences.

1.3.2 Components of Attitudes

The concept of attitude is multidimensional and consists of three primary components: cognitive, affective, and behavioural. These components interact to influence how individuals perceive, feel about, and respond to an object, person, issue, or situation (Eagly & Chaiken, 1993).

1.3.2.1 Cognitive Component

The cognitive component of attitude refers to the beliefs, thoughts, and attributes that an individual associates with an object, person, issue, or situation. It involves mental processes related to understanding, evaluation, and interpretation of information (Eagly & Chaiken, 1993). For instance, teachers might believe that Moodle provides a variety of resources and tools that support effective teaching, which influences their overall attitude toward using the platform.

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1.3.2.2 Affective Component

It refers to the emotional responses towards the attitude object. Teachers might feel excited about the possibilities Moodle offers or frustrated by its technical issues. These feelings play a significant role in shaping their attitudes and subsequent behaviour (Eagly & Chaiken, 1993).

1.3.2.3 Behavioural Component

It consists of actions or intentions towards the attitude object. For example, a teacher's intention to incorporate Moodle into their classes reflects their attitude towards the platform. This component connects attitudes with actual behaviour such as the frequency of Moodle use in teaching practices (Ajzen, 1991).

1.3.3 The Concept of Attitude in EFL Teaching

In English as a Foreign Language (EFL) teaching, teachers' attitudes toward technology significantly influence the integration of digital tools in the classroom. Positive attitudes are often associated with the adoption of innovative instructional methods and increased student engagement (Kern, 2006). Teachers who perceive technology as a valuable educational resource are more likely to incorporate it into their practice, thereby enhancing students' learning experiences (Warschauer, 2004).

1.3.4 Attitude Formation Theories

Attitude formation is a key area of study in psychology that explores how individuals develop their attitudes towards various objects, people, or situations. These two theories explain the processes behind attitude formation.

* ***Social Learning Theory*** Albert Bandura's (1977) proposed that attitudes are formed through observing others and interacting within social context. In educational setting, teachers might develop attitudes towards Moodle by observing colleagues' experiences or

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receiving feedback from students. Social interactions and vicarious experiences play a significant role in shaping their attitudes (Bandura, 1977).

* **Cognitive Dissonance Theory** Leon Festinger's (1957) explains that when individuals experience conflicting beliefs or behaviours, they attempt to reduce the resulting discomfort by adjusting their attitudes. In the context of this study, if teachers at Mouloud Mammeri University of Tizi-Ouzou initially view Moodle negatively but later discover its usefulness for teaching, they may alter their attitudes to align with their new experiences, thereby reducing internal dissonance (Festinger, 1957).

1.3.5 Attitude Change Theory

Attitude change theory explores the mechanisms through which individuals' attitudes altered over time. One influential theory is the Elaborating Likelihood Model (ELM) by Petty and Cacioppo (1986). It describes two routes to attitude change: the central route, which involves thoughtful consideration of information and the peripheral route, which relies on superficial cues. Teachers' attitude towards Moodle might change through either route. For example, a well structured training session (central route) versus a positive attitude endorsement from a colleague (peripheral route) can influence their attitudes (Petty & Cacioppo, 1986).

1.3.6 Theory of Reasoned Action

Ajzen and Fischbein (1980) proposed that attitudes shape behavioural intentions, which then influence actual behaviour. In the context of Moodle, a teacher's positive attitude towards the platform's usefulness and ease of use can lead to their intention to use it in their teaching practices (Ajzen & Fischbein, 1980).

1.4 Technological Tools and Platforms

Technological platforms, often referred to as digital or e-learning tools, have transformed the distance education landscape by making the teaching and learning process

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more accessible and flexible. These tools enable students to learn from anywhere and at any time, adapting to their individual needs (Alrasheedi, Capretz, & Raza, 2015). They also promote interaction and collaboration between students and teachers through features like discussion forums, online chats and shared digital spaces (Hrastinski, 2008). Even in situations where students face challenges with internet accessibility, certain online teaching platforms can still be effective. Here are three digital teaching platforms that are well suited for such scenarios:

a) Online web meeting platforms

Online web meeting platforms such as Zoom, Google Meet, Microsoft Team, or Skype enable live, real-time virtual classes. Teachers can conduct live lessons and record these sessions, which can then be uploaded to Learning Management Systems (LMS). This approach allows students who may experience unstable internet connections to access recorded lessons later when they have more reliable access (Martin & Parker, 2014).

b) Learning Management systems (LMS)

LMS platforms are web-based software platforms designed to facilitate interactive online learning. LMS platforms support the organisation, delivery, and management of educational content and learner results. They provide a structured environment where teachers can upload course materials, manage assignments, and track student progress. Students can also submit assignments, participate in discussions, and interact with teachers and peers, regardless of time and distance (Watson & Watson, 2007). A popular LMS frequently used by educators are Google Classroom and Moodle.

c) Cross-platform messaging applications

Applications such as WhatsApp, Skype, Telegram offer practical solutions for online teaching. These platforms require minimal digital skills and are commonly used by both

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students and educators in their daily lives. They facilitate communication and the distribution of educational materials, including both printed documents and digital audio or video files, through attachment functions. This makes them a useful tool for maintaining engagement and providing support, especially in scenarios where internet access might be limited (Alrasheedi et al., 2015).

1.5 Moodle Platform

Moodle (Modular Object Oriented Dynamic Learning Environment) platform, it is known as a Learning Management System (LMS) and a free Open Source course management system (CMS) or Virtual Learning Environment (VLE). As a tool for creating dynamic online web sites for students, has become very popular among educators around the world (Dougiamas & Taylor, 2003).

This platform facilitates communication among users across different locations synchronous (chats) and asynchronous (discussion forums) methods (Hrastinski, 2008). It features configurable tools for creating assessments (quizzes, online tests and surveys) and managing their tasks with timetables. The platform's functionalities are divided into two main categories: resources and modules. Resources include such a Web pages, PowerPoint files and multimedia content. Modules are interactive components that enable student-teacher engagement and content manipulation. In this context, the Moodle platform provides several modules, such as Database, lessons, Assignments, Workshops, Chats, Forums, News, Glossary, Wikis, Choice, Quiz, Survey, Feedback, SCORM (Sharable Content Object Reference Model) and External tools to enhance the learning experience.

1.6 Strategies for Effective Engagement on Moodle

In online learning environments like Moodle, effective engagement strategies are essential to foster meaningful interactions between educators and students. Two key forms of

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Computer-Mediated Communication (CMC) _synchronous and asynchronous_ play a vital role in achieving this goal (Hrastinski, 2008; Martin & Parker, 2014).

1.6.1 Synchronicity

Synchronous communication, a key form of Computer-Mediated Communication (CMC), is increasingly popular on platforms like Moodle, where it enables real-time interactions between participants. At Mouloud Mammeri University of Tizi-Ouzou, tools such as live chat rooms and virtual classrooms on Moodle facilitate dynamic and interactive learning experiences by allowing educators and students to engage in real-time discussions. This immediacy fosters a sense of connection and engagement that is often challenging to achieve in asynchronous environments (Martin & Parker, 2014).

In more detailed cases, synchronous communication' on Moodle supports group discussions and live webinars, enabling collaborative interactions that stimulate the spontaneity of a traditional classroom (Bower et al., 2015). This integration of synchronous tools has been instrumental in supporting educational quality during remote learning by providing real-time feedback, clarifying doubts immediately, and fostering a stronger teacher–student connection that helps bridge the gap caused by physical distance (Hrastinski, 2008; Martin & Parker, 2014).

1.6.2 Asynchronicity

Asynchronous communication, a key aspect of computer-mediated communication (CMC), is widely used in online learning environments such as Moodle. Unlike synchronous communication, asynchronous methods allow students and teachers to engage with content, discussions, and assignments at their own pace, offering greater flexibility for learners in different time zones or with varying schedules. Tools such as discussion forums, message

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boards, and assignment uploads enable reflective learning and support deeper understanding without requiring real-time interaction (Hrastinski, 2008).

This flexibility helps sustain student engagement and participation, particularly in contexts where continuous, self-paced access to learning materials is essential. Asynchronous methods also complement synchronous tools, providing a balanced online education model that accommodates diverse learner needs and circumstances (Hrastinski, 2008; Garrison & Vaughan, 2008).

1.7 Challenges and Limitations of Distance Education

Distance education offers flexibility and accessibility to learners worldwide, but it also presents unique challenges and limitations that can affect its effectiveness. These challenges are often categorized into two main groups: internal factors, such as learner motivation, digital literacy, time management, and external factors, including internet connectivity, access to devices, and institutional support (Moore & Kearsley, 2012; Dhawan, 2020). Understanding these obstacles is essential for developing strategies that address the limitations of distance education platforms like Moodle and for improving the overall quality of the online learning experience.

1.7.1 Inherent/ Internal Factors

Internal factors revolve around the learner experience and include challenges such as physical separation, which may lead to feelings of isolation, reduced motivation, and decreased engagement in the absence of face-to-face interaction and classroom structure (Moore & Kearsley, 2012; Song et al., 2004).

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a) Physical Separation

Physical separation in distance education can hinder effective communication and learner engagement by creating feelings of isolation and detachment from the learning community. On platforms such as Moodle, the lack of synchronous, real-time interaction can intensify these challenges. Although tools like forums, chat rooms, and internal messaging support communication, they do not fully replicate the immediacy and depth of face-to-face interaction. This limitation may reduce the quality of feedback and weaken the sense of belonging among learners, which can negatively affect the overall effectiveness of the online learning experience (Moore & Kearsley, 2012; Song et al., 2004; Richardson, Maeda, & Swan, 2017).

b) Lack of Interest

Students in distance learning environments may struggle to maintain interest due to the comparatively less engaging nature of online materials when contrasted with traditional face-to-face instruction. The absence of physical presence and synchronous interaction can reduce students' emotional and cognitive connection to the course content. On platforms such as Moodle, the reliance on asynchronous communication and self-paced learning may contribute to lower engagement levels, especially when course materials are not designed to be interactive or visually appealing. The effectiveness of Moodle in sustaining student motivation largely depends on how well the instructional content is structured, presented, and supported by multimedia elements that encourage active participation (Martin & Bolliger, 2018; Sun & Rueda, 2012; Song et al., 2004).

c) Lack of Motivation

Distance education often presents motivational challenges for students due to the absence of the structure and routine typically found in face-to-face classroom settings.

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Without regular in-person interactions and external forms of accountability, learners may find it difficult to stay motivated and self-disciplined. Although learning management systems such as Moodle offer features like progress tracking, deadlines, and automated reminders intended to support learner motivation, their effectiveness largely depends on instructional design and how consistently these tools are integrated. Students may continue to experience difficulties with self-regulation and time management, particularly when course content lacks interactivity, timely feedback, or scaffolding to sustain engagement (Artino, 2008; Martin & Bolliger, 2018; Broadbent & Poon, 2015).

1.7.2 External Challenges

External factors in distance education relate to technological and logistical challenges, and include limited access to reliable internet, outdated or insufficient digital equipment, and a lack of adequate training for instructors on how to use learning management systems such as Moodle effectively. These issues can significantly hinder the delivery and quality of online instruction, especially in regions with limited infrastructure or digital literacy (Dhawan, 2020; Tømte et al., 2021; Kebritchi et al., 2017).

a) Technical Issues

Technical issues such as unstable internet connections, server outages, and software incompatibility can significantly hinder distance education by limiting access to course materials and online activities. Garrison and Anderson (2003) highlight the importance of reliable infrastructure, including server performance and bandwidth availability, in supporting effective learner engagement in online learning environments. On platforms like Moodle, these technical barriers may prevent students from submitting assignments, participating in discussions, or accessing essential resources. Instructors may also face difficulties managing courses or providing timely feedback. Such challenges can reduce the

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quality and consistency of the learning experience (Kebritchi, Lipschuetz, & Santiago, 2017).

b) Poor Equipment

Inadequate hardware or software can hinder students and instructors' ability to participate effectively in distance education. Issues such as poor-quality webcams, microphones, and out-dated computers can negatively affect communication and engagement. As noted by Allen and Seamen (2017), while platforms like Moodle facilitate online learning, they don't mitigate the effects of limited access to technology. Users with insufficient technology may struggle to fully engage with interactive elements like video lectures, live chats, and multimedia content. Limited access to appropriate technology can also pose challenges for students when course activities require higher technical capabilities.

c) Lack of Training

Instructors who are not adequately trained in using Moodle and other digital tools may face challenges in designing and delivering effective online courses. A lack of familiarity with Moodle's features can lead to suboptimal course design, ineffective communication, and insufficient support for students. According to Bawa (2016), poorly designed courses may result in under-usage of interactive features like quizzes, forums, and multimedia resources, which can negatively impact student engagement and learning outcomes. Therefore, proper training and professional development are essential for instructors to fully leverage Moodle's capabilities and enhance the online learning experience.

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1.8 Theoretical Framework

The study will report part of the research in Mouloud Mammeri University of Tizi-Ouzou at English Department that investigates teachers' attitudes towards distance teaching based on the use of Moodle platform. The study will be guided by Davis' (1989) Technology Acceptance Model (TAM) as it is illustrated in the following figure:

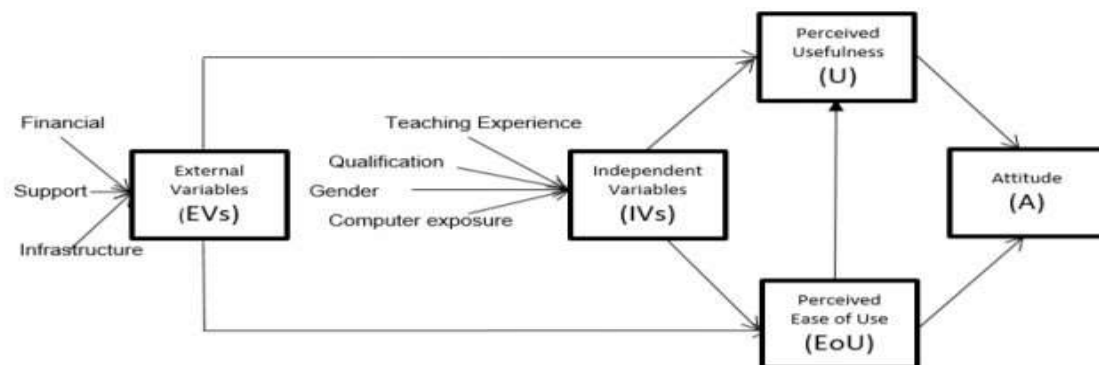


Figure 2. Extended Technology Acceptance Model for Teachers' Attitudes toward E-Learning.

Adapted from Kisanga (2016, p. 112), based on Davis, Bagozzi, and Warshaw (1989).

The Technology Acceptance Model (TAM), introduced by Davis (1989), is one of the most widely used theoretical frameworks in the social sciences for studying users' acceptance and use of technology. It provides a foundation for understanding and predicting how individuals adopt and engage with technological systems. Originally developed to explain computer usage behavior, TAM has since been applied in various fields, including education, healthcare, business, and public administration.

According to Davis (1989), the model identifies two key beliefs: perceived usefulness and perceived ease of use. These beliefs influence the user's attitude toward using technology, which in turn affects their behavioral intention to use it, ultimately leading to

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actual system use. Davis defines perceived usefulness as “the degree to which a person believes that using a particular system would enhance their job performance,” and perceived ease of use as “the degree to which a person believes that using a particular system would be free of effort” (p. 320).

These two perceptions play a critical role in shaping the user’s overall attitude, which determines whether they will adopt the system. TAM also allows for the inclusion of external variables such as infrastructure, institutional support, training, and social influence, which may influence perceived usefulness and perceived ease of use either directly or indirectly.

Sukendro et al. (2020) emphasize that TAM is not only a predictive framework but also a diagnostic tool that helps researchers understand the motivational factors behind technology adoption. They explain that “the core constructs of TAM — perceived usefulness, perceived ease of use, attitude, and behavioral intention — serve as mediators that connect external variables to actual use behavior” (p. 284).

In this study, TAM is extended to include external factors such as financial support, access to infrastructure, and institutional policies, along with personal characteristics such as teaching experience, academic qualification, gender, and previous exposure to technology. These variables are expected to influence perceived usefulness and perceived ease of use, which in turn shape attitudes and behavioral intention toward using educational platforms such as Moodle. This extended model offers a broader understanding of technology acceptance among educators by considering both contextual and individual factors.

a) Perceived Usefulness

Perceived usefulness is defined as “the degree to which a person believes that using a particular system would enhance his or her job performance” (Davis, 1989, p. 320). In the

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context of our study, perceived usefulness refers to how Mouloud Mammeri University of Tizi-Ouzou (MMUTO) instructors judge Moodle's effectiveness in streamlining their instructional tasks and improving student learning outcomes. Research shows that users who perceive clear benefits—such as increased teaching efficiency, better student engagement, and improved learning gains—are significantly more likely to adopt and continue using a system (Venkatesh & Davis, 2000). For example, Teo (2011) found that teachers who rated Moodle highly on usefulness scales reported greater intention to integrate it into their lesson plans and more sustained use over time.

b) Perceived Ease of Use

Perceived ease of use is defined as “the degree to which a person believes that using a particular system would be free of effort” (Davis, 1989, p. 320). In our context, perceived ease of use refers to how Mouloud Mammeri University teachers judge Moodle's user-friendliness and intuitiveness. When instructors find the platform easy to navigate and operate, the barriers to adoption are lowered and the likelihood of sustained use increases. Venkatesh and Davis (2000) further demonstrate that ease of use can enhance perceived usefulness, thereby strengthening users' intention to engage with the system. Teo (2011) found that teachers who report higher levels of ease of use are more inclined to integrate technology into their instructional practice.

c) Technical Support

Technical support refers to the availability and quality of assistance provided to users to help them effectively use technology (Kopcha, 2010). Kopcha observes that “timely and knowledgeable support is essential for teachers to integrate technology into their practice without distraction” (p. 873). In the context of Moodle at Mouloud Mammeri University, effective technical support can alleviate instructors' concerns about system issues, enabling them to focus on pedagogical design and delivery. Research shows that high-quality user

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assistance increases confidence and sustained use of e-learning platforms (Liaw, Huang, & Chen, 2007).

Conclusion

In reviewing the literature on teachers' attitudes towards Moodle and similar educational technologies reveals key insights through the Technology Acceptance Model (TAM), which underscores the influence of perceived ease of use and perceived usefulness on technology adoption. While many educators acknowledge Moodle's benefits, challenges such as technical issues, insufficient training, and resistance to change hinder its effective use. Research indicates that attitudes towards Moodle have improved since its mandatory adoption in 2020, driven by increased familiarity and perceived utility, though concerns about privacy and public scrutiny persist. Addressing these issues and providing targeted support are crucial for enhancing teachers' experiences with Moodle, and future research should focus on overcoming barriers and prompting a positive learning environment.

Chapter 2:
Research Methodology

Introduction

This chapter describes the research techniques used to explore teachers' attitudes towards online teaching using Moodle platform, aiming to address the research questions presented in the general introduction. It begins by detailing the data collection methods, which include questionnaire and interview. Following this, it explains the procedures for analysing both qualitative and quantitative data. This section is organized into two main parts: data collection procedures and data analysis procedures.

2.1 Research Method

This study adopts a mixed method approach to provide a comprehensive analysis by integrating both quantitative and qualitative methods, thereby ensuring the credibility and reliability of the findings. Croker (2009, p. 8) explains that mixed methods research is particularly effective when addressing multifaceted issues, as it “draws on the strengths of both quantitative and qualitative paradigms to provide a fuller understanding of the research problem.” In the context of this study, the mixed method approach is well-suited to capturing the complexity of the factors influencing teachers' use of the Moodle platform in online teaching. By combining numerical data with qualitative insights, it enables the collection of diverse perspectives that reflect both measurable patterns and in-depth personal experiences. As such, this combination offers a comprehensive understanding of teachers' attitudes towards Moodle, enhancing the interpretive depth and practical value of the findings (Croker, 2009, p. 8).

2.2 Context of the Investigation and Sample Population

This research is a case study, which Borg and Gall (1989, p. 402) define as a “detailed examination of a single subject or group or phenomenon.” It enables an in-depth exploration of teachers' attitudes towards Moodle by providing rich, contextual insights into the factors

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influencing their perceptions and behaviours. Conducted in the Department of English at Mouloud Mammeri University of Tizi-Ouzou, the study is based on responses from ten instructors who have used Moodle for online teaching.

Rather than using random sampling, which typically selects participants based on accessibility or proximity, this study focused on participants who were already using Moodle in their teaching practice. As Cohen, Manion, and Morrison (2007, p. 114) explain, purposeful sampling involves including cases that possess the characteristics relevant to the research focus. In this case, no participants were actively selected; instead, the study involved ten teachers who naturally used Moodle as part of their instructional routine. This approach ensured that all participants had direct experience with the platform, allowing for meaningful insights into its use within the university setting.

2.3 Data Collection Procedures

The data collection in this study combines both quantitative and qualitative methods to effectively address the research objectives. Quantitative data were gathered through a questionnaire comprising closed-ended questions, which were statistically analysed to identify trends and patterns in teachers' attitudes towards Moodle. In parallel, qualitative data were drawn from the open-ended questions within the same questionnaire, as well as from in-depth interviews with teachers who already use Moodle in their teaching practice. This mixed-methods approach provided a more comprehensive understanding of their experiences and perspectives.

2.3.1 Questionnaire

A questionnaire is a structured research tool used to systematically collect data from participants. According to Brehob (2001, p. 5), a questionnaire is a “form completed by individuals to obtain demographic data and their views and interests,” offering researchers a

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practical way to gather standardized responses. Kirakowski (1998, p. 3) further emphasizes its utility, describing it as a method for “eliciting, recording, and collecting information” that reflects participants' attitudes and behaviours. In the context of Human-Computer Interaction (HCI) research, questionnaires are particularly effective for capturing users' thoughts and experiences, thereby facilitating a deeper understanding of their interactions with technological systems. In this study, the questionnaire was administered to teachers who already use Moodle, allowing for the collection of relevant data based on their first-hand experience.

2.3.1.1 Description of the Questionnaire

The questionnaire was developed based on the constructs of the Technology Acceptance Model (TAM), incorporating key variables such as Perceived Usefulness (PU), Perceived Ease of Use (PEU), and Attitude toward Technology (AT). It also integrates elements from theories of attitude formation and change to capture the evolving nature of teachers' perceptions.

The questionnaire is structured into six main sections:

2.3.1.1.1. Demographic Information

This section collects basic personal and professional data, including gender, age, years of teaching experience, department, and level of instruction. These details help contextualise the participants' responses and allow for the analysis of possible correlations between demographic variables and attitudes.

2.3.1.1.2. Digital Competence and Internet Use

This section explores teachers' familiarity with digital technologies and their use of the internet in teaching. It includes questions about the platforms they use, their reasons for using the internet, and their digital habits.

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2.3.1.1.3. Moodle Use and Experience

This is the core section of the questionnaire. It focuses on how frequently teachers use Moodle, the functions they engage with, and their familiarity with the platform. It also measures Perceived Usefulness (e.g., “Moodle enhances my teaching efficiency”) and Perceived Ease of Use (e.g., “I find Moodle easy to navigate”) using a 5-point Likert scale, ranging from “strongly disagree” to “strongly agree.”

2.3.1.1.4. Perceived Institutional and Technical Support

This section investigates the degree of support teachers receive from their institution, including professional training, peer collaboration, and technical assistance related to the use of Moodle.

2.3.1.1.5. Psychological and Privacy Concerns

This section explores teachers’ comfort levels while teaching online, especially regarding issues such as privacy, use of cameras during online sessions, and concerns about public scrutiny.

2.3.1.1.6. Attitudinal Shifts and Future Perspectives

The final section examines how teachers’ attitudes toward Moodle have changed since its introduction in 2020. It includes items on both positive and negative changes in perception, as well as their intentions for future use. Sample items include: “My attitude toward Moodle has changed positively since I first used it” and “I am likely to continue using Moodle in my teaching.”

2.3.1.2 Questionnaire Administration

The questionnaire was distributed online via google forms using a secure survey platform. Participants (only 10 teachers) were contacted via email, with an invitation explaining the purpose of the study and the importance of their participation. The email

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included a link to the questionnaire, which participants were asked to complete within a two-week window. Follow-up reminders were sent to ensure a high response rate.

2.3.2 Interview

The interview is a data collection method in which the researcher poses a series of questions to the participant in order to obtain information about a specific topic (Adhabi & Anozie, 2017, p. 89). It enables participants to express their knowledge, intentions, emotions, and reflections related to the research topic, thereby offering valuable insights into the subject under investigation (Baltaci, 2019, p. 173).

2.3.2.1 Description of Interview

To complement the quantitative data, semi-structured interview was conducted with a subset of participants (3 teachers) to explore in greater depth the reasons behind the attitudes expressed in the questionnaires. This format provides flexibility, allowing participants to express their thoughts freely while ensuring that all key topics were thoroughly covered, particularly focusing on:

Barriers to continued use: Understanding why some teachers have discontinued using Moodle.

Personal experiences: How individual experiences with Moodle have shaped their attitudes.

Perceptions of privacy: Detailed discussions on privacy concerns and how these impact their teaching practices.

Expectations for the future: Teachers' visions for the evolution of Moodle and online teaching at Mouloud Mammeri University of Tizi-Ouzou.

2.3.2.2 Interview Administration

After the questionnaire phase, participants who expressed interest in further discussing their experiences were invited to participate in an interview. This interview was

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conducted via video conferencing tools, ensuring convenience for the participants. Each interview lasted between 30 and 45 minutes and was recorded (with the participant's consent) for transcription and analysis.

2.4 Data Analysis Procedures

To analyse the data comprehensively, both quantitative and qualitative approaches were employed:

2.4.1 Quantitative Data Analysis

The quantitative data from the questionnaires were analysed using descriptive statistics (e.g. frequencies, means, standard deviations) to summarise and interpret the data (Creswell & Creswell, 2018, p. 150). Correlation analysis was also performed to identify relationships between demographic variables and attitudes towards Moodle. For example, the analysis examined whether years of teaching experience were associated with the perceived usefulness of Moodle.

In addition, regression analysis was conducted to examine the extent to which the core variables of the Technology Acceptance Model (TAM), namely perceived usefulness and perceived ease of use, *significantly predict teachers' attitudes* towards Moodle (Field, 2018, p. 222). This method allowed the researchers to quantify the influence of each independent variable on the outcome and assess how well the model explained the variation in attitudes.

2.4.2 Qualitative Data Analysis

The qualitative data from the open-ended questionnaire responses and interview was subjected to thematic analysis. This involved the following steps:

Familiarisation: Transcribing the interviews and reading through the responses multiple times to become deeply familiar with the data.

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Coding: Identifying and labelling key pieces of data that relate to specific research questions or themes.

Theme Development: Grouping the codes into broader themes that capture the essence of the participants' experiences and attitudes. For example, themes related to "privacy concerns" or "perceived barriers to use" emerged from the data.

Reviewing and Refining: Ensuring that the themes accurately represent the data and are consistent across different participants.

This analysis provides a rich, detailed understanding of teachers' attitudes, the factors influencing these attitudes, and how they have evolved over time.

2.5 Limitations of the Study

Several limitations should be acknowledged:

Sample Size: With a sample of 10 teachers, the findings may not be fully generalisable to the entire population of Mouloud Mammeri University of Tizi-Ouzou teachers. However, the study's purposive sampling aimed to capture a diverse range of experiences within the same department.

Self-Reported Data: The reliance on self-reported data through questionnaires and interviews may introduce bias, as participants might respond in socially desirable ways or may not accurately recall past attitudes and experiences.

Cross-Sectional Nature: The study captures attitudes at a single point in time, which may not fully reflect on-going changes or developments in attitudes towards Moodle.

Despite these limitations, the study provides valuable insights into the factors influencing teachers' attitudes towards Moodle and highlights areas for further research and improvement.

Conclusion

In summary, this chapter outlined the methodological approach employed to explore the attitudes of EFL teachers towards online teaching through the Moodle platform at Mouloud Mammeri University of Tizi-Ouzou. A mixed method approach was used, integrating both quantitative and qualitative data collection through questionnaires and semi-structured interviews. The use of the Technology Acceptance Model (TAM) as the analytical framework enabled the study to systematically assess teachers' perceptions of Moodle's ease of use and usefulness.

The data collection process, though limited by a sample size, offered valuable insights into the challenges faced by teachers since the implementation of Moodle in 2020. The qualitative interviews, in particular, provided a deeper understanding of teachers' personal experiences, shedding light on both the barriers and opportunities presented by the platform. The results derived from this methodology will be discussed in subsequent chapters to offer interpretations and recommendations for enhancing Moodle's integration in teaching practices at Mouloud Mammeri University of Tizi_Ouzou.

Chapter 3:
Presentation of the Results

Presentation of the Results

Introduction

This chapter presents the results of the questionnaire and interviews administered to EFL teachers at the Department of English in Tizi-Ouzou. The primary aim is to provide a comprehensive understanding of the teachers' experiences and attitudes towards using Moodle for online teaching. By analysing the collected data, including insights from both the questionnaire and interviews, this chapter sheds light on the overall effectiveness of Moodle as a teaching tool, identifies key challenges faced by educators, and gathers insights into areas for improvement. The following sections explore the detailed findings, highlighting both strengths and areas needing enhancement based on the feedback provided by the participants.

3.1 Results of the Questionnaire

In this part, we explore the findings from the questionnaire completed by EFL teachers at the department of English in Tizi-Ouzou. Although the sample consists of only 10 participants, the responses provide valuable insights into their experiences and attitudes toward using Moodle for online teaching. The results are organised into the following sections.

3.1.1 Teachers' Profile

1. Gender

Gender	Number of participants
Male	3
Female	7

Table 1 *Teachers' Gender*

In Table 1, 7 out of 10 participants are female, while the remaining 3 participants are male.

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2. Age

Age	Number of participants
Under 25	0
from 25 to 39	7
from 40 to 49	2
50 years and above	1

Table 2 *Teachers' Age*

This table (2) shows that 7 of the participants are aged 25-39, 2 are aged 40-49, and one of the participants have 50 years and above. There are no participants under the age of 25 in the sample.

3. Teaching Experience

Teaching Experience	Number of participants
From 1 to 5 years	5
from 6 to 10	0
from 11 to 15	3
more than 15 years	2

Table 3 *Teachers' Teaching Experience*

This table (3) shows that 5 of the participants have 1 to 5 years of teaching experience. While 3 have 11 to 15 years. Additionally, 2 have more than 15 years of experience, and none have 6 to 10 years of teaching experience.

4. Teaching Module (s)

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The participants in this study teach a diverse range of modules that span several areas of expertise. These include Media Studies ,and didactics, as well as courses focusing on Ethics and Deontology. In the field of linguistics, they cover both Linguistics and CALx, along with Phonetics and courses on Reading and Writing. Additionally, they engage students with modules on Listening/ Speaking, Civilisation, and Translation, along with English Language Teaching (ELT) and Study Skills. Moreover, some participants focus on teaching Intercultural Communication, the History of Communication, and specialised subjects such as ESP and Human Sciences. This diverse range of teaching modules reflects a broad and interdisciplinary approach to education, covering essential areas in both language and communication studies.

3.1.2 Current Technology Use and Familiarity

1. How familiar are you with using digital technologies?

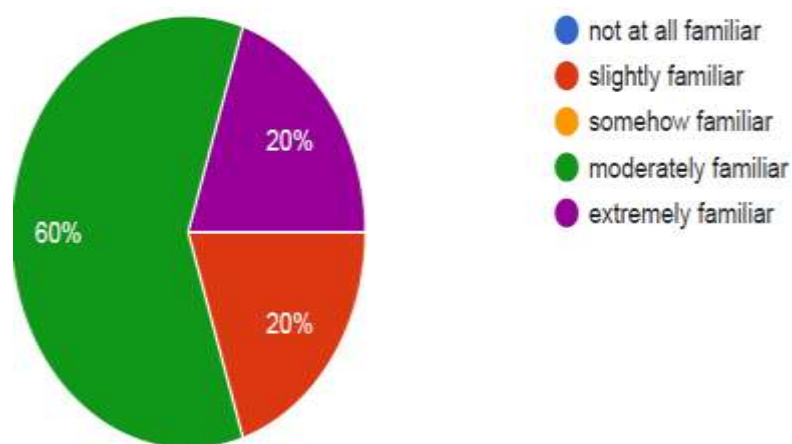


Figure 3 *Teachers' Familiarity with Using Digital Technologies*

This figure (3) shows that 60% of the teachers are moderately familiar with digital technologies, while 20% are slightly familiar and another 20% are extremely familiar. There are no participants who are “not at all familiar” or “somehow familiar” with these technologies.

2. Do you use the internet for teaching purposes?

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This question indicates that 100% of the teachers responded ‘Yes’ to the use of internet for teaching purposes, with no participants selecting ‘No’. This demonstrates that all teachers in the sample consistently rely on the internet as a tool in their teaching practices.

3. If yes, what are the primary reasons for using the internet in your teaching?

The reason for using the internet	Number of participants
Uploading lessons and materials	8
Sharing resources with students	8
Communicating with students	8
Conducting online classes	4
Collaborating with colleagues	4

Table 4 Teachers’ Reasons for Using the Internet in their Teaching

This table (4) shows that 8 teachers use the internet for uploading lessons and materials, sharing resources with students, and communicating with them (e.g., email, messaging...). In contrast, 4 participants use it for conducting online classes and collaborating with colleagues.

4. Which platforms do you primarily use?

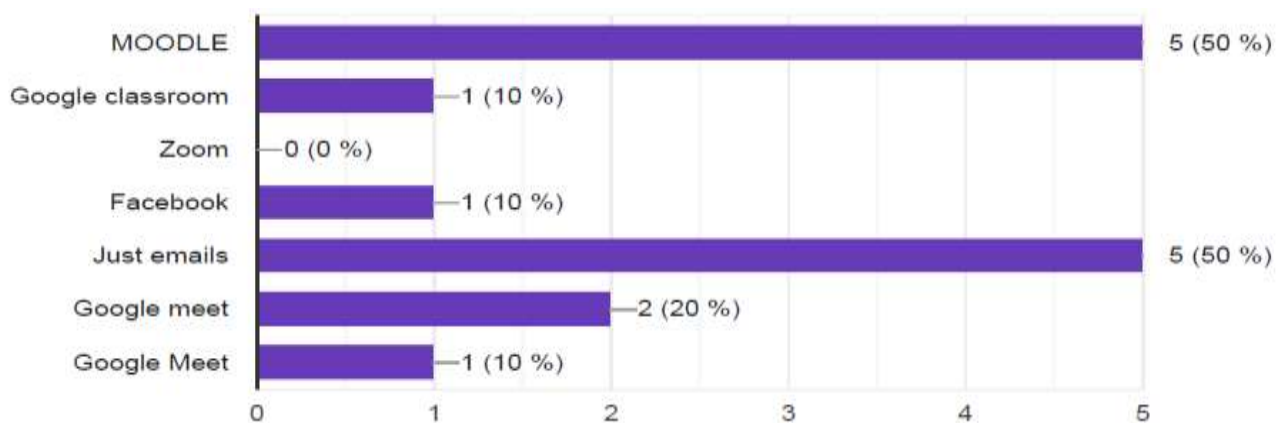


Figure 4 Teachers’ Use of the Platforms

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This figure (4) indicates that Moodle and emailing are the most used platforms, each used by 50% of teachers. Google Meet is used by 30%, while Google Classroom and Facebook each have 10%. Zoom is not used by these participants.

5. What factors influenced your decision to choose the platform you mentioned above?

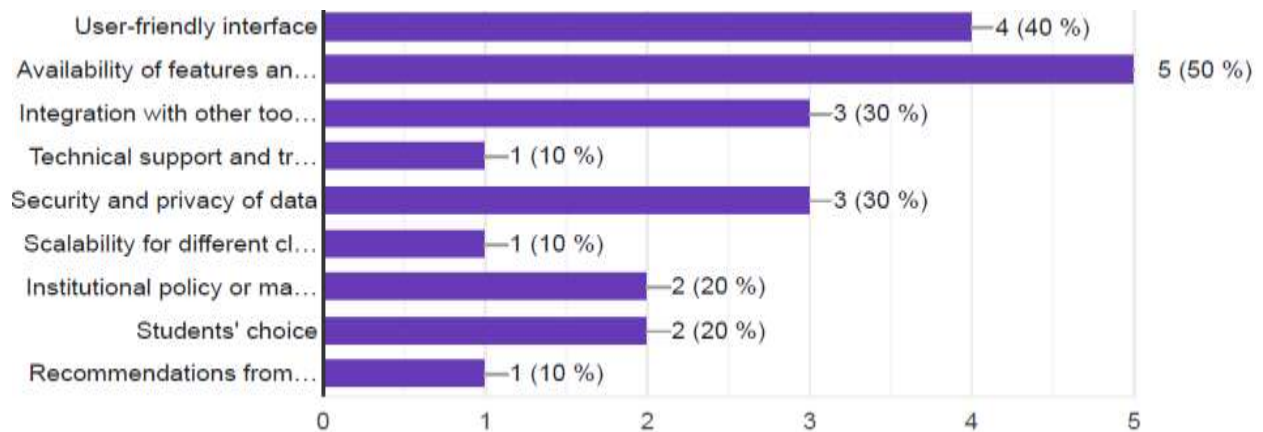


Figure 5 Teachers' Factors of their Decision to Choose the Platform

This figure (5) shows that the primary factors influencing these teachers' platform choices are the availability of features and tools (50%) and a user-friendly interface (40%). Other considerations include integration with other tools (30%), security and privacy (30%), and institutional policy or students' choice (20%), while technical support, scalability, and recommendations from colleagues are less significant factors, each at 10%.

6. Current use of Moodle

Current use of Moodle	Number of participants
Currently using Moodle	2
Used Moodle in the past but no longer use it	4
used Moodle in the past and continue to use it	2
Have used Moodle at least once	2

Table 5 Teachers' Use of Moodle

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Table (5) illustrates the current use of Moodle among the participants. The data show that 4 out of 10 teachers (40%) used Moodle in the past but no longer use it, while 2 teachers (20%) are currently using Moodle, and another 2 teachers (20%) used Moodle in the past and continue to use it. Additionally, 2 participants (20%) used Moodle only once or very briefly, indicating minimal or occasional prior use.

3.1.3 Moodle, Perceived Usefulness and Perceived Ease of Use

1. How easy do you find it to navigate and use Moodle?

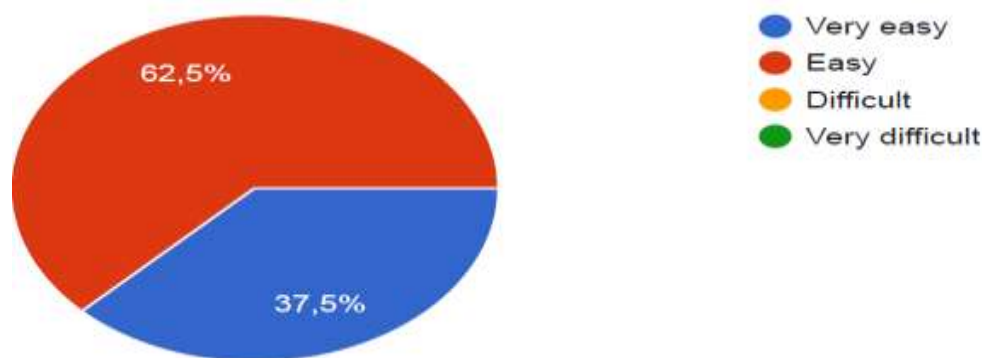


Figure 6 Teachers' Ease of Navigating and Using Moodle

This figure (6) indicates that the majority of teachers find Moodle easy to use, with 62.5% describing it as *easy* and 37.5% considering it *very easy* to navigate. Notably, none of the teachers reported any difficulties using the platform, indicating a generally positive experience and user-friendly interface.

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2. How effective is Moodle in helping you manage and organise course materials?

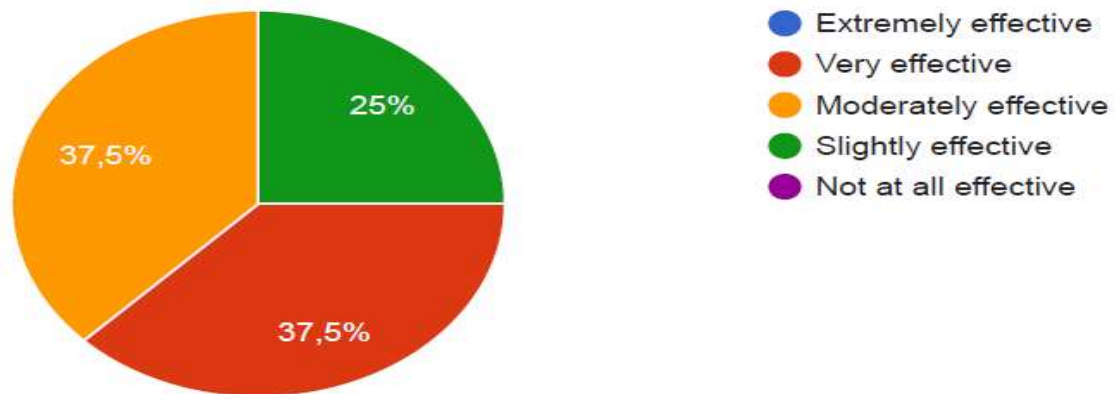


Figure 7 Teachers' Perception of Moodle's Effectiveness in Managing and Organising Course Materials

This figure (7) shows that the majority of teachers perceive Moodle as effective in managing and organising course materials, with 37.5% rating it as *very effective* and another 37.5% finding it *moderately effective*. Meanwhile, 25% consider it only *slightly effective*, and no teachers rated it as either *extremely effective* or not at all effective.

3. How satisfied are you with Moodle's assessment tools (quizzes, assignments...)?

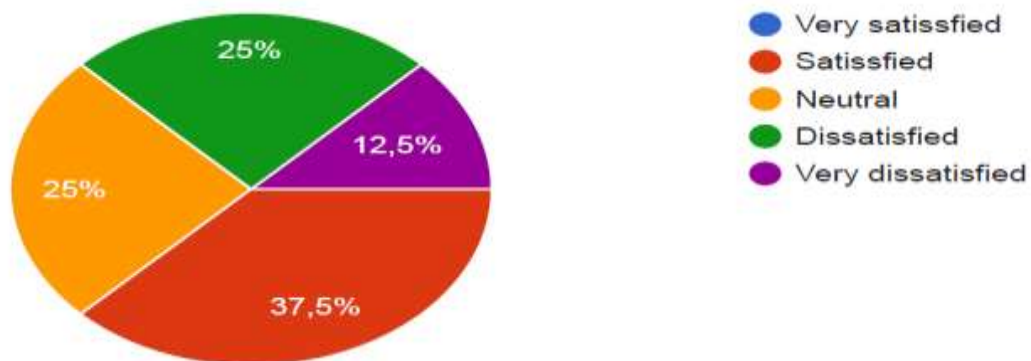


Figure 8 Teachers' Satisfaction with Moodle's Assessment Tools

Based on the figure (8), teachers' satisfaction with Moodle assessment tools is quite varied. The largest group, 37.5% are *satisfied* with the tools, while 25% hold a *neutral* stance. However, significant portions of teachers are *dissatisfied* with 25% and 12.5% reporting they are *very dissatisfied*. Notably, no teachers indicated being *very satisfied* with the assessment tools.

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This suggests mixed satisfaction levels, with some areas for improvement in Moodle's assessment features.

4. Do you deliver online classes via Moodle?

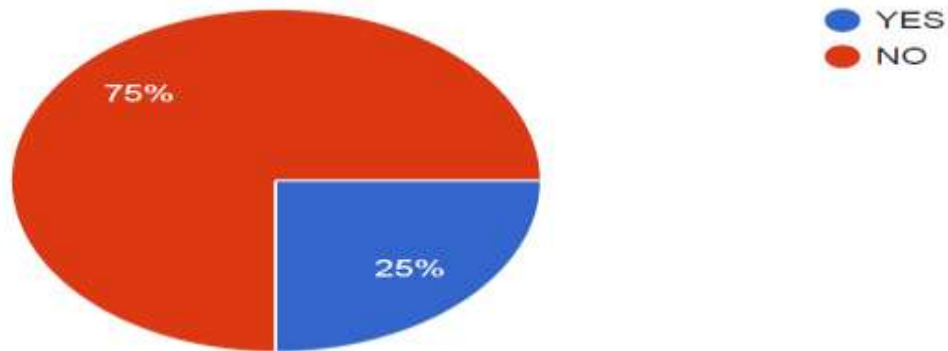


Figure 9 Teachers' Use of Moodle for Delivering Online Classes

This figure (9) indicates that teachers largely avoid using Moodle for online classes, with 75% opting for alternative platforms or methods. While, teachers who use Moodle for online classes make up only 25% of the respondents.

5. If no, would you tell us which platform did you opt for and why?

Respondents who do not use Moodle often choose Google Meet due to its familiarity for students, find Moodle too complicated, or prefer to send lectures via Gmail to their students.

6. If yes, are you able to schedule and conduct live sessions or webinars on Moodle?

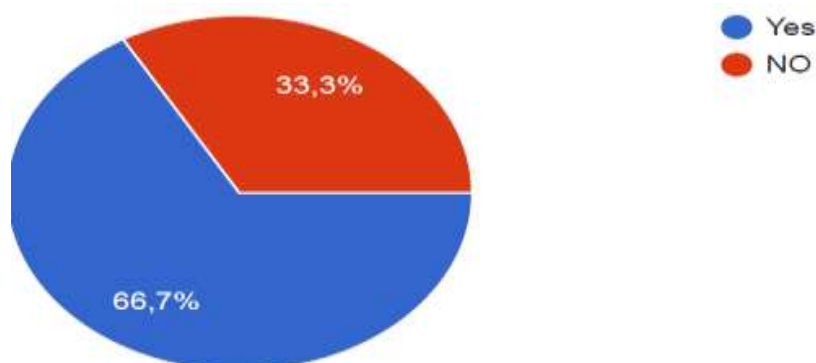


Figure 10 Teachers' Ability to Schedule and Conduct Live Sessions or Webinars on Moodle

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This figure (10) shows that respondents who use Moodle answer this question: 66.7% of them can schedule and conduct live sessions or webinars on Moodle, while 33.3% cannot.

7. Do you find it easy to upload and share course materials for online classes on Moodle?

This question shows that all respondents find it easy to upload and share course materials for online classes on Moodle. This indicates strong satisfaction with Moodle's functionality in this area, suggesting that the platform effectively supports the management and distribution of course content.

8. How easy do you think it is to facilitate discussions and interact with students in a Moodle classroom?

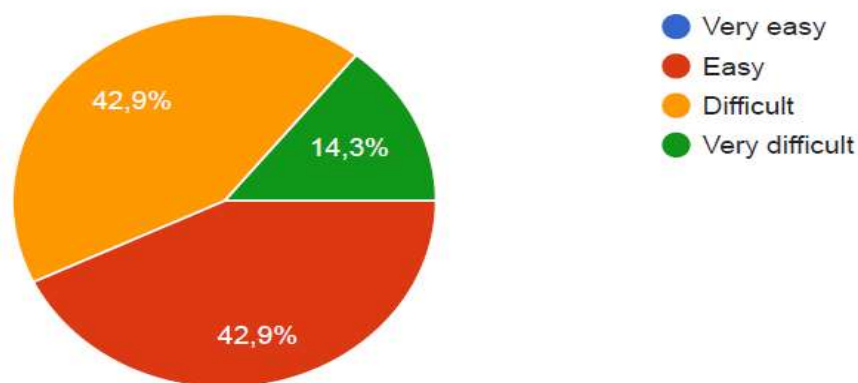


Figure 11 Teachers' Ease of Facilitating Discussions and Interacting with Students in a Moodle Classroom

In evaluating how easy it is to facilitate discussions and interact with students in a Moodle classroom, 42.9% of respondents find it *easy*, and another 42.9% find it *difficult*. Notably, 0% consider it *very easy*, and 14.3% find it *very difficult*.

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9. How would you evaluate your overall experience with delivering online classes via Moodle?

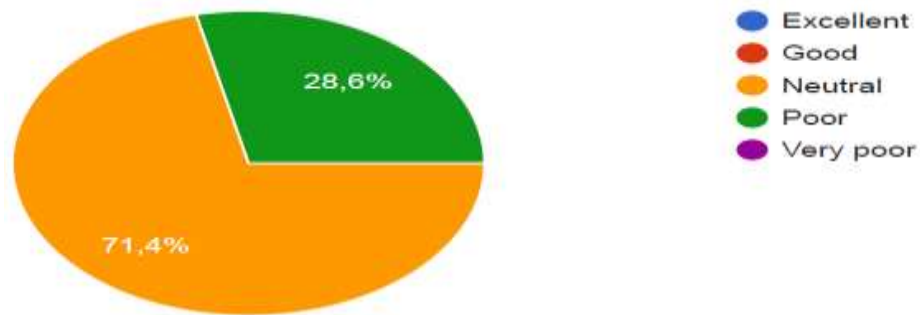


Figure 12 Teachers' Evaluation of their Overall Experience with Delivering Online Classes via Moodle

This figure (12) evaluate their overall experience with delivering online classes via Moodle, 71.4% of respondents feel *neutral*, indicating neither strong satisfaction nor dissatisfaction with the platform. A smaller proportion, 28.6% rate their experience as *poor*, while no respondents consider their experience *excellent*, *good*, or *very poor*.

10. How has Moodle enhanced your teaching experience in comparison to traditional methods?

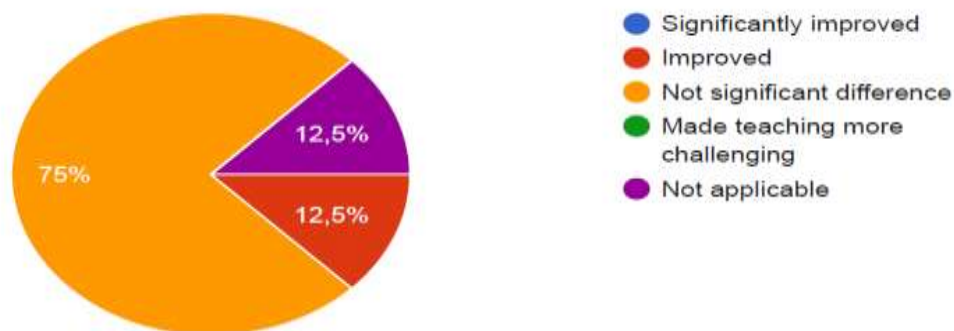


Figure 13 Teachers' Perspectives on how Moodle has enhanced their Teaching Experience compared to Traditional Methods

This figure (13) shows that when comparing Moodle to traditional methods, 75% of the respondents report no significant difference in their teaching experience. Meanwhile, 12.5% find that Moodle has improved their teaching, and the same percentage considers it as

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not applicable. No respondents feel that that Moodle has significantly improved their teaching or made it more challenging.

11. Do you believe that online teaching via Moodle can be effective as face-to-face teaching?

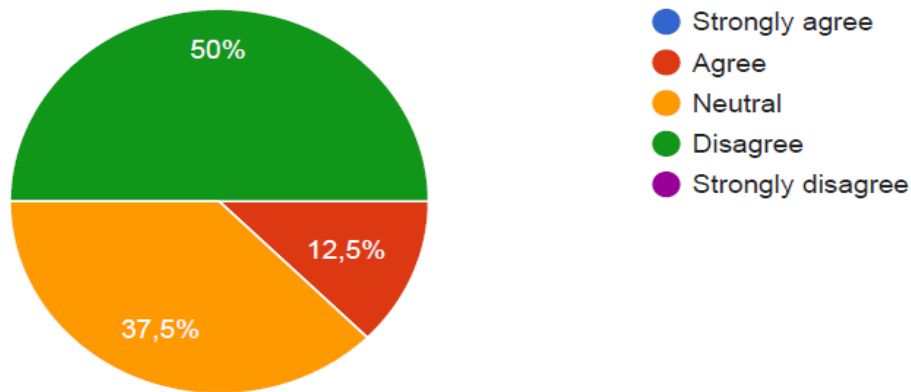


Figure 14 Teachers' Beliefs on the Effectiveness of Online Teaching via Moodle Compared to Face-to-Face Teaching

This figure (14) shows that 50% of respondents of this question *disagree* that Moodle is equally effective, while 12.5% *agree*. Additionally, 37.5% remain *neutral* on the matter.

12. What challenges do/did you face while teaching online via Moodle?

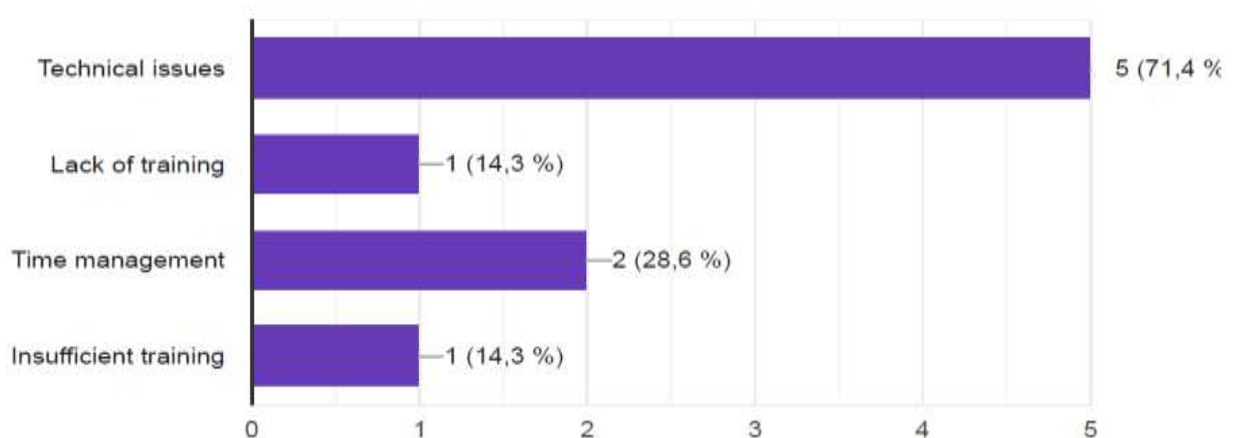


Figure 15 Teachers' Challenges Faced while Teaching Online via Moodle

This figure (15) shows that when teaching online via Moodle, 71.4% of respondents report technical issues, highlighting a major challenge with the platform's reliability or usability. Additionally, 28.6% struggle with time management, which could affect their

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ability to effectively deliver and organise their courses. Both 14.3% of teachers identify insufficient training and a general lack of training as obstacles.

3.1.4 Attitudes towards Usage and Technical Support

1. What is your overall attitude toward using Moodle for teaching?

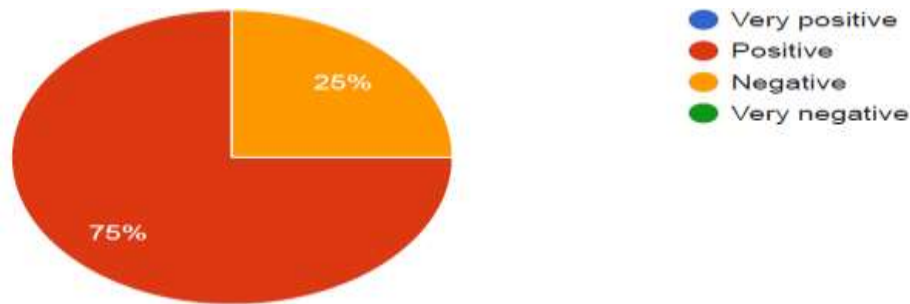


Figure 16 Teachers' Attitude toward Using Moodle for Teaching

This figure (16) shows their overall attitude toward using Moodle for teaching, 75% of respondents hold a *positive* view, while 25% have a *negative* attitude. No teachers expressed a *very positive* or *very negative* opinion.

2. How do you rate the technical support provided by your institution for resolving problems related to Moodle?

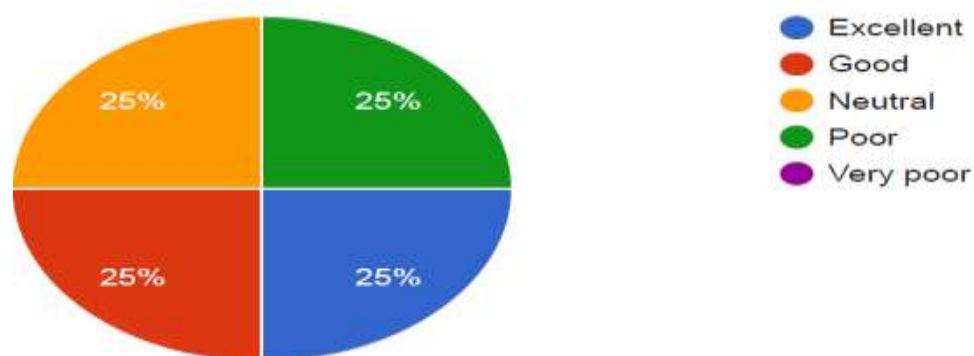


Figure 17 Teachers' Ratings of Technical Support Provided by their Institution for Moodle-Related-Issues

In evaluating the technical support provided by their institution for resolving Moodle-related-problems, 25% of respondents rate it as *excellent*, and another 25% rate it as *good*. Similarly, 25% have a *neutral* stance, while 25% find the support to be *poor*.

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3. Did/ Do you receive adequate professional development on using Moodle effectively?

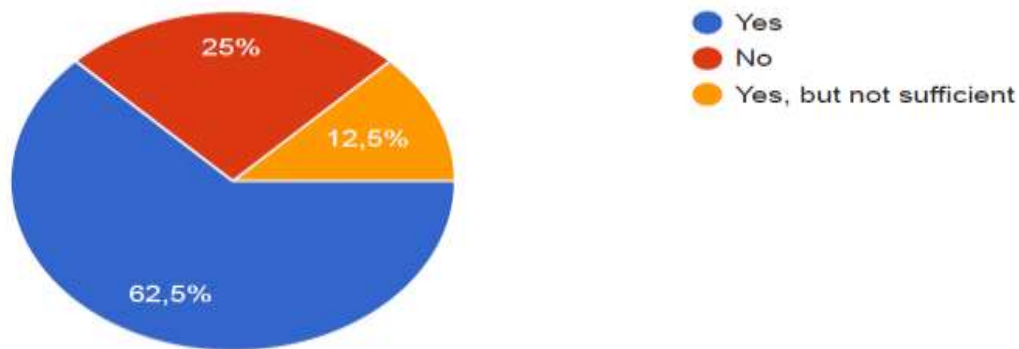


Figure 18 Teachers' Experiences with Receiving Adequate Professional Development on Using Moodle Effectively

In terms of receiving adequate professional development for using Moodle effectively, 62.5% of respondents feel they have received sufficient training, indicating a majority are confident in their preparation. However, 25% of teachers who respond report not receiving adequate professional development, while 12.5% acknowledge receiving training but feel it was not sufficient.

3.1.5 Subjective Norms

1. Do you feel that your colleagues and institution support the use of Moodle?

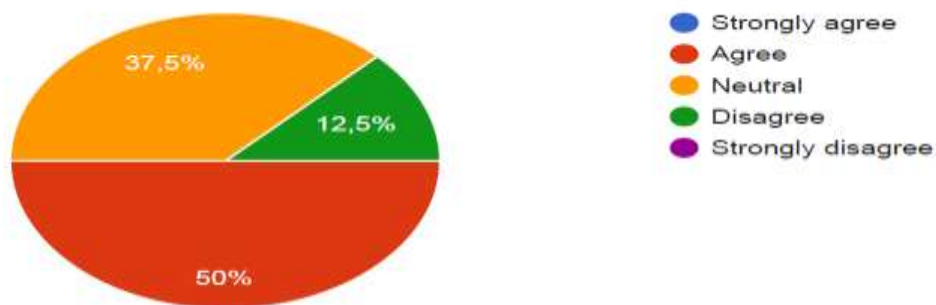


Figure 19 Teachers' Perception of Colleague and Institutional Support for Using the Moodle

Regarding the support from colleagues and the institution for using Moodle, 50% of the respondents *agree* that they feel supported. Meanwhile, 37.5% remain *neutral*, suggesting they are unsure or indifferent about the level of support. However, 12.5% of teachers *disagree*, feeling

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a lack of support and there are no teachers who “strongly agree” or “strongly disagree” the support.

3.1.6 Privacy, Camera Use, and Public Scrutiny

1. How concerned are you about privacy issues related to using Moodle for online teaching?

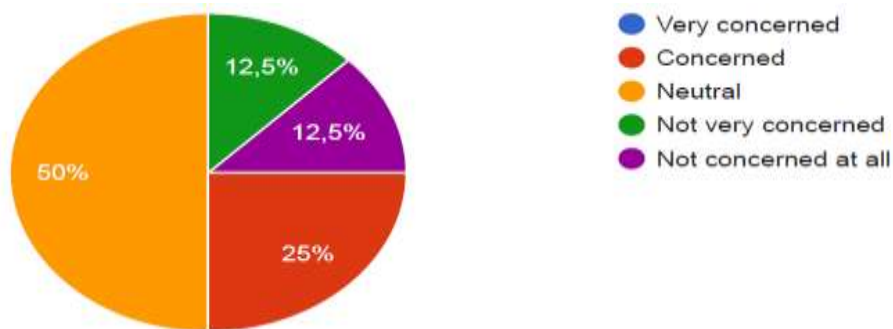


Figure 20 Teachers' Issues about Privacy Issues Related to Using Moodle for Online Teaching

In terms of privacy concerns related to using Moodle for online teaching, 50% of teachers remain *neutral*, suggesting uncertainty or indifference toward potential privacy issues. Meanwhile, 25% are *concerned*, reflecting a notable portion with reservations about privacy. On the other hand, 12.5% are *not very concerned*, and another 12.5% are *not concerned at all*. Interestingly, no respondents are *very concerned*.

2. How comfortable are you with using a camera during online teaching sessions?

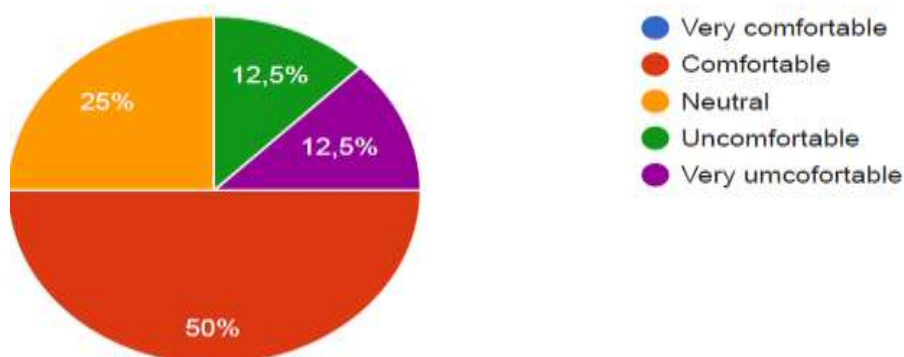


Figure 21 Teachers' Comfort Level with Using a Camera during Online Teaching Sessions

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In assessing teachers' comfort levels with using a camera during online teaching sessions, 50% report feeling *comfortable*, indicating that half of the respondents are at ease with this aspect of online teaching. However, 25% remain *neutral*, showing some uncertainty or indifference, while 12.5% feel *uncomfortable* and another 12.5% are *very uncomfortable* with using a camera. Notably, none of the respondents feel *very comfortable*.

3. Are you concerned about being exposed to public scrutiny while teaching online via Moodle?

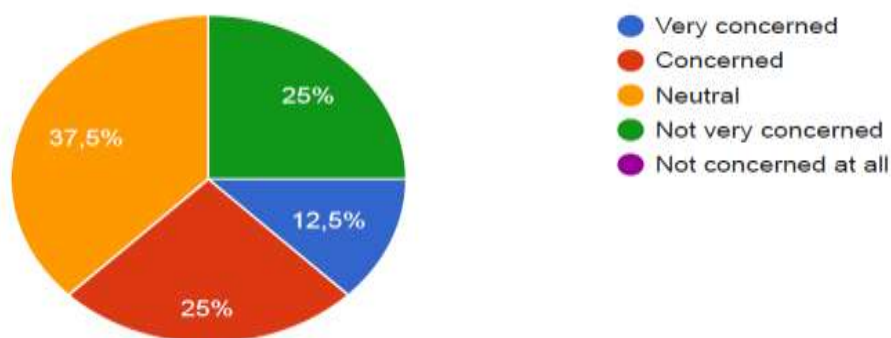


Figure 22 Teachers' Concerns about being exposed to Public Scrutiny while Teaching Online via Moodle

In evaluation concerns about being exposed to public scrutiny while teaching online via Moodle, 37.5% of teachers remain *neutral*, indicating uncertainty or a lack of strong feelings on the issue. Meanwhile, 25% are *concerned*, and an additional 12.5% are *very concerned*, suggesting that public exposure during online teaching is a notable worry for some. On the other hand, 25% are *not very concerned*, reflecting a more relaxed attitude.

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3.1.7 Experiences since 2020

1. Since when did you start using Moodle?

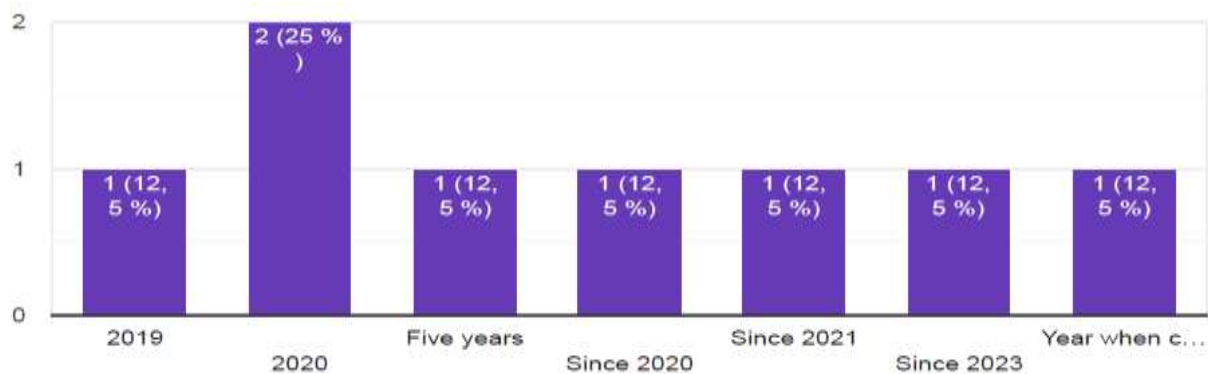


Figure 23 Timeline of Teachers' Moodle Usage

Regarding how long teachers have been using Moodle, 25% of respondents started using the platform in 2020, which aligns with the onset of widespread online teaching due to the pandemic. Another 12.5% began using Moodle in 2019, while 12.5% have used it since 2021, 2023, or since the year when COVID-19 started, reflecting varying adoption timelines. Additionally, 12.5% of teachers have been using Moodle for five years, suggesting a longer-term engagement with the platform.

2. Has your attitude towards Moodle changed since you first started using it?

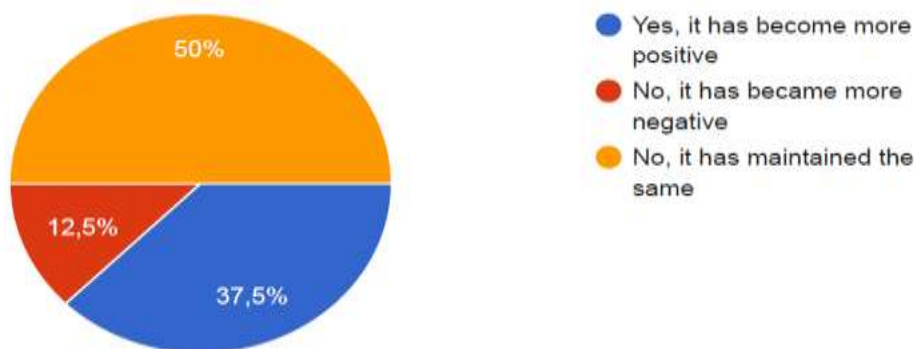


Figure 24 Teachers' Attitudes toward Moodle: Changes since First Use

Regarding changes in attitudes toward Moodle since first use, half (50%) of teachers report that their attitude has remained the same, indicating a consistent view of the platform. Meanwhile, 37.5% have experienced a more positive shift in their attitude, suggesting an

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improvement in their perception of Moodle. Conversely, 12.5% indicate that their attitude has become more negative, reflecting some dissatisfaction or challenges.

3. If yes, what are the main reasons?

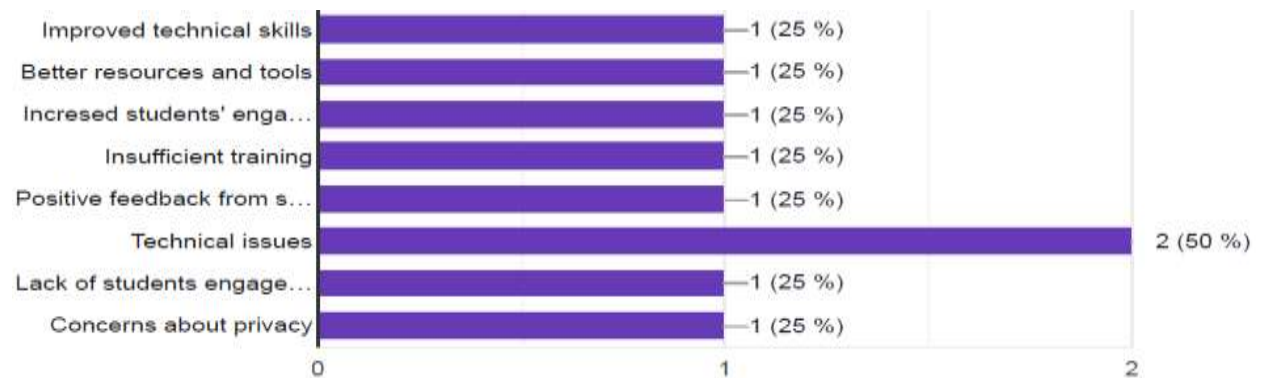


Figure 25 Teachers' Main reasons for Changes in Attitude toward Moodle

Teachers' attitudes towards Moodle are influenced by several factors, both positive and negative. Key reasons for positive changes include improved technical issues, better resources and tools, increased student engagement, and positive feedback from students, each accounting 25%. However, challenges such as the platform being more suited to technical issues (50%), insufficient training, lack of student engagement, and privacy concerns (each at 25%) negatively affect attitudes.

3.1.8 Using Moodle in the Future

1. How likely are you to continue using Moodle in the future?

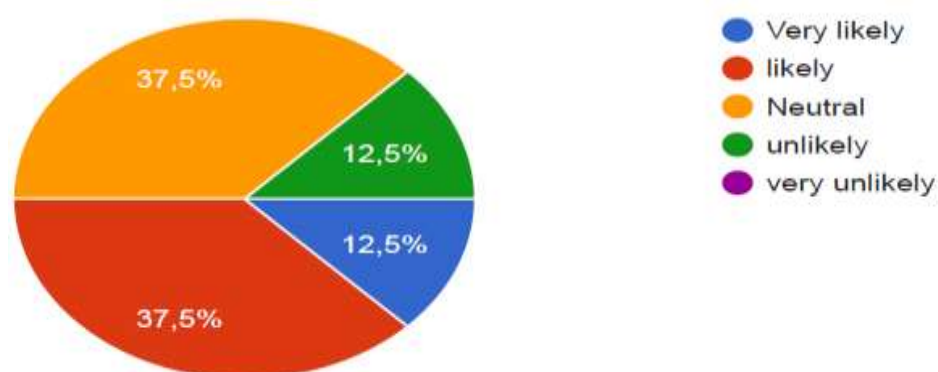


Figure 26 Teachers' Likelihood of Continuing to Use Moodle in the Future

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Figure 26 presents the participants' responses regarding their likelihood of continuing to use Moodle. A total of 12.5% of teachers indicated they are very likely to continue using the platform, while 37.5% responded that they are likely to do so. Together, these responses represent 50% of participants expressing a positive inclination. 37.5% chose a neutral option, and 12.5% indicated they are unlikely to continue using Moodle. No participants selected the "very unlikely" option, as reflected by the 0% response rate for that category.

2. How likely are you to recommend Moodle to other teachers?

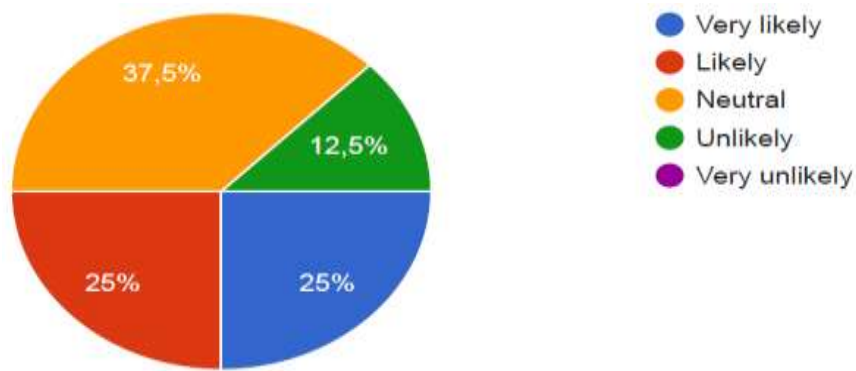


Figure 27 Teachers' Likelihood of Recommending Moodle to Other Educators

This figure (27) suggests a balanced mix of opinions. 25% of teachers are *very likely* and another 25% are *likely* to recommend Moodle. However, 37.5% are *neutral*, showing a significant portion of teachers is undecided or indifferent, possibly reflecting mixed experiences. Meanwhile, 12.5% are *unlikely* to recommend Moodle, though no teachers (0%) are *very unlikely* to do so.

3. What improvement would you like to see in Moodle to enhance your teaching experience?

Preference	Percentage
More interactive tools	4
Enhanced communication features	3
Enhanced assessment tools	3
Improved technical support	1

Table 6 Teachers' Desired Improvements in Moodle to Enhance their Teaching Experience

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Table 6 presents the areas in which teachers reported a need for improvement in Moodle. Four teachers expressed interest in having more interactive tools. Three teachers indicated a preference for enhanced communication tools, while another three teachers reported a need for improved assessment tools. Additionally, one teacher mentioned the need for better technical support. These responses reflect the various aspects of the platform that participants would like to see developed or strengthened.

3.2 Results of the Interviews

This subsection presents the results of interviews conducted with EFL teachers at the Department of English of Tizi-Ouzou. The interviews aimed to explore teachers' experiences with Moodle as a learning platform, their challenges regarding student engagement, and strategies for overcoming these issues. The responses to the interview questions are organised under key themes, including satisfaction with Moodle, connectivity and engagement challenges, platform alternatives, assessment design, privacy concerns, and suggestions for improvement.

Question 1. How satisfied are you with Moodle as a learning platform?

Teachers' responses were positive regarding Moodle's features and the technical support provided by the department. Moodle's ability to organise course content and facilitate assessments was frequently praised. As one of the participants said: "I'm very satisfied with Moodle. It offers a wide range of features for course management, and the support from the department has been great".

Teachers expressed high satisfaction, noting Moodle's robust features for course management. However, issues with student engagement and poor internet connectivity were highlighted as major barriers to effective use of Moodle, particularly for students in remote areas.

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Question 2. What challenges do you face regarding student engagement?

Teachers provided similar responses, with many emphasising the negative impact of poor Internet connectivity on student participation. Teachers reported that even when students were motivated, unstable connections prevented them from engaging with course materials on Moodle. As teacher said: “The main issue is that many students in remote areas have poor Internet connectivity”.

Many students struggle to consistently access Moodle due to unreliable internet, leading to missed deadlines and assignments. This has been a recurring issue, and teachers feel that it hampers overall student progress and course engagement.

Question 3. How does the lack of reliable internet connection impact your students' participation in online learning?

Responses were consistent, with all teachers agreeing that poor connectivity has a significant negative impact on students' ability to participate. Teachers noted that students often miss out on essential learning opportunities when they cannot access the platform regularly. As one teacher said: “It impacts their participation significantly. Even when they are motivated, the poor connection disrupts their learning, causing them to fall behind or struggle with accessing resources in a timely manner”.

Students fall behind on coursework and assignments, even if they are otherwise motivated to participate in the course. Teachers mentioned adjusting deadlines and offering alternative formats for learning materials to mitigate the impact.

Question4. What steps have you taken to address the issue of students lacking Moodle accounts?

Teachers' strategies were varied, but generally involved guiding students through the process of requesting Moodle accounts from the Department' administration. However, teachers also pointed out that many students fail to follow through on this, resulting in

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engagement problems. Some students delay in requesting accounts, creating an unnecessary barrier to accessing learning materials. Despite teachers' efforts to remind students, the current account request process remains a hindrance to timely student engagement. As this teacher said: "I regularly remind students to request accounts from the e-learning centre and offer guidance on the process".

Question 5. Why do some students prefer Google Meet over Moodle, and how does this affect your ability to track them?

On this issue, diverse opinions emerged, with most teachers reporting that students prefer Google Meet for its simplicity and lower bandwidth requirements. However, this shift made it more difficult for teachers to track students' participation, particularly when some use unidentified emails to join sessions. Consequently, Teachers expressed frustration with not being able to reliably track student attendance and participation on Google Meet due to the use of unidentified emails. This created additional administrative burdens and made engagement monitoring challenging. As one of the teachers said: "Many students find Google Meet simpler to use, especially since it requires less bandwidth than Moodle".

Question 6. How do you design assessments to address internet challenges faced by students?

In relation to this issue, teachers provided similar responses, with most indicating that they design online tests on Moodle that are adapted to students with limited internet connectivity. These assessments often include features such as auto-saving, which automatically stores students' progress during a test to prevent data loss, and extended time frames, which allow for more flexible time limits to accommodate varying internet speeds or connection interruptions.

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Teachers create exams that allow students to work even if their internet connection is interrupted by employing randomised questions and focus on higher-order thinking questions to reduce the risk of cheating during online tests. As one teacher said: *“I try to be flexible with deadlines and provide alternative formats for assessments when necessary. For students in remote areas, I offer extended windows to complete tasks and ensure that assessments are accessible even with limited internet”*.

Question 7. What improvements would you suggest to enhance student engagement and Moodle usability?

Teachers provided varied suggestions, but several common themes emerged. One of the main recommendations was to make it easier for students to access Moodle, especially at the beginning of the academic year. Teachers felt that simplifying the registration and login process would help reduce delays and allow students to engage with the platform more quickly. They also emphasised the need for more training opportunities for both teachers and students to help them use Moodle more effectively. In addition, some participants suggested offering support on how to use Moodle alongside other platforms and how to better track student engagement. As one teacher explained: *“I think providing students with better guidance on how to access Moodle and more flexibility for those with poor internet would help.”*

Question 8. Why did you stop using Moodle, and what would encourage you to use it again?

The response regarding why teachers stopped using Moodle was centred on common challenges such as time management and student engagement. Teachers felt that managing Moodle became too time-consuming, particularly for those balancing additional teaching responsibilities while also maintaining online course content. Another key issue was the lack

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of student engagement, often linked to poor internet connectivity, which prevented students from regularly accessing course materials and completing assignments. As a result, teachers found the platform less effective for their instructional needs. As one teacher explained: *“It was very hard to keep up with both my regular teaching and managing everything on Moodle. Many students weren’t even logging in regularly because of internet problems, so it didn’t feel worth the effort after a while.”*

Teachers found the platform less effective for their instructional needs. In response to these challenges, they were optimistic but cautious about the future of e-learning in the department. While they acknowledged the potential for e-learning to grow, they emphasised the importance of addressing current challenges in order to ensure its success. Many teachers saw a future where a hybrid model “Blended learning” which refers to an educational approach that combines both online and face-to-face learning experiences that would be implemented, combining Moodle for asynchronous learning with platforms like Google Meet for live, synchronous sessions. This approach would allow teachers to leverage the best of both tools, using Moodle to manage course materials and assessments while relying on more interactive platforms for live communication. However, they stressed that student engagement must be improved for this model to work. Better tools for tracking student progress and engaging them in real time would be necessary. The institution's role in shaping the future of e-learning was also highlighted, with teachers calling for more investment in improving internet connectivity, especially for students in remote areas, and offering technical support and training to both teachers and students. As teacher said: *“I would suggest being flexible, offering multiple ways to access materials, and using both synchronous and asynchronous teaching methods to accommodate students with different levels of connectivity”*.

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The interviews show a mix of similar responses and diverse suggestions across teachers. While Moodle is well-regarded, addressing the connectivity challenges faced by students and simplifying account management are seen as key to improving overall student engagement and success.

Conclusion

This chapter focuses on the main significant results obtained from the two research tools which are the questionnaire and the interview that were conducted with teachers from the Department of English at Mouloud Mammeri University of Tizi-Ouzou. The results highlight the varied attitudes towards the use of the Moodle platform, with most teachers expressing mixed or neutral perceptions due to on-going technical challenges and the platform's complexity. While some teachers demonstrated a gradual shift towards more positive attitudes, particularly those who received adequate training and support, a small portion of respondents reported encountering persistent barriers such as limited internet access and insufficient technical assistance.

The findings underscore the need for continued improvements in the platform's functionality, particularly in relation to ease of use, student engagement, and assessment tools. Moreover, enhancing technical infrastructure and providing further training are crucial to support both teachers and students in maximising the platform's potential. These findings will be further explored in the discussion chapter, which will examine the implications of these attitudes and experiences, and provide recommendations for future improvements.

Chapter 4:
Discussion of the Results

Discussion of the Results

Introduction

This chapter presents a detailed discussion of the findings obtained from the questionnaire and interviews conducted with EFL teachers at Mouloud Mammeri University of Tizi-Ouzou. The analysis is grounded in prior research and the Technology Acceptance Model (TAM), with consideration given to both external and internal factors influencing the adoption and use of Moodle for teaching since its implementation in 2020. Furthermore, the discussion addresses the barriers encountered by teachers, the changes in their attitudes over time, and their recommendations for improving the platform, ensuring a comprehensive, data-driven interpretation.

4.1 Discussion of Teachers' Questionnaire

This subsection discusses the findings from the teachers' questionnaire, focusing on their familiarity with technology, perceptions of Moodle, barriers to its use, changes in attitudes, and future adoption of the platform.

4.1.1 Teachers' Familiarity with Technology and Moodle

This subsection explores teachers' technological background and how it influences their use of Moodle. It highlights digital literacy levels, the preferred teaching platforms, and the factors driving their choice of tools.

1. Digital Literacy and Tool Usage

The demographic profile of the participants may help contextualise their attitudes towards Moodle and online teaching more broadly. The majority of respondents are female, and seven teachers fall within the 25–39 age group (Table 2). This relatively young age distribution could suggest that these teachers were exposed to digital technologies earlier, which might influence their adaptability and openness to using platforms such as Moodle. According to Zekri and El Moussaoui (2024), digital literacy appeared to be a key factor shaping teachers'

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confidence in using online tools, and the COVID-19 crisis may have served as a catalyst for their adaptation to digital platforms. This perspective is echoed by Sánchez-Cruzado et al. (2021), who noted that “the COVID-19 outbreak opened a new scenario where teachers must have adequate digital literacy to teach online and to implement a current and innovative educational model” (p. 1858). Furthermore, five of the respondents reported between one and five years of teaching experience, which could indicate a cohort more inclined to experiment with new instructional technologies.

When it comes to digital literacy, the data show that 60 % of the teachers reported being moderately familiar with digital technologies (Figure 3), while all participants regularly use the internet for teaching purposes. This may indicate a baseline level of competence in digital tools across the sample, though it could also suggest gaps in more advanced technological skills, which might explain the varied use of different platforms. The range of tools employed is notable: Moodle and email are used by 50 % of respondents, 30 % rely on Google Meet, and only 10 % use Google Classroom (Figure 4).

This variety reflects flexibility in teachers’ approaches to online instruction and suggests that Moodle may not be perceived as a one-size-fits-all solution. As teachers adapt their methods to what they consider the most effective tools for specific tasks, they appear to use Moodle alongside other platforms rather than as their sole teaching environment. This finding is consistent with Bower (2019), who noted that “teachers often combine different tools depending on pedagogical needs, technological affordances, and student accessibility” (p. 12), highlighting the importance of adaptability in digital teaching practices.

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2. The choice of Teaching Platforms

The gathered data show that the choice of the platform is influenced by several factors, including ease of use, familiarity, and student preferences. Google Meet, for instance, is frequently selected due to its simplicity and the familiarity it offers to students, making it an attractive option for live and synchronous teaching sessions. This aligns with Zekri and El Moussaoui (2024, p. 45), who found that teachers' unfamiliarity with online platforms prior to the COVID-19 pandemic significantly influenced their level of satisfaction. Their survey and interview results demonstrated a notable relationship between platform familiarity and user satisfaction, confirming that both teachers and students tend to avoid platforms they are not familiar with. Moreover, the relative ease with which teachers can set up and conduct live sessions on Google Meet, especially when compared to the more complex interface of Moodle, further reinforces its status as a preferred tool for real-time engagement with students.

In contrast, Moodle's usage appears to be more suited to asynchronous tasks such as uploading lessons and sharing resources, and this is obvious in our findings that all the respondents find it easy to upload and share course materials on Moodle, as it allows teachers to provide content that student can access at their convenience without requiring real-time interaction. This makes it ideal for distributing materials like lecture notes, assignments and quizzes. However, when it comes to synchronous teaching, the majority of teachers (66%) (Figure 10) find it easy to schedule and conduct live session or webinars on Moodle but only 25% of them use Moodle for delivering online classes(Figure 9)which underscores the platform's limitations in supporting real-time and synchronous interaction. This reflects a clear preference for simpler communication tools, like email and Google Meet, over Moodle when it comes to tasks that require immediate interaction or live engagement. Teachers likely perceive Moodle as being more complex or cumbersome for these tasks, which might explain

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why they opt for more streamlined platforms when conducting live sessions or handling immediate communication with students.

To address this, institutions might consider offering more specialised training that not only introduces platform functionalities but also demonstrates their practical application in diverse teaching contexts. Providing such training on a continuous basis, rather than as a one-time orientation, could help teachers gain the confidence and competence needed to explore Moodle more fully (Kafyulilo et al., 2015). This approach may encourage more meaningful and varied use of the platform, especially in assessment, feedback, and student engagement tools that are often overlooked.

The choice of using simpler tools for specific tasks also speaks to the broader issue of how teachers balance ease of use with the functionality required for different types of online instruction. Email, for instance, is a ubiquitous and straightforward tool for distributing information, while Google Meet is often used for live classes due to its accessibility and ease of operation. These preferences likely reflect the perceived complexity of Moodle, particularly for synchronous activities like online teaching sessions, where simplicity and real-time functionality are paramount. Moodle's extensive features, while beneficial for managing course materials and assignments, may be seen as overcomplicated or not as intuitive for live teaching, contributing to its lower adoption rate for such purposes.

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Overall, the findings suggest that while teachers are generally proficient with digital tools, their choice of platforms may vary depending on the specific demands of their teaching tasks. Moodle is valued for its ability to organise and share resources asynchronously. However, when it comes to live, interactive teaching, simpler tools such as Google Meet are often preferred due to their ease of use and student familiarity. This usage pattern may indicate that technological complexity in educational platforms can act as a barrier to broader adoption, particularly when the perceived benefits do not clearly outweigh the effort required to learn and use the system effectively.

4.1.2 Moodle, Perceived Usefulness and Ease of Use

This section assesses teachers' perceptions of Moodle's usability and effectiveness, focusing on how ease of use impacts its adoption. The analysis is based on the principles of TAM, specifically ease of use and perceived usefulness in teaching tasks.

1. Teachers' Attitude towards Moodle Use

According to the results, Moodle's ease of use was rated positively by the majority of teachers, with 62.5% finding it "easy" to navigate, and no respondents indicating significant challenges with the platform's interface (Figure 6). This reflects the importance of a user-friendly interface in promoting the adoption of any technological tool, as outlined in Davis's Technology Acceptance Model (TAM). TAM emphasises that "perceived ease of use is defined as the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320), a factor that is critical in shaping users' attitudes toward adopting technology. When users find a platform easy to use, they are more likely to incorporate it into their daily tasks. This finding underscores Moodle's success in meeting the TAM's ease of use criteria, at least for administrative tasks such as uploading materials and managing courses.

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However, despite the platform's perceived ease of use, which means that teachers find Moodle user-friendly, the results show that 75% of teachers do not use it for delivering live, interactive online classes, opting instead for alternatives like Google Meet (Figure 9). This discrepancy between ease of use and actual adoption for real-time teaching points to a critical issue: while Moodle may be user-friendly for certain functions (e.g., content management), it is not necessarily perceived as effective or efficient for more complex, interactive tasks such as live teaching. This aligns with TAM's second major construct, perceived usefulness which refers to the degree to which a person believes that using a particular system will enhance their job performance (Davis, 1989).

2. Complexity in Real-Time Teaching

The results suggest that Moodle may be perceived as less useful for real time teaching. For instance, 33.3 % of teachers reported difficulties with scheduling and conducting live sessions on Moodle (Figure 10), which could imply that the platform is not sufficiently intuitive or streamlined for synchronous teaching tasks. This may be significant, as real time interaction is often considered a key element of effective online learning. Some teachers might feel that the effort required to manage live sessions on Moodle outweighs the potential benefits.

In contrast, teachers appear to prefer simpler, more accessible platforms such as Google Meet, which may be perceived as more user friendly for both educators and students. The decision to bypass Moodle for live instruction, despite its perceived effectiveness in asynchronous functions like sharing materials, may point to a gap in the platform's overall functionality. According to the Technology Acceptance Model (TAM), if a system is not perceived as useful in essential areas of teaching, such as live, engagement—users are less likely to adopt it, regardless of its ease of use in other aspects (Davis, 1989).

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The challenge of perceived usefulness is especially pronounced in synchronous teaching contexts. Moodle was developed primarily as an asynchronous learning management system, excelling in resource sharing, assignment submission, and progress tracking. However, the sudden increase in demand for live interaction during the pandemic may have revealed its limitations in facilitating real-time communication, leading some educators to adopt simpler alternatives. As Zekri and El Moussaoui (2024, p. 47) observed, “The COVID-19 pandemic highlighted the inadequacies of many digital platforms, compelling educators to seek alternatives that better facilitate live and interactive learning experiences.” This conclusion is supported by Hew and Brush (2007, p. 265), who noted that “while LMS can support asynchronous learning, they often lack the necessary tools and features to effectively facilitate synchronous interaction and engagement.” Together, these findings suggest that if a platform is not perceived as useful for live teaching tasks, instructors may choose different systems for real-time instruction while continuing to use the same LMS for asynchronous activities.

3. Perceived Usefulness in Managing Course Materials

Moodle's perceived usefulness in managing and organising course materials received mixed responses from the teachers. 37.5% of respondents found it "Moderately effective," indicating that Moodle performs well in its core function of managing digital content, an essential task in any online learning environment. However, 25% of respondents rated Moodle as only "slightly effective" in this regard, highlighting variability in the perceived usefulness of the platform depending on the specific needs of the teachers (Figure 7).

This mixed response may stem from the variety of pedagogical approaches within the EFL department at MMUTO. Teachers who follow communicative language teaching, which emphasises learner interaction and requires adaptable tools for dynamic content delivery (Richards & Rodgers, 2001, p. 104), may find Moodle's structure too inflexible. In contrast,

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those favouring a lecture-based methodology might appreciate Moodle's clear, organised layout for presenting materials. Similarly, practitioners of project-based learning, in which students engage in extended, real-world tasks that integrate multiple skills (Thomas, 2000, p. 38), may look for platforms that support seamless collaboration and multimedia integration features that Moodle may only partially provide. Educators who employ differentiated instruction, that is, tailoring tasks and resources to individual learners' readiness, interests, and learning profiles (Tomlinson, 2014, p. 17), may encounter challenges in using Moodle to meet diverse student needs. These pedagogical differences could therefore help explain why perceived usefulness varies, even though most teachers rate the platform highly for ease of use.

According to Technology Acceptance Model (TAM), perceived usefulness is a more significant factor than ease of use in determining long-term user engagement with a system. If Moodle fails to meet the needs of teachers for crucial tasks such as real-time interaction or content customisation it is likely that even those who find the platform easy to navigate will eventually reduce their usage or abandon it in favour of alternatives. This is reflected in the 25% of respondents who rated Moodle as "slightly effective" in managing materials, indicating that they don't view the platform as significantly enhancing their teaching experience (Figure 7).

4. Teachers' Dissatisfaction with Assessment Tools

One of the most critical findings of this study is the level of dissatisfaction with Moodle's assessment tools. For example, some teachers may find Moodle's quiz and grading features limited, lacking options for varied question types or automated feedback, which refers to system-generated responses that provide learners with immediate guidance on their performance (Shute, 2008, p. 153). Others may be frustrated by the inability to customise

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assessment criteria or incorporate detailed rubrics into the platform, leading to concerns about the validity of their student evaluations. A notable proportion of respondents (37.5 % indicating either dissatisfaction or strong dissatisfaction) pointed to the platform's shortcomings in supporting effective student assessment (Figure 8). This discontent is particularly significant because assessment is a central component of any educational system, and the success of online learning environments often depends on how well they facilitate grading, feedback and accurate evaluation of student work.

The dissatisfaction with Moodle's assessment tools may indicate a misalignment between the platform's features and teachers' pedagogical requirements for flexible evaluation. Hew and Brush (2007, p. 224) argue that learning management systems often emphasise content distribution at the expense of interactive and evaluative functions, a critique that appears applicable to Moodle's quiz and grading capabilities. Moreover, the limited support for automated feedback, which is shown to be vital for timely formative assessment (Shute, 2008, p. 153), could further reduce the platform's usefulness in managing student evaluations. As assessment is central to course administration, these shortcomings could undermine teachers' overall satisfaction and discourage continued use of Moodle, especially when alternative platforms offer more comprehensive assessment and feedback mechanisms.

5. Implications of Perceived Usefulness and Ease of Use

In summary, the results indicate that while Moodle is easy to use for administrative and organisational tasks, it falls short in perceived usefulness, particularly in areas related to live teaching and assessment. According to TAM, both perceived usefulness and ease of use must be aligned for a system to be fully embraced by its users (Davis, 1989). In the case of Mouloud Mammeri University of Tizi-Ouzou teachers, the platform's ease of navigation is appreciated, but its complexity in interactive teaching and limited assessment capabilities

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undermine its usefulness in critical teaching tasks. This imbalance explains why many teachers opt for alternatives like Google Meet, which they perceive as better suited to their immediate pedagogical needs.

4.1.3 Barriers and Challenges to Moodle Usage

This section addresses the technical, logistical, and personal challenges teachers face when using Moodle. It highlights issues such as infrastructure limitations, lack of training, and time management difficulties, and their impact on Moodle adoption.

1. Technical Issues

A substantial proportion of participants—71.4 %—identified technical issues as their primary challenge in using Moodle (Figure 15). For instance, some teachers reported frequent connectivity problems that disrupted class delivery or access to course materials. Others experienced compatibility issues across different devices and browsers, which could result in an inconsistent user experience. There were also mentions of slow loading times and system crashes during periods of high demand, further impeding effective teaching and learning. This pattern may reflect broader infrastructure constraints in Algeria, where limited bandwidth and outdated hardware have been noted as significant barriers to e-learning adoption (Ghounane & Rabahi, 2023, p. 52).

In addition, 28.6 % of respondents cited time management difficulties, and 14.3 % mentioned insufficient training as key obstacles. These findings suggest that, while Moodle's core functionality might be adequate, logistical and support shortcomings may substantially reduce the platform's overall effectiveness in this context.

These barriers underscore the importance of external support, meaning the resources and assistance provided by institutions such as training programmes, technical help and infrastructure improvements. The Technology Acceptance Model (TAM) and its extensions

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highlight facilitating conditions, defined as the degree to which individuals believe that organisational and technical infrastructure exists to support system use (Venkatesh et al., 2003, p. 453). Without sufficient training and technical support, even a platform that is well designed may struggle to achieve widespread adoption. This is illustrated in Figure 17, where 50% of respondents rated technical support as excellent or good, suggesting that more robust institutional backing for Moodle could enhance its effectiveness.

The combination of limited infrastructure, insufficient ongoing technical support and a lack of tailored training may contribute to the challenges teachers face when using Moodle, even though the platform is generally regarded as user friendly. At Mouloud Mammeri University of Tizi-Ouzou, participants repeatedly cited inadequate training as a barrier to effective use of the system. As Nait Ramdane El Hacene (2015, p. 58) observed, “when teachers do not receive adequate technical and training support, their motivation to adopt e-learning tools is significantly diminished, hindering effective implementation.” This suggests that without targeted support, even well-designed platforms could struggle to gain sustained uptake among educators.

The TAM model suggests that perceived ease of use and usefulness are key determinants of technology adoption. Therefore, external barriers such as unreliable technical support or inadequate infrastructure can negatively affect perceptions of Moodle’s usefulness and ease of use, leading to lower adoption rates or abandonment of the platform. This is evidenced by the 20% of teachers who stopped using Moodle (Figure 5), indicating that overcoming technical barriers is crucial for Moodle’s long-term success at Mouloud Mammeri University of Tizi-Ouzou.

2. Time Management

The data show that 28.6 % of teachers reported time management as a challenge (Figure 15). This may reflect the additional time required to prepare and upload materials

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alongside learning the ins and outs of the platform. Zekri and El Moussaoui (2024, p. 50) found that teachers “often struggle with the additional time and effort required to prepare materials and familiarise themselves with online platforms, which can discourage full adoption of these technologies.” This observation aligns with the TAM construct of perceived ease of use, suggesting that if educators view Moodle as more time-consuming than traditional methods, they may be less inclined to adopt it fully.

3. Insufficient Training

A small portion of the respondents highlighted that insufficient training is a major obstacle to effectively using Moodle. Despite the platform's usability, the lack of comprehensive training hinders teachers from fully engaging with its advanced features, particularly in managing online classes and assessments.

According to the results, 14.3 % of teachers mentioned a lack of training as a key challenge when using Moodle (Figure 15). This aligns with Berbar (2020, p. 78), who reported that “the lack of proper training and technical support was cited by most teachers as a barrier to effective use of Moodle.” Such findings underscore the importance of targeted training sessions to enhance teachers’ competence and foster a more positive attitude towards the platform.

Although the majority of teachers (62.5%) received some form of training, it often fell short of equipping them with the necessary skills to use Moodle to its full potential. For instance, 25% of teachers reported not receiving adequate professional development, while 12.5% acknowledged receiving training but found it insufficient (Figure 18). Similar challenges were identified by Zekri and El Moussaoui (2024), who reported that the unfamiliarity with online teaching tools and lack of adequate training were key factors that hindered teachers’ motivation and use of platforms like Moodle

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The lack of comprehensive training not only affects how effectively teachers use Moodle but also creates a reliance on simpler, more familiar platforms like Google Meet. This observation mirrors the findings of Gouider (2023), who pointed out that teachers often favoured platforms they found easier to use, mainly due to inadequate preparation for using more complex systems like Moodle.

The barriers identified particularly technical issues and time management challenges, have significantly influenced teachers' attitudes towards Moodle. According to cognitive dissonance theory (Festinger, 1957), individuals experience discomfort when their expectations do not align with reality. This may explain why 25% of teachers reported a negative attitude towards Moodle due to unresolved technical issues (Figure 19). Insufficient training, reported by 14.3% of teachers, further exacerbates this negative perception, hindering full integration of Moodle into their teaching practices.

Despite these challenges, 50% of teachers reported a neutral attitude, with their views on Moodle remaining largely unchanged since 2020. This stability could be attributed to Eagly and Chaiken's (1993) dual-process model of attitude change, which suggests that attitudes tend to remain stable unless new, compelling experiences are introduced. In contrast, 37.5% of teachers reported a more positive attitude, possibly due to increased familiarity with Moodle and improvements in navigating the platform (Figure 6). This aligns with Zajonc's mere exposure effect (1968), which posits that increased exposure can lead to more favourable attitudes.

4.1.4 Changes in Attitudes since 2020

The findings show that five participants reported no change in their attitudes towards Moodle since its mandatory introduction, while 37.5 % of teachers indicated a more positive attitude (Figure 24). This shift may be understood through the mere exposure effect, a phenomenon in which repeated encounters with a stimulus lead to increasingly favourable

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feelings toward it. In this context, as educators spent more time using Moodle and observed its benefits first hand, their comfort with its functions may have grown, resulting in more positive evaluations. According to Petty and Cacioppo's elaboration likelihood model, when users pay attention to the actual performance of a system and find it valuable, they are likely to process information about it deeply and solidify positive attitudes (1986, p. 124).

By contrast, 12.5 % of respondents reported a more negative attitude, which may reflect cognitive dissonance arising from ongoing frustrations. Cognitive dissonance theory explains that when individuals hold two conflicting ideas, such as expecting smooth operation but experiencing technical difficulties, they may feel psychological discomfort and resolve it by rejecting the source of conflict (Festinger, 1957, p. 3). In Moodle's case, persistent issues with connectivity, assessment tools or support might have led some teachers to view the platform less favourably over time. Berbar's study supports this interpretation, noting that "inadequate training and irregular technical support during Moodle's initial rollout contributed to sustained scepticism among faculty" (2020, p. 72). Together, these theories suggest that while familiarity can foster positive attitudes, unresolved practical challenges may continue to undermine acceptance.

1. Teachers' Attitudes towards Moodle: A Longitudinal Perspective

Understanding how teachers' perspectives on Moodle have developed over time requires attention to both their experiences and the broader context in which these experiences occurred. According to attitude formation theory (Ajzen and Fishbein, 1980, p. 24), individuals form attitudes based on the evaluation of expected outcomes and the beliefs associated with a particular behaviour or tool. In the case of Moodle, teachers' early reactions may have been shaped by the sudden obligation to adopt the platform during the pandemic, as well as by their expectations regarding how easy and beneficial it would be to use. These

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expectations are central to the Technology Acceptance Model, which considers perceived usefulness and perceived ease of use as key determinants of acceptance.

Over time, these initial impressions may have shifted in response to practical experiences. Attitude change models developed by Petty and Cacioppo (1986, p. 124) explain that exposure alone is not always enough to shift one's position. Instead, changes are more likely to occur when the user processes their experience in a meaningful way—especially if the outcomes are personally relevant or consistent over time. In this study, half of the teachers reported that their attitude had remained stable since 2020, while 37.5 % indicated an improvement (Figure 23). These results may suggest that consistent use of Moodle in daily practice helped some teachers develop a more confident or favourable stance, even if their initial adoption was cautious or externally motivated.

2. Barriers and Challenges' Impact on Attitude Change

The changes in attitudes observed among some teachers are influenced by various challenges. The 71.4% of teachers who identified technical issues as a primary barrier to using Moodle indicate that persistent challenges can act as negative reinforcements, preventing a full positive shift in attitudes (Figure 15). Cognitive dissonance theory (Festinger, 1957) helps explain why teachers may experience conflict when recognising Moodle's potential benefits while facing barriers like inadequate infrastructure, leading to frustration and resistance.

Moreover, the 25% of teachers hold negative attitudes towards Moodle underscore the impact of these technical and training-related barriers (Figure 20). When initial positive expectations are unmet due to persistent difficulties, it can reinforce negative perceptions, leading to stagnation or even reversal in attitude change.

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3. The Role of Training and Support in Attitude Change

Training and institutional support appear to play an important role in shaping how teachers relate to Moodle. Based on expectancy value theory, motivation to engage with a task depends on two key elements: the expectation of success and the perceived value of the task itself (Eccles and Wigfield, 2002, p. 118). In this study, 50 % of teachers rated the available technical support as excellent or good (Figure 19). These respondents may have viewed Moodle more favourable because they felt sufficiently equipped to use it successfully. In contrast, the 25 % who indicated a lack of adequate training might have encountered more obstacles, which could affect their perception of whether continued use of the platform is worthwhile or sustainable.

When analysed through the lens of attitude development theories, these findings suggest that teachers' views of Moodle are shaped by an interplay of early exposure, practical challenges and perceptions of long-term value. Although some participants reported more favorable opinions over time, ongoing barriers such as inconsistent support and limited training opportunities may continue to prevent a broader shift in attitudes. Addressing these obstacles through targeted institutional efforts could help reinforce more positive experiences and support a gradual change in how Moodle is perceived and used.

4.1.5 Privacy Concerns and Camera Use

The study also examined teachers' attitudes towards privacy and camera use. The findings reveal that 50% of teachers were neutral about privacy concerns, while 25% expressed concern (Figure 20). This neutrality suggests that privacy is not a major deterrent for most teachers; however, it may contribute to reluctance in adopting Moodle for live sessions. Similarly, 50% of respondents were comfortable with using cameras (Figure 23), while the remainder expressed varying degrees of discomfort. This discomfort could

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influence their choice of platform for online teaching. Concerns regarding public scrutiny during online sessions, as indicated by Figure 22, may also play a role.

Despite Moodle's technical capabilities for facilitating live teaching sessions, privacy concerns and discomfort with camera use suggest that the platform remains under-usage. As highlighted by Zekri and El Moussaoui (2024), these issues are linked to broader anxieties and technical challenges associated with online teaching platforms. The preference for alternative platforms, such as Google Meet, by 75% of teachers (Figure 11) is attributed to ease of use and familiarity, which further underscores the need for improvements in Moodle's synchronous learning features.

4.1.6 Future Outlook and Adoption of the Moodle Platform

The future outlook for Moodle at Mouloud Mammeri University of Tizi-Ouzou is shaped by teachers' experiences, challenges, and expectations regarding its current use and potential for further integration into their teaching practices. Although Moodle has become an essential tool, especially during the COVID-19 pandemic, its future is contingent upon addressing several key areas for improvement.

1. Continuation and Adoption of Moodle

A small proportion of teachers expressed neutral or mixed feelings about their likelihood of continuing to use Moodle. As shown in the findings, 37.5% of respondents were neutral regarding the platform's continued use, while 12.5% were very likely to continue, and another 12.5% were likely (Figure 28). This suggests that while some teachers are committed to Moodle, a larger group remains uncertain about its sustained usefulness unless key issues are addressed. This ambivalence may be due to on-going challenges, including technical barriers, insufficient training, and dissatisfaction with certain features, such as assessment tools and live class management.

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For Moodle to remain a core teaching platform at Mouloud Mammeri University of Tizi-Ouzou, institutional support is crucial. Enhancing infrastructure, offering more regular and advanced training sessions, and addressing specific needs—such as simplifying live online classes and refining assessment tools—could bolster confidence in the platform and encourage broader adoption.

2. Recommendations for Improvement

Teachers have provided several recommendations for improving Moodle’s functionality and ease of use. The most commonly suggested improvements include the integration of more interactive tools (37.5%) and enhanced communication features (25%). Additionally, a minority (12.5%) of respondents emphasised the need for better technical support, including prompt assistance with technical issues and on-going professional development (Figure 30).

4.2 Discussion of Teachers’ Interview

The results of the interviews provide valuable insight into the challenges, successes, and future outlook of Moodle as an e-learning platform in the department. The findings reveal both enthusiasm and frustration, with a range of opinions that shed light on how Moodle is perceived and used by educators.

4.2.1. Satisfaction with Moodle

Teachers’ satisfaction with Moodle may depend on their level of technological proficiency and previous experience with online teaching platforms. For instance, one participant (Teacher 3) remarked, “I’m very satisfied with Moodle. It offers a wide range of features for course management, and the support from the department has been great.” This response reflects a positive view of Moodle as a comprehensive and reliable system for organising course materials, managing assignments, and tracking student progress. The teacher’s satisfaction may stem from their ability to make effective use of Moodle’s advanced

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features, which could streamline instructional tasks and enhance the overall learning experience for students.

In contrast, other teachers expressed concerns about the platform's usability. One participant (Teacher 2) stated, "I'm not very satisfied with Moodle. I find it a bit complicated, and it requires a lot of time to set up. Moodle doesn't have specialised tools for these areas, so I need to rely on external software." This response suggests that the teacher encountered challenges in using key features, such as creating quizzes, uploading multimedia content, and navigating the gradebook. These tools may appear unintuitive or time-consuming to educators who are less confident in using digital platforms. As a result, some participants reported relying on simpler alternatives, such as email, to distribute materials and communicate with students.

Another teacher (Teacher 1) explained, "For me, I stopped using Moodle because it became too time consuming to manage alongside my other responsibilities." This comment points to workload and time management issues as significant barriers, further complicated by low levels of student engagement, often due to poor internet connectivity.

These varied responses highlight that while Moodle offers a wide range of tools for course delivery, its perceived usefulness and ease of use are closely linked to teachers' digital competence and the availability of training and support. Differences in experience suggest that broader adoption may depend not only on the platform itself but also on the institutional resources provided to support teachers' needs.

4.2.2. Addressing Connectivity and Student Engagement

A recurring theme across the interviews was the challenge of poor internet connectivity, particularly for students in remote areas. Teacher 1 emphasized, «The main issue is that many students in remote areas have poor internet connectivity», impacting

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student participation. In response, teacher 3 adopted a flexible approach by incorporating asynchronous learning materials that students could access offline, stating “I try to be flexible with deadlines and provide alternative formats for assessments when necessary”.

However, all teachers agreed that institutional improvements in internet infrastructure are essential to ensure equitable access for all students. As teacher 2 articulated “If the platform was more intuitive and offered better communication tools for students, I might consider using it again”.

4.2.3. Assessment and Test Design Challenges

The design of assessments emerged as a notable difficulty among participants, particularly in relation to the complexity and time investment required to use Moodle’s more advanced features. While some teachers reported making use of the platform’s quiz and evaluation tools, their responses highlighted concerns about inefficiency, lack of intuitive design, and the need for additional support.

One teacher explained, “I use Moodle’s advanced features to create randomised questions and open-ended prompts which promote critical thinking, but it’s time consuming and complicated” (Teacher 3). This statement reflects an awareness of the pedagogical benefits of Moodle’s assessment tools but also underscores the effort required to implement them effectively. The perceived burden of preparing such assessments may discourage frequent use, especially in contexts where teachers manage heavy workloads or lack technical assistance.

Another participant commented, “Moodle’s quiz tool is particularly limited. For instance, when creating question banks, there’s no easy way to randomise questions without creating a lot of manual work” (Teacher 1). Here, the teacher not only points to the labour-intensive nature of Moodle’s assessment functions but also to structural limitations that may

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hinder efficient design. The need for more automated and customisable options appears to be a recurring concern.

These findings align with Shute's (2008, p. 153) emphasis on the role of formative assessment and the importance of timely, automated feedback in supporting online learning. When such tools are difficult to access or apply, teachers may perceive the system as misaligned with their pedagogical goals. According to the Technology Acceptance Model, if a platform is not perceived as both useful and easy to use, its adoption and sustained use may be compromised (Davis, 1989). In this case, Moodle's assessment design features, although functionally rich, may present usability barriers that limit their practical integration into everyday teaching.

4.2.4 Need for Institutional Support and Training

Across the board, teachers called for stronger institutional support, both in terms of technical assistance and training. While many teachers, particularly those more familiar with technology, found Moodle's support services helpful, there were concerns about the timeliness and comprehensiveness of assistance. Teacher 1 and Teacher 2 felt that delayed responses to technical issues made it difficult to maintain a smooth online learning experience.

Moreover, several teachers emphasised the need for more training opportunities to help both teachers and students maximise Moodle's potential. Some noted that the process for creating and managing student accounts through the e-learning centre was cumbersome, negatively affecting student engagement. Streamlining account creation and providing more hands-on training could significantly improve both teacher satisfaction and student participation.

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4.2.5 Reasons for Discontinuing Moodle Use

One of the participants (teacher 1), at some point, stopped using Moodle, citing time management and student engagement as major barriers. Managing Moodle became too burdensome, particularly for teachers juggling multiple responsibilities. This was compounded by student disengagement, often due to poor internet connectivity. Students struggled to access the platform regularly, and this inconsistency reduced Moodle's effectiveness as a learning tool. However, the teacher indicated that with improvements such as better communication features and a more intuitive user interface, he would be willing to return to using Moodle. The demand for a streamlined and less time-consuming experience highlights the need for Moodle to adapt to both teacher and student needs, particularly in remote and challenging learning environments.

4.2.6 Future of E-Learning at the Department

Looking to the future, most teachers expressed cautious optimism about the role of e-learning in the department. There is broad support for a hybrid model that combines Moodle for asynchronous learning with platforms like Google Meet for live sessions. Teachers recognised that while Moodle excels at organising course materials and facilitating content delivery, its interaction tools lag behind, leading many to prefer Google Meet for real-time communication. However, the issue of fake emails on Google Meet poses a challenge for teachers who struggle to verify the identity of participants.

The teachers agreed that for Moodle to remain a key part of the department's future, it must evolve to offer more dynamic and student-centred tools. Additionally, the institution must continue to improve internet access and provide technical support to ensure that students, especially those in remote areas, can fully participate in online learning.

4.2.7 Optimising Moodle for the Future

Finally, the findings reveal that while Moodle is well regarded as a learning platform, it requires improvements to better serve the department's e-learning needs. Teachers want

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Moodle to become more intuitive and user-friendly, particularly for students with limited technical experience. Additionally, they are looking for ways to better engage students by combining Moodle's content management tools with more dynamic, real-time features like those offered by Google Meet. Moving forward, the integration of these platforms and the enhancement of Moodle's interactive capabilities will be crucial in maintaining its relevance.

The department must also continue to address the technological gaps facing students, particularly in terms of internet connectivity, to ensure that Moodle can be fully used.

In conclusion, while Moodle has established itself as a valuable e-learning platform within the department, its future success depends on its ability to adapt to both technical and engagement-related challenges. Addressing connectivity issues, streamlining assessment tools, ensuring privacy, and providing on-going institutional support are critical to maintaining Moodle's relevance. By integrating Moodle's content management capabilities with real-time communication platforms like Google Meet and enhancing its interactive features, the department can create a more effective and inclusive online learning environment for both teachers and students.

Conclusion

The study reveals that while Moodle is widely recognised as a vital tool for administrative and organisational tasks at Mouloud Mammeri University of Tizi-Ouzou, its effectiveness in areas such as live teaching and assessment remains a challenge for many educators. Despite being easy to navigate, the platform faces significant barriers, including technical limitations, insufficient training, and the absence of robust assessment tools, which have significantly hindered its broader adoption for teaching purposes. These on-going issues with infrastructure and inadequate technical support have led to mixed or negative attitudes among teachers, preventing Moodle from reaching its full potential as a teaching tool.

Discussion of the Results

The Technology Acceptance Model (TAM) sheds light on these challenges, indicating that while teachers find Moodle easy to use, its perceived usefulness is diminished due to persistent obstacles. Teachers' attitudes towards Moodle have shown greater acceptance over time as they become more familiar with the platform, which aligns with Zajonc's mere exposure effect. However, unresolved technical issues and lack of proper training continue to prevent the platform from achieving its full potential at Mouloud Mammeri University of Tizi-Ouzou. Additionally, privacy concerns, time management difficulties, and dissatisfaction with certain features have caused some teachers to prefer alternative platforms like Google Meet. These barriers also highlight the need for institutional support, including enhanced infrastructure and more comprehensive training programs, to ensure Moodle's sustained use and future adoption.

In summary, Moodle's integration at Mouloud Mammeri University of Tizi-Ouzou faces significant challenges, but with targeted improvements especially in the areas of training, technical support, and feature refinement, there is potential for wider acceptance and more positive long-term outcomes. Teachers' experiences underscore the importance of addressing both technical and pedagogical needs to foster more favourable attitudes and improve Moodle's overall effectiveness.

General conclusion

General Conclusion

This study investigated teachers' attitudes towards online teaching via the Moodle platform in the Department of English at Mouloud Mammeri University of Tizi-Ouzou. Its primary aim was to assess Moodle's perceived usefulness and evaluate teachers' attitudes towards its adoption for online instruction. Additionally, the study examined how these attitudes have evolved since the platform's introduction in 2020 and identified key factors influencing its implementation.

The research focused on two main objectives. The first objective was to identify teachers' current attitudes towards online teaching using Moodle. The second was to explore changes in these attitudes and determine the main reasons behind them.

Considering the complexity of exploring teachers' attitudes, which involves both psychological and technological dimensions, and taking into account the relatively recent adoption of Moodle in this context, the study was grounded in Davis's Technology Acceptance Model (TAM) and in theories of attitude formation and change. The findings confirmed several aspects of the initial hypotheses and aligned with previous research, although certain expectations were not fully supported by the results.

To conduct this inquiry, a mixed methods approach was adopted, combining both quantitative and qualitative data collection techniques. Data were gathered through questionnaires distributed to teachers in the Department of English, and semi-structured online interviews were conducted with a selected number of participants. Descriptive statistical analysis was used to examine the quantitative data, while thematic analysis was employed to interpret and explain the qualitative findings.

The implementation of Moodle at Mouloud Mammeri University of Tizi-Ouzou during the COVID-19 pandemic represented a pivotal transition towards online learning. Yet this shift has not been without significant challenges. While teachers generally commend Moodle for its user-

General Conclusion

friendly interface in managing administrative tasks, such as uploading materials and organising courses, several key barriers have hindered its full adoption. Notably, the platform's limitations in facilitating synchronous teaching, coupled with inadequate training and persistent technical difficulties, have driven many educators to prefer simpler platforms like Google Meet for real-time interactions. This trend underscores a prevailing perception of Moodle as overly complex for live instructional activities.

The findings of this study indicate that, although there has been a gradual increase in some educators' positive attitudes towards Moodle—largely due to their growing familiarity with the platform—a substantial segment of the teaching staff remains neutral or even dissatisfied. This ambivalence can be analysed through the lens of the Technology Acceptance Model (TAM), which highlights the dual importance of ease of use and perceived usefulness. In this context, while ease of use remains a critical factor, the perceived usefulness of Moodle—especially in terms of its effectiveness for live teaching and assessment—requires significant enhancement.

The identified shortcomings, particularly the lack of effective assessment tools and the on-going technical challenges, such as unreliable internet infrastructure and insufficient technical support, further contribute to the platform's under-usage. These barriers not only impede educators' ability to leverage Moodle's full potential but also diminish student engagement and learning outcomes.

To foster greater acceptance and effectiveness of Moodle at Mouloud Mammeri University of Tizi-Ouzou, robust institutional support is imperative. This support should encompass the enhancement of technical infrastructure to ensure reliable connectivity and access, the provision of regular and advanced training sessions tailored to educators' diverse needs, and the integration of more interactive and engaging tools to facilitate synchronous teaching. By addressing these critical issues, the institution can cultivate a more favourable

General Conclusion

perception of Moodle among educators, finally encouraging its broader adoption in higher education.

Such proactive measures would not only enhance the teaching and learning experience but also ensure that Moodle evolves into a more effective educational tool that meets the demands of modern pedagogy, thereby positioning Mouloud Mammeri University of Tizi-Ouzou at the forefront of innovative online learning solutions. Specifically, it is vital to tackle technical challenges, ensure consistent training opportunities for educators, and provide reliable internet access for all students. Prompting collaboration among teachers to share resources and innovative teaching strategies, alongside the incorporation of engaging multimedia elements, will significantly enrich the online learning experience.

In this study, several limitations were encountered that may impact future research. One significant limitation was the difficulty in collecting data, particularly for the practical component, which was exacerbated by the timing of data collection during the holidays, leading to reduced participation. As a result, we relied on Google Forms for data collection. Additionally, the study was limited to only ten teachers of English at Mouloud Mammeri University of Tizi-Ouzou, who were contacted via their professional emails, which restricted the scope of responses. Out of these, only three teachers agreed to participate in an interview, highlighting the need to consider these factors when interpreting the findings and guiding future research designs.

Based on examination of teachers' attitudes regarding the use of Moodle platform, several recommendations have been suggested to enhance its effectiveness in the Department of English at Mouloud Mammeri University of Tizi-Ouzou. The university administration should prioritise resolving technical problems associated with the Moodle platform and organise regular training sessions to improve teachers' familiarity and efficiency in using it. Additionally, the Ministry of Higher Education and Scientific Research should ensure that all

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students have reliable internet access. Encouraging teachers to utilise Moodle as a collaborative space for sharing resources, best practices, and innovative teaching strategies is also essential. Furthermore, incorporating multimedia resources such as videos, interactive quizzes, and discussion forums within Moodle will enrich the online learning experience.

In summary, improving the use of Moodle within the Department of English at Mouloud Mammeri University of Tizi-Ouzou may require addressing persistent technical issues, providing consistent training opportunities, and ensuring stable internet connectivity.

access for all students. Additionally, fostering collaboration among teachers and integrating engaging multimedia resources will significantly improve the overall quality of online teaching and learning. Given the focus of this study on EFL teachers attitudes towards online teaching via Moodle, further research is needed to investigate students' perspectives on their experiences with this platform. This could help identify solutions to enhance the quality of online teaching in higher education. Future studies could also include students' perspectives and classroom observations to provide more comprehensive insights into the topic.

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Appendices

Appendix 1. Teachers' Questionnaire

Dear Teacher,

This questionnaire is an integral component of our master's dissertation titled * Teachers' Attitudes towards Online Teaching via Moodle Platform*. Your valuable insights are crucial in understanding the practices and attitudes of EFL teachers at the Department of English in Tizi-Ouzou.

We kindly request that you respond to the following questions truthfully and to the best of your knowledge. Your participation is greatly appreciated.

Sincerely,

Ms. Khaled Inas

Mrs. Tahrat Karima

Master 2 students of Foreign Languages Didactics-Mouloud Mammeri University of Tizi-Ouzou

Section 1: General Information

1. Gender

- Male
- Female

2. Teaching Experience

- 1 to 5 years
- 6 to 10
- 11 to 15
- More than 15 years

3. Age

- Under 25
- 25-39

Appendix 1. Teachers' Questionnaire

- 40-49
- 50 and above

4. Teaching Module

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Section 2: Current Technology Use and Familiarity

1. How familiar are you with using digital technologies?

- Not all familiar
- Slightly familiar
- Somehow familiar
- Moderately familiar
- Extremely familiar

2. Do you use the internet for teaching purposes?

- Yes
- No

3. If yes, what are the primary reasons for using the internet in your teaching?

(would you please select all that apply)

- Uploading lessons and materials
- Conducting online classes
- Sharing resources with students
- Communicating with students (e.g., email, messaging)
- Collaborating with colleagues
- Other :

4. Which platforms do you primarily use? (would you please select all that apply)

- Moodle
- Google classroom

Appendix 1. Teachers' Questionnaire

- Zoom
- Facebook
- Just emails
- Other :

5. What factors influenced your decision to choose the platform you mentioned above? (Would you please select all that apply)

- User-friendly interface
- Availability of features and tools
- Integration with other tools or systems
- Technical support and training
- Security and privacy of data
- Scalability for different class sizes
- Institutional policy or mandate (the choice of the department)
- Students' choice
- Recommendations from colleagues
- Other:

6. Current use of Moodle

- I am currently using Moodle
- I have used Moodle in the past and I am still using it
- I used Moodle in the past but I stopped at a certain time
- I have never used Moodle

Section 3: Moodle, Perceived Usefulness and Perceived Ease of Use

1. How easy do you find it to navigate and use Moodle?

- Very easy
- Easy

Appendix 1. Teachers' Questionnaire

Difficult

Very difficult

2. How effective is Moodle in helping you manage and organize course materials?

Extremely effective

Very effective

Moderately effective

Slightly effective

Not at all effective

3. How satisfied are you with Moodle's assessment tools (quizzes, assignments....)?

Very satisfied

Satisfied

Neutral

Dissatisfied

Very dissatisfied

4. Do you deliver online classes via Moodle?

Yes

No

5. If no, would you tell us which platform did you opt for and why?

.....

6. If yes, are you able to easily schedule and conduct live sessions or webinars on Moodle?

Yes

No

Appendix 1. Teachers' Questionnaire

- 7. Do you find it easy to upload and share course materials for online classes on Moodle?**
- Yes
 - No
- 8. How easy do you think it is to facilitate discussions and interact with students in a Moodle classroom?**
- Very easy
 - Easy
 - Difficult
 - Very difficult
- 9. How would you evaluate your overall experience with delivering online classes via Moodle?**
- Excellent
 - Good
 - Neutral
 - Poor
 - Very poor
- 10. How has Moodle enhanced your teaching experience in comparison to traditional methods?**
- Significantly improved
 - Improved
 - Not significant difference
 - Made teaching more challenging
 - Not applicable

Appendix 1. Teachers' Questionnaire

11. Do you believe that online teaching via Moodle can be effective as face-to-face teaching?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

12. What challenges do/did you face while teaching online via Moodle? (Would you select all that apply)

- Technical issues
- Lack of training
- Time management
- Insufficient training
- Other :

Section 4: Attitudes towards usage

1. What is your overall attitude toward using Moodle for teaching?

- Very positive
- Positive
- Negative
- Very negative

Section 5: Technical support

1. How do you rate the technical support provided by your institution for resolving problems related to Moodle?

- Excellent

Appendix 1. Teachers' Questionnaire

- Good
- Neutral
- Poor
- Very poor

2. Did/ do you receive adequate professional development on using Moodle effectively?

- Yes
- No
- Yes, but not sufficient

Section 6: Subjective Norms

1. Do you feel that your colleagues and institution support the use of Moodle?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Section 7: Privacy, Camera use, and public scrutiny

1. How concerned are you about privacy issues related to using Moodle for online teaching?

- Very concerned
- Concerned
- Neutral
- Not very concerned
- Not concerned at all

Appendix 1. Teachers' Questionnaire

2. How comfortable are you with using a camera during online teaching sessions?

- Very comfortable
- Comfortable
- Neutral
- Uncomfortable
- Very uncomfortable

3. Are you concerned about being exposed to public scrutiny while teaching online via Moodle?

- Very concerned
- Concerned
- Neutral
- Not very concerned

Section 8: Experiences since 2020

1. Since when did you start using Moodle?

.....

2. Has your attitude has changed, what are the main reasons? (Select all that apply)

- Improved technical skills
- Better resources and tools
- Increased students' engagement
- Insufficient training
- Positive feedback from students
- Technical issues
- Lack of students engagement

Appendix 1. Teachers' Questionnaire

- Concerns about privacy
- Other :

Section 9: Using Moodle in the future

1. How likely are you to continue using Moodle in the future?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

2. How likely are you to recommend Moodle to other teachers?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

3. What improvements would you like to see in Moodle to enhance your teaching experience?

- More interactive tools
- Improved technical support
- Enhanced communication features
- Enhanced assessment features

Any additional comments or suggestions

.....

Thank you!

Appendix 2. Teachers' Interview

Dear teacher,

Thank you for your time and participation,

This interview forms part of our dissertation research on attitudes towards online teaching via Moodle platform. The purpose of this interview is to gain your attitude and experiences on a number of aspects related to the subject.

Teacher one:

Q1. The presentation mentioned diverse modules being taught (e.g., Media Studies, Linguistics, ELT). How do you think Moodle could be optimised for specific modules that you find more challenging to teach online?

‘In my experience, teaching linguistics and phonetics can be quite challenging on Moodle because these subjects often require interactive tools for phonetic transcription and real-time feedback. Moodle doesn’t have specialised tools for these areas, so I need to rely on external software. It would be beneficial if Moodle could integrate such specialised tools, especially for language-based courses.’

Q2. Teachers' years of experience vary significantly. Do you think less experienced teachers face unique difficulties when using Moodle compared to more experienced ones?

‘No, I don’t think so. I don’t think it is a matter of experience I think it is due familiarity with technology and the ability to handle technical issues. For example, creating quizzes or setting up advanced grading criteria can be overwhelming for both experienced and inexperienced teachers but what makes the difference is their ability to manage all this.’

Q3. A large percentage of teachers stopped using Moodle at some point. Could you elaborate on the specific reasons that led them to stop using Moodle and what might encourage them to use it again?

Appendix 2. Teachers' Interview

‘For me I stopped using Moodle because it became too time-consuming to manage alongside my other responsibilities. Additionally, students were not engaging well with the platform, which made it less effective. If the platform was more intuitive and offered better communication tools for students, I might consider using it again.’

Q 4. Teachers had mixed feelings about Moodle's effectiveness in organising course materials. Can you give specific examples of where Moodle helps you and where it fails to meet your expectations?

‘Moodle does a good job at organising uploaded content, like lecture slides and reading materials. However, where it fails is in tracking student progress. It's difficult to quickly see which students are behind without going through each submission individually. A more visual or simplified tracking tool would be really helpful.’

Q5. Some respondents expressed dissatisfaction with Moodle's assessment tools. Can you elaborate on what aspects of the tools you find lacking and how they could be improved?

‘The quiz tool is particularly limited. For instance, when creating question banks, there's no easy way to randomise questions without creating a lot of manual work. Also, the assignment submission and grading workflow is not streamlined enough—students often have difficulty submitting assignments, and grading them takes longer than it.’

Q6. Half of the respondents disagreed that Moodle is as effective as face-to-face teaching. Could you provide specific examples of where you feel Moodle falls short compared to traditional classroom settings?

‘The main challenge with Moodle is the lack of real-time interaction. In a face-to-face setting, I can see if students are struggling, ask questions, and adjust my teaching on the spot. With Moodle, communication feels more rigid and delayed, which makes it hard to address students' needs as they arise.’

Appendix 2. Teachers' Interview

Q7. Many teachers mentioned technical issues as a significant challenge with Moodle. Can you describe the types of technical issues you encountered and how they affected your teaching?

‘One recurring issue is that Moodle often crashes when multiple students are trying to access quizzes at the same time. This has led to frustration and lost data for students, especially during high-stakes exams. Another issue is with uploading large files, which sometimes take too long or fail altogether.’

Q8. The results suggest that opinions on technical support from institutions vary widely. Could you provide specific examples of when the technical support you received was helpful or insufficient?

‘There were times when technical support was prompt, such as when I faced difficulties with the gradebook configuration—they helped resolve the issue quickly. However, there have been times when I submitted a request for help with integrating external tools, and it took days to receive a response, which delayed my work.’

Q9. Teachers expressed concerns about privacy and public scrutiny. Could you clarify what specific privacy issues worry you when teaching online via Moodle?

‘My main concern is that student data, such as personal information and grades, may not be fully protected, especially if Moodle's security settings aren't properly configured. I also worry about being recorded during live classes without my knowledge, which could lead to videos being shared without consent.’

Q10. What aspects of being exposed to public scrutiny while teaching online do you find most concerning, and how do you think these issues could be mitigated?

‘One of my concerns is that anything I say during a live session could be misinterpreted if taken out of context. Students or outsiders could record the session and share it on social

Appendix 2. Teachers' Interview

media. I believe the institution should have clearer policies on recording classes and offer better control over who can access these recordings.'

Q11. The presentation showed that some teachers are unsure about continuing with Moodle in the future. What would need to change for you to feel more confident in continuing to use Moodle?

'I think Moodle needs to become more user-friendly for both teachers and students. Simplifying the interface, making navigation more intuitive, and improving the speed of the platform would help. Additionally, more built-in tools for student engagement would make it more appealing.'

Q12. Are there any specific features or tools you would like to see added or improved in Moodle to enhance your teaching experience?

'I'd like to see better communication tools, like a built-in chat feature that works seamlessly during live classes. I'd also appreciate more automated grading options, especially for quizzes, and an easier way to collaborate with colleagues on course materials within the platform.'

Teacher Two

Moodle and Internet Connectivity:

Q1. How satisfied are you with Moodle as a learning platform?

'I'm not very satisfied with Moodle. I find it a bit complicated, and it requires a lot of time to set up. I'm not very tech-savvy, so I struggle with some of the features, and the support, while available, isn't always timely enough for me.'

Appendix 2. Teachers' Interview

Q2.What challenges do you face regarding student engagement, especially with students in remote areas?

‘Connectivity is the biggest challenge. Many of my students have limited or no internet access, so they either can’t participate in real-time or they miss deadlines. It’s discouraging for them, and it makes me feel like I can’t effectively teach them.’

Q3.How does the lack of reliable internet connection impact your students' participation in online learning?

‘It severely limits their participation. I’ve noticed that some students stop attending altogether because they can’t keep up, and there’s no real way to bridge that gap unless they have consistent internet access.’

Q4.What steps have you taken to address the issue of students lacking Moodle accounts?

‘I’ve reached out to the department to help students with the technical process, but I can’t say that all of them get the help they need. I also give students alternatives, like emailing their work, which is far from ideal.’

Q5.Why do some students prefer Google Meet over Moodle, and how does this affect your ability to track them?

‘Google Meet is easier for them because it’s simpler to access, but I find it hard to track their participation. I’ve had students join with fake names or emails, and there’s not much I can do to verify who’s who.’

Q6.Have you explored any tools or methods to integrate Google Meet with Moodle to help with student tracking?

‘No, I haven’t really explored that. I’m not sure how to do it, and frankly, I don’t have the time or the technical skills to figure that out.’

Appendix 2. Teachers' Interview

Q7. How do you approach assessments given the challenges with internet connectivity and student engagement?

'I've had to simplify my assessments because I know not all students can participate in online tests. I often switch to take-home assignments or ask students to submit their work via email.'

Q8. What strategies have you found effective in creating online tests that reduce the chances of cheating?

'I don't use online tests much because of these concerns. When I do, I ask for reflective essays or assignments that require deeper thinking so it's harder to cheat.'

Q9. How do you ensure that assessments are fair, given the differences in internet access among students?

'I give extensions when necessary and offer alternative assignments for those who struggle with access. But it's still not perfect, and some students are disadvantaged.'

Q10. What would you recommend to other teachers facing similar challenges with internet connectivity and student engagement?

'Be flexible and patient. Offering multiple ways to submit work or engage with the course is important. We have to adapt to their needs.'

Q11. Is there anything else the department or e-learning centre could do to improve your experience with Moodle or help address the student engagement issue?

'More training and simpler tools for teachers would help. Not everyone is comfortable with the tech, and it takes away from teaching.'

Teacher 3

Appendix 2. Teachers' Interview

Moodle and Internet Connectivity:

Q1. How satisfied are you with Moodle as a learning platform?

‘I’m very satisfied with Moodle. It offers a wide range of features for course management, and the support from the department has been great. I’ve had no technical issues with it.’

Q2. What challenges do you face regarding student engagement, especially with students in remote areas?

‘The main issue is that many students in remote areas have poor internet connectivity. This makes it difficult for them to access Moodle consistently, and some of them miss out on course materials and assignments.’

Q3. How does the lack of reliable internet connection impact your students' participation in online learning?

‘It impacts their participation significantly. Even when they are motivated, the poor connection disrupts their learning, causing them to fall behind or struggle with accessing resources in a timely manner.’

Q4. What steps have you taken to address the issue of students lacking Moodle accounts?

‘I regularly remind students to request accounts from the e-learning centre and offer them guidance on the process. However, I’m aware that not all students follow through, which remains a challenge.’

Q5. Why do some students prefer Google Meet over Moodle, and how does this affect your ability to track them?

Appendix 2. Teachers' Interview

‘Many students find Google Meet simpler to use, especially since it requires less bandwidth than Moodle. However, it makes it harder for me to track students, especially since some use fake emails to join sessions.’

Q6. How do you handle the issue of students using fake emails on Google Meet?

‘Unfortunately, Google Meet doesn’t have a built-in way to verify email identities, so I have to rely on manual checks. It’s challenging to know for certain whether a student is truly participating.’

Q7. Have you explored any tools or methods to integrate Google Meet with Moodle to help with student tracking?

‘I haven’t yet fully explored the integration of the two, but I know that Moodle offers plugins that could link attendance from Google Meet with Moodle records. I might consider this in the future.’

Assessment and Test Design:

Q8. How do you approach assessments given the challenges with internet connectivity and student engagement?

‘I design assessments that account for these challenges. I use Moodle to create sophisticated online tests that can accommodate intermittent connectivity, such as timed tests with automatic saving of progress.’

Q9. What strategies have you found effective in creating online tests that reduce the chances of cheating?

‘I employ strategies like randomizing questions, using open-ended questions that require critical thinking and designing tests that require higher-order thinking rather than simple recall.’

Q10. How do you ensure that assessments are fair, given the differences in internet access among students?

Appendix 2. Teachers' Interview

‘I try to be flexible with deadlines and provide alternative formats for assessments when necessary. For students in remote areas, I offer extended windows to complete tasks and ensure that assessments are accessible even with limited internet.’

Solutions and Institutional Support:

Q11. What support or solutions would you like to see from the institution to improve student engagement?

‘I think providing students with better guidance on how to access Moodle and more flexibility for those with poor internet would help. Offering them tools to download materials for offline access could also be beneficial.’

Q12. Do you think improving internet connectivity in remote areas is the main solution, or are there other ways to engage students effectively?

‘Improving internet connectivity would be ideal, but it’s not the only solution. We could also use strategies like sending materials in advance, providing offline assignments, or offering hybrid approaches to make learning more accessible.’

Q13. What would you recommend to other teachers facing similar challenges with internet connectivity and student engagement?

‘I would suggest being flexible, offering multiple ways to access materials, and using both synchronous and asynchronous teaching methods to accommodate students with different levels of connectivity.’

Q14. Is there anything else the department or e-learning centre could do to improve your experience with Moodle or help address the student engagement issue?

Appendix 2. Teachers' Interview

‘The department is doing a good job, but it could help if there were more centralised solutions for automatic Moodle account creation. Also, providing more training for students to better understand how to use Moodle might boost engagement.’