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(RESEARCH ARTICLE)

On teachers' acceptance of e-learning to enhance productive skills in Moroccan High School: The case of second-year baccalaureate level

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Abstract

This cross-sectional quantitative study investigates the factors affecting teachers' acceptance and use of E-learning platforms, namely, the Learning Management System (LMS), to enhance productive skills, mainly writing skills, in Moroccan high schools. To attain the study objectives, the online and the hardcopy versions of the questionnaire were deployed during the data collection process. A total of 83 English teachers took part in this study. The data were analyzed using descriptive statistics by calculating the means and the standard deviations of the items of each construct. The analysis result revealed that the teachers' behavioral intention is influenced by their students' writing achievements, which means that teachers' behavioral intention to use LMS would increase if their students' writing achievements, resulting from adopting LMS in teaching writing, were demonstrated. Besides, the results demonstrated that teachers view using LMS platforms as an easy instructional tool requiring less effort, indicating that teachers possess the necessary skills to adopt LMS platforms in their teaching. In the same vein, results confirmed that the teachers' behavioral intention is not influenced by their colleagues' or friends' perceptions. Still, it is strongly influenced by the support of the Ministry of Education. Teachers also confirmed that they possess the necessary tools and skills to adopt LMS platforms in their teaching. Finally, in the behavioral intentions construct, the results concluded that teachers' behavioral intention strongly predicts the actual use of LMS platforms. This study has some implications for key innovation factors that could lead to the successful adoption and diffusion of LMS platforms in Moroccan high schools.

Keywords: E-learning; Learning Management Systems; Productive skills; Writing skills; UTAUT model

1. Introduction

As we enter the new millennium, the world is becoming increasingly globalized, which has tremendously impacted all the spheres of our lives, including education. The latter is transforming from traditional methods of rote learning and memorization and the confinement in the classroom walls to the new digital learning trends, and more learner-centered approaches whose aim is to equip the new generation with essential 21st-century skills to face the new challenges and to meet the new requirements in the job markets that demand workforce that is infused with such soft skills as creativity, critical thinking, collaboration, and communication. This entails fully mastering productive skills, mainly writing skill, which is indispensable for better communication in this globalized world. (Tribble, 1996) maintained that people who cannot write effectively are disqualified from many social roles.

Since Independence, the Moroccan educational system has undergone several reforms to respond to the needs and aspirations of students and the global job market requirements. In 1999, the National Charter of Education was ratified by a special commission to improve the educational system. Among the recommendations put forward by this charter

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is the centrality of ICT integration in the educational system. The new era no longer supports rote learning and the traditional way of teaching; instead, there is a need to shift toward modern teaching practices that foster collaborative work, critical thinking, and problem-solving skills. The educational system should provide a teaching environment that transfers learners from a "community of learners" to a "learning community" Sergiovanni (1994).

The ultimate objective of integrating Information Communication Technologies (ICTs) in education is to equip students with 21st-century skills and prepare them to face the challenges of the new millennium; learners need to learn transferable skills that will allow them to be productive members of their society, and thus, contributing to sustainable development locally and globally. Among the multifaceted applications of ICTs, e-learning stands out as a promising avenue. E-learning, as a quintessential example of ICTs, can profoundly enhance productive skills, mainly writing skills, enabling learners to excel in an increasingly digital and interconnected world. Learning Management System (LMS) is a form of e-learning. Ellis (2009) defines a Learning Management System as a software application for administering, documenting, tracking, reporting, and delivery of e-learning education courses or training. LMS provides diverse learning environments that are highly interactive, dynamic, and nonlinear.

Numerous studies have delved into the relationship between utilizing LMS platforms and improving learners' writing abilities, mainly focusing on writing skills. An experimental study conducted by (Diantari et al., 2017) explored the benefits of integrating Edmodo, an LMS platform, to enhance writing skills. The results revealed that employing Edmodo as an instructional tool to teach writing had a positive impact on students' writing performance. Meanwhile, another study conducted by (Wihastyanang et al., 2014) aimed to investigate whether LMS could improve students' argumentative writing. The findings divulged that teaching writing through LMS yielded better results than traditional classroom teaching.

While bringing digital innovations, such as LMS, aims to revolutionize the educational system, this aim can only materialize through engaging all the stakeholders to ensure the effective integration of these online platforms in our educational system and overcome the challenges that may hamper this integration. Teachers, being one part of the equation, are central to technology integration in the educational system. Thus, this study aims to uncover factors that impact teachers' use of LMS platforms in writing instruction.

1.1. The statement of the problem

Writing is a complex, productive skill that requires both cognitive and affective investments from EFL learners; it is deemed a daunting task for students that is hard to master. Besides, making mistakes while writing a piece of work, and the fear of being judged by others are considered the main hurdles that hinder learners from learning a foreign language. Furthermore, instructors also contribute significantly to this state of affairs, considering that whatever they do, their learners will never be able to compose a high-quality piece of work worth reading and responding to. Henceforth, teachers turn to the traditional approaches that may have been proved inefficient in improving learners ' performance in writing skills. Consequently, teachers of English could feel dissatisfied with how writing is dealt with in Moroccan schools and with the level of students' writing. Hence, LMS platforms in teaching writing can make it more engaging for teachers and learners.

1.2. The significance of the study

As per the current scenario, learners are often referred to as digital natives; therefore, it has become crucial for the ELT community to incorporate innovative technology into the education system and explore all the possibilities to improve students' writing abilities. Therefore, it is recommended to address this matter by integrating new technologies and developing innovative approaches and techniques to aid learners in becoming proficient writers in both the virtual and the real world. The scope of this inquiry, then, is to unveil the significant factors influencing teachers to accept and use LMS platforms to enhance the teaching of writing in Moroccan high schools.

2. Review of the Literature

Broadly speaking, many studies have demonstrated that incorporating Information and Communication Technologies (ICTs) helps to facilitate a radical shift from the traditional teaching modus operandi of instructional design to a more flexible, meaningful, and open-learning approach. Robinson et al. (2008) argued that the primary purpose of technology integrations is to facilitate learning. Integrating ICTs in education has been linked to an increase in cognitive and affective student engagement, which is a central concern for modern educators (Bond et al., 2020), for one of the aims of education in the new millennium is to equip students with soft skills to help them face the challenges of the 21st century.

In Morocco, as stated previously, the National Charter of Education recommended the integration of ICTs in the educational system to modernize the educational sector to meet the expectations of the digital natives and assist them in fitting into the global job market requirements.

2.1. The Moroccan national charter of education and training

ICT integration was first implemented by the National Charter of Education and Training (NECT) in 1999, during which His Majesty King Mohammed VI announced the period of 1999-2009 as the 'education decade.' Article 10 of the NCET addressed ICT integration in education and supported ICT acquisition tools at school and e-learning support. Along with modernizing education, the government focused on developing the private sector, governance, e-commerce, and internet access, which were considered key factors to ensure effective ICT integration.

One of the drastic steps taken by the government to facilitate ICT access was the privatization of the telecommunication sector, which resulted in the reduction of Internet and telecommunication costs and made the internet affordable not only in urban areas but also in rural ones. In mid-2004, the estimated number of internet users was 2,000,000, according to the Moroccan Internet Society 'Misoc'. In 2017, the number of Internet users increased to 22 million (63% of the total population), according to Agence Nationale de Réglementation des Télécommunications ANRT (2017). Morocco has launched many ICT projects to integrate ICT in the field of education, among which are the Marwan project and GENIE.

2.2. The MARWAN project

The MARWAN project (Maroc Wide Area Network) was launched in 2000. The project aimed to wire Moroccan universities through the LAN network. The rationale behind such a network was to share databases, research findings, doctoral theses, and international conference proceedings among all the Moroccan Universities; the MARWAN project served as a bridge connecting Moroccan universities and allowing the dissemination of academic knowledge among these educational institutions in higher education and providing them with low-cost Internet access.

Indeed, the digital era has brought about new concepts to the educational arena; the diffusion and sharing of knowledge, promotion of collaboration among educational institutions, and modernizing educational practices are the ultimate objectives of ICT integration. Therefore, words like the online community, global network, global citizen, and the like have become commonplace. Accordingly, the MARWAN project aimed to link higher education institutions, creating an online academic community where knowledge is shared and diffused.

 The rationale behind the MARWAN installation is to develop modes of distance learning and training and to use networking to improve scientific research by creating databases. Furthermore, the project aims to generalize ICT use by covering all educational institutions across Morocco. Besides, one of the objectives of the MARWAN project is to improve the management of resources by sharing them and creating new job opportunities by generating new services and professions based on ICT is another aim of MARWAN.

The MARWAN project managing committee hoped that this project would significantly transform higher education institutions towards effective use of the Internet and networked information resources through training in network skills. However, the MARWAN project fell short of achieving its goals. This failure is attributed to the slow-paced process of wiring universities and the prevailing resistance among educators. In brief, network-based learning is still in its infancy in Morocco, and the use of academic networks still faces many hurdles, mostly related to human resources training.

2.3. GENIE

GENIE program (Generalization of Information and Communication Technologies in Education) was launched in 2005 by the Moroccan government. The program's main objective was the generalization of ICT in public schools to improve teaching quality and provide 8,600 schools with internet-connected multimedia rooms by 2008. The government considers GENIE a massive ICT program requiring a colossal budget between 2006 and 2013 over 2 phases: 2006/2008, and 2009/2013 (Ministry of Education 2015), not to mention deploying a considerable amount of human resources.

The first three-year period of the program was devoted to the three principal axes: infrastructure, digital resources, and training. The first step was to set the ground for the program's implementation by connecting multimedia rooms to the Internet in partnership with international hardware and software companies. The second axis, digital resources, aimed to provide digital resources and establish a national laboratory of digital resources and a national web portal for Information and Communication Technology in Education (ICTE). The third axis is training, which allows teachers to

acquire and improve their ICT-related competencies and enhance their pedagogical practices via "Intel Teach to the Future" (Kabbaj et al., 2009).

The strong disposition expressed by the Ministry of Education to integrate ICTs in high schools was confronted by numerous constraints and challenges (Alj & Benjelloun, 2013). Supervised by the NART, the GENIE program came into a moratorium two years after its inauguration to reflect on the importance of ICT integration in education. Some studies have revealed that updating logistics, coaching, and content is vital for improving GENIE (Kabbaj et al., 2009).

The second part of the GENIE program involved the introduction of a fourth axis: usage development; therefore, the principal objective was the acquisition of digital resources, running conscious raising campaigns, and launching an ICTE web portal. It also tracked and investigated effective ICT implementation in educational institutions. Despite the drastic efforts to make the GENIE program successful, it fell short of achieving 100% of its target goals. However, in 2015, The Supreme Council for Education launched the Strategic Vision of Reform 2015/2030. The reform aims to equip educational institutions with didactic material, equipment, and digital libraries.

2.4. Writing as a productive skill

In today's globalized world, mastering writing skills is crucial for students, as competence is essential for achieving their goals. Writing can be viewed from different perspectives, such as a process or a product. According to Johnson and Johnson (1999), writing as a product refers to the final output of the writing activity (p. 342). Process writing, on the other hand, is the act of turning ideas into written words, rather than just focusing on the end product. Writing is a social activity that involves communication between the writer and the reader. It aims to convey a clear and cohesive message to the audience using a standardized format. In Moroccan EFL classes, the primary approach to teaching writing is process writing. Kroll (2001) maintained that process writing involves a cyclical process where students draft, receive feedback from peers or the teacher, and revise their work before writing the final draft. The process includes several mental processes like brainstorming, planning, mind mapping, writing the first draft, and peer editing. However, these stages are not necessarily linear and can be done recursively. (Harmer, 2001 p.326; Larouz, 2012 p.47).

2.5. Learning management systems as constructivist online platforms.

Numerous studies have shown that LMS platforms can significantly enhance students' academic performance, motivation, and readiness to learn more, while also allowing them to track their progress. LMS is based on the notion of a constructivist approach, in which students learn collaboratively in a group and create new and relevant knowledge through synchronous and asynchronous communication (Leask &Younie, 2006). Online collaborative tools, such as blogs, forums, and wikis, assist students in learning and constructing knowledge beyond the traditional physical classroom Bradley (2021), Chaw and Tang (2018), Chipps et al. (2015), Islam and Azad (2015), and Walker et al. (2016). Similarly, using LMS to teach writing skills can be meaningful and authentic to learners as they actively work together to construct new knowledge about a specific topic. Besides, learners feel motivated as their writing pieces are accessible to other peers in forums.
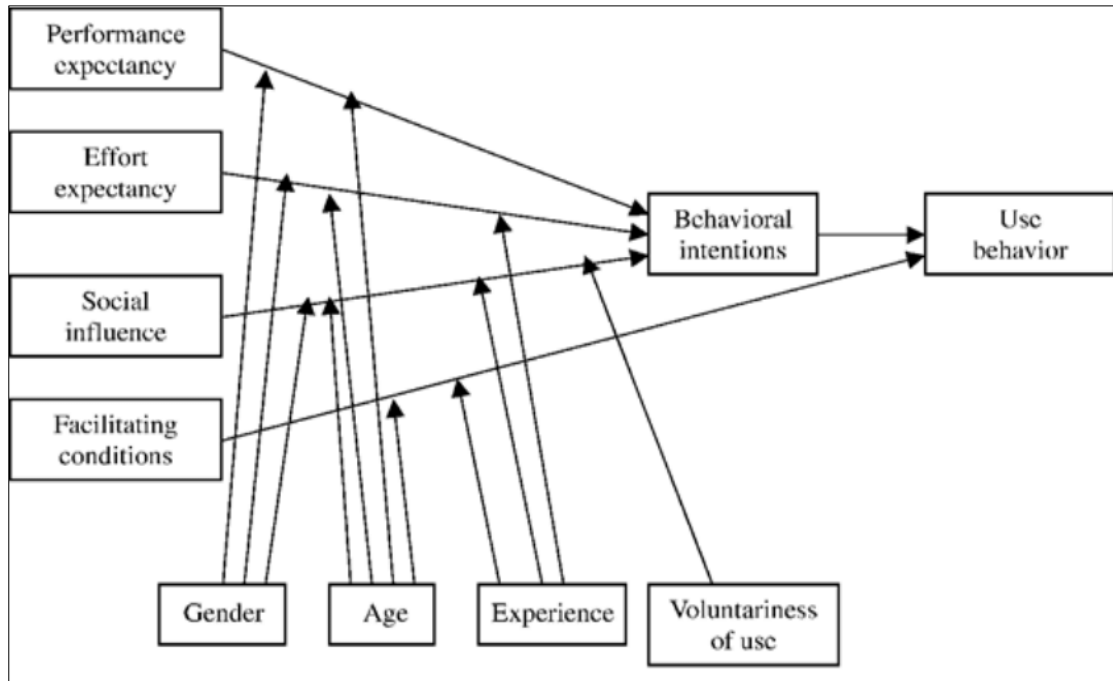
2.6. Study frameworks

2.6.1. Theoretical framework

The current study is based on the Unified Theory of Acceptance and Use of Technology (UTAUT), which was put forward by Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). The model aimed to predict both the behavioral intention to use (BIU) and attitudes towards use (ATU) by highlighting four significant factors: performance expectancy (PE), effort expectancy (EE), facilitating conditions (FC), and social influence (SI), in addition to four moderators including age, gender, experience, and voluntariness (Venkatesh et al., 2016, p. 329) as shown in Figure 1 below.
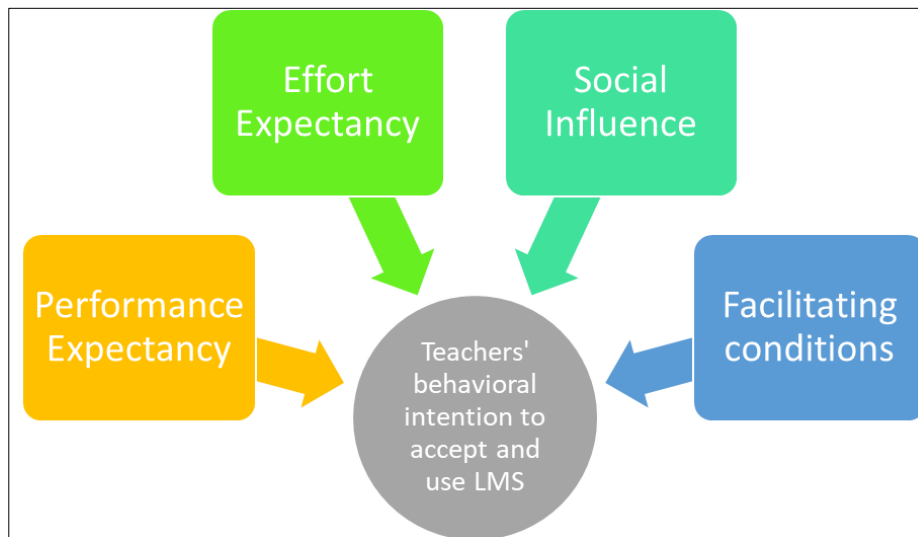
The model constitutes four independent variables and one dependent variable, as seen in Figure 1. The four independent variables are:

- **Performance expectancy:** The extent to which a user believes a system use will help achieve a gain in task performance.
- **Effort expectancy:** The extent to which the user believes the system will be easy to use.
- **Social influence:** The extent to which the user believes that important others believe they should use the system
- **Facilitating conditions:** The extent to which the user believes an organizational and technical infrastructure exists to support system use.

Figure 1 The UTAUT research model (Venkatesh et al., 2003)

2.6.2. Conceptual framework

Figure 2 Conceptual framework of the study.

The conceptual framework serves as a road map that the researcher follows in the research study. Based on the theoretical framework, a conceptual framework was generated, which demystifies the study's variables. The current research study explores factors influencing teachers' acceptance and use of LMS to improve students' writing skills. Therefore, the independent variables for the study are Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. The dependent variable is the Behavioural Intention to accept and use LMS to enhance students' writing skills.

3. Methodology

The current study aims to investigate the factors influencing Moroccan high school teachers' acceptance and usage of LMS platforms to improve students' writing skills. The study utilizes a quantitative method to achieve the research objective. Paper-based and online versions of the questionnaire based on the UTAUT model, which is the theoretical

framework guiding this research, are used to gather data. Convenience sampling is used to distribute the questionnaire since it enables researchers to survey available participants easily (Heath, 2018, p.172). The research targets teachers from various Moroccan high schools.

3.1. Research question

Which factors of the UTAUT model affect teachers' integration of LMS in writing?

3.2. Demographic analysis of teachers of English

The teachers' paper-based questionnaire was distributed in the region of Fes-Meknes, as shown in Tables 1 and 2 below. Teachers from three delegations in the Fes-Meknes area participated in the survey. Of 21 participants, 11 were females, and 10 were males. However, in the online version, 35 respondents were males, and 27 were females. 54.21% of the total participants were male (45), and 45.78% were female (38).

Table 1 The distribution of the teachers participating in the paper-based survey questionnaire

High schools	Sector	Delegations	The participants		Total
			Female	Males	
Sebt Jahjouh	Public	El Hajeb	02	00	02
Lalla Amina	Public	Meknes	02	02	04
Ibn lkhatib	Public	Elhajeb	02	02	04
Al Mamonia	Private	Meknes	02	01	03
Riad Al Maarif	Private	Meknes	00	01	01
Imame Ghazali	Public	Meknes	02	02	04
Ain Chgag	Public	Fes	01	01	02
Portai de savoir	Private	Meknes	00	01	01
Total			11	10	21

Table 2 The distribution of the teachers participating in the online questionnaire

Region	The participants		Total	Percent
	Females	Males		
Fes-Meknes	9	10	19	30.64 %
Rabat-salé-Kenitra	6	8	14	22.58%
Beni Mellal-Khenifra	5	4	9	14.51%
14Settat-casablanca	7	13	20	32.25%
Total	27	35	62	100%

3.3. Reliability of the teacher's questionnaire

Table 3 Reliability of the teacher's questionnaire

Construct	No. of Items	Cronbach's Alpha (α)	Comments
Performance Expectancy (PE)	4	0.757	High reliability
Effort expectancy (EE)	3	0.722	High reliability
Social influence (SI)	4	0.601	High Moderate
Facilitating conditions (FC)	4	0.699	High Moderate
Behavioral intent (BI)	3	0.873	High reliability

3.4. Validity of the questionnaire

This section deals with validating teachers' questionnaires. To attain this end, a correlation test is conducted to check the validity of all the constructs. As previously mentioned, correlation tests the relationship between variables. A correlation coefficient of more than 0.3 is considered acceptable (Coakes,2005), which is regarded as a moderate association between the two variables. Therefore, a correlation test was run to test all the items in each questionnaire construct to check their validity.

3.4.1. Performance expectancy

Within this study, performance expectancy was measured by the degree to which teachers believe that using LMS platforms will assist them in enhancing their students' writing skills and increasing their achievements in this language skill. This construct was measured by three question items. As shown in Table 4 below, all the items show a significant and positive correlation, which means that the question items in this construct are valid.

Table 4 Correlation Matrix for Performance Expectancy scale of the teachers' questionnaire**.**

		PE1	PE2	PE3	PE4
Correlation	**PE1**	1.00			
	PE2	0.36**	1.00		
	PE3	0.53**	0 .38**	1.00	
	PE4	0.51**	0.41**	0.37**	1.00

**Correlation is significant at the 0.01 level (2-tailed).

3.4.2. Effort expectancy

In this study, effort expectancy was measured by the degree of ease of use of LMS platforms to teach writing skills. This construct comprises three question items. As indicated in the correlation matrix Table 5, all the construct items exhibit significant correlation, thus confirming the validity of the construct.

Table 5 Correlation Matrix for Effort Expectancy scale of the teachers' questionnaire**.**

		EE1	EE2	EE3
Correlation	EE1	1.00		
	EE2	0.35**	1.00	
	EE3	0.45**	0.32**	1.00

**Correlation is significant at the 0.01 level (2-tailed).

3.4.3. Social influence

Social influence construct measures the extent to which an individual perceives that it is important that others believe he or she should use the new information system." (Venkatesh et al., 2003, p. 451). The social influence factor has no

effect in the case of voluntary use, yet this factor becomes effective when the use of technology is mandatory. In this study, social influence was measured by the extent to which teachers perceive that it is important that people who are important to them (friends, family members, colleagues…etc.), and the stakeholders (teachers, the Ministry of Education… etc.) believe they should use LMS platforms in their teaching. Table 6 below shows that all the items are significantly correlated, which affirms the validity of the construct.

Table 6 Correlation Matrix for Social Influence Scale of the questionnaire

		SI1	**SI2**	**SI3**	**SI4**
Correlation	SI1	1.00			
	SI2	0.64**	1.00		
	SI3	0.66**	0.87**	1.00	
	SI4	0.45**	0.36**	0.48**	1.00

**Correlation is significant at the 0.01 level (2-tailed).

3.4.4. Facilitating conditions

Facilitating conditions (FC) stand for the availability of technological resources used to support the use of LMS platforms (Venkatesh et al., 2003). FC was measured by the teachers' perception of accessing the required resources (the necessary electronic gadgets…etc.), the necessary skills, and the technical support needed to use LMS platforms to teach writing skills to their students. Table 7 below shows that all the items of the construct are correlated.

Table 7 Correlation Matrix for Facilitating Conditions scale of the questionnaire.

		FC1	**FC2**	**FC3**	**FC4**
Correlation	FC1	1.00			
	FC2	0.36**	1.00		
	FC3	0.60**	0.79**	1.00	
	FC4	0.28**	0.61**	0.52**	1.00

**Correlation is significant at the 0.01 level (2-tailed).

3.4.5. Behavioral intention

Behavioral intention is a predictive variable of the actual use of LMS. This construct predicts teachers' acceptance and use of LMS platforms to teach writing. Three question items measured it. Table 8 below displays that all the items exhibit a significant and positive correlation, which means that the question items of the construct are valid.

Table 8 Correlation Matrix for Behavioral Intention scale of the teachers' questionnaire

		BI1	BI2	BI3
Correlation	BI1	1.00		
	BI2	0.83**	1.00	
	BI3	0.78**	0.76**	1.00

**Correlation is significant at the 0.01 level (2-tailed).

3.5. Presentation of the Teachers' questionnaire results

To answer research question three, which is about the factors of the UTAUT that affect teachers' integration of LMS to teach writing skills, descriptive data of the survey were run in SPSS. Tables 9 to 13 below present the mean scores and standard deviations related to each UTAUT construct in the teachers' questionnaire.

3.6. Performance expectancy

This construct is about the teachers' perceptions concerning Performance Expectancy. In this research, performance expectancy is the degree to which the teachers believe that using LMS platforms will improve their students' writing skills; students will become skillful at writing and get good grades in writing assessments if they adopt LMS. PE is measured by assessing teachers' perceptions of their student's skills and achievements in writing if they adopt LMS platforms. Descriptive statistics revealed that teachers' behavioral intention is influenced by their students' writing achievements, which means that teachers' behavioral intention to use LMS would increase if their students' writing achievements, resulting from adopting LMS in teaching writing, were demonstrated.

Table 9 below summarizes the mean scores and standard deviations for the teachers' perceptions concerning Performance Expectancy. As can be observed, the PE 3 mean is the highest (PE3: $\bar{X}$ = 2.2530; SD=.621), which means that teachers believe that teaching writing through LMS platforms will increase their students' writing achievements. This shows that teachers are more concerned with enhancing their pupils' writing achievements.

Table 9 Descriptive statistics for performance expectancy

Performance Expectancy	N	Mean	Std. Deviation
PE1: Using LMS is useful for improving my students' writing skills	83	2 .0000	0.441
PE2: Teaching writing through LMS will improve my student's writing skills.	83	1.9639	0.613
PE3: Teaching writing through LMS will increase my students' writing achievements.	83	2.2530	0.621
PE4: My students' writing skills will quickly improve thanks to teaching writing through LMS.	83	2.0482	0.215
Overall mean score		0.0663	0.336

3.7. Effort Expectancy

This construct is about the teachers' perception concerning Effort Expectancy. It is about the degree of ease of use associated with using LMS platforms to teach writing skills. The descriptive statistics showed that teachers view using the LMS platform as an easy instructional tool requiring less effort. This indicates that teachers possess the necessary skills to adopt LMS platforms.

Table 10 below provides a descriptive analysis of the teachers' perception concerning Effort Expectancy. As can be seen, all the mean scores and standard deviations are more or less the same. In other words, most teachers agree that using LMS as an instructional tool to teach writing is easy. The lowest mean score is (EE3: $\bar{X}$= 2.2651 SD= 1.04), while the highest mean score is (EE2: $\bar{X}$ = 2.6867; SD= 1.06), which means that teachers believe that the use of LMS to teach writing is an easy undertaking that requires less effort.

Table 10 Descriptive Statistics for Effort Expectancy.

Effort Expectancy	N	Mean	Std. Deviation
EE1: Using LMS to teach writing skills is easy for me.	83	2.3253	1.01
EE2: My interaction with LMS will require less effort	83	2.6867	1.06
EE3: I find using LMS easy to teach writing skills.	83	2.2651	1.04
Overall, all mean score		2.4257	0.66

3.8. Social influence

Descriptive statistics showed that teachers' behavioral intention is not influenced by their colleagues or friends, but it is influenced by the support of the Ministry of Education. This means teachers' behavioral intention to use LMS platforms would increase if the Ministry of Education supports its use. Besides, the overall mean of the social influence construct revealed that (SI) is the most significant predictor of teachers' behavioral intention. Table 11 below comprises

four questions related to the social influence construct. As can be seen, all the mean scores and standard deviations are close to each other. The lowest mean score is (SI3: $\bar{X}$= 2.5904 SD= 1.16), while the highest mean score is (SI1: $\bar{X}$ = 2.9036; SD= 1.17), which means that teachers tend to agree that the Ministry of Education and the stakeholders support the use of LMS platforms; the support of the ministry of education and other stakeholders influences teachers' behavioral intension to adopt the technology. However, teachers' perceptions seem not to be influenced by the views of their colleagues at work.

Table 11 Descriptive statistics for social influence.

Descriptive Statistics			
Social Influence	**N**	**Mean**	**Std. Deviation**
SI1: Stakeholders (e.g., ministry of education, policymakers...etc.) have been supportive of the use of LMS in teaching.	83	2.9036	1.17
SI2: My social contacts (e.g., friends, relatives, colleagues ...etc.) think I should use LMS in teaching.	83	2.6867	1.27
SI3: My colleagues at work think I should use LMS in teaching.	83	2.5904	1.16
SI4: There is a general trend toward using LMS in education, so I believe I should use LMS in my teaching.	83	2.8434	1.06
Overall mean score		2.7560	0.94

3.9. Facilitating conditions

The results showed that teachers agree they have the necessary resources, like electronic gadgets and internet access. Besides, the results confirmed that teachers are skillful at using the LMS platforms and have no issues with the new technology. Therefore, facilitating conditions significantly predict teachers' behavioral intention to adopt LMS.

There are four questions related to facilitating conditions construct. The result in Table 12 revealed that the lowest mean score is (FC4: $\bar{X}$= 2.0000 SD=.84), while the highest mean score is (FC2: $\bar{X}$ = 3.1325; SD= 1.23), which means that the teachers agree that they have electronic gadgets to use LMS platforms in teaching, yet item FC4 with a standard deviation of (SD=,84102) is closer to the mean, which means that most teachers agree that they are skillful at using them LMS platforms and have no issue using them.

Table 12 Descriptive Statistics for Facilitating Conditions

Descriptive Statistics			
Facilitating conditions	N	Mean	Std. Deviation
FC1: I have internet access to teach writing skills through LMS.	83	2.9880	1.22
FC2: I have the necessary electronic gadgets (e.g., laptop. Smartphone...etc.) to use LMS.	83	3.1325	1.23
FC3: I am knowledgeable enough to use LMS in teaching writing skills.	83	2.8916	1.09
FC4: I am skillful at using LMS to teach writing skills.	83	2.0000	0.84
Overall mean score		2.7530	0.87

3.10. Behavioral intention

This construct measures teachers' behavioral intentions to use LMS platforms to teach writing skills to their students. It is well noted in the literature that behavioral intention and actual use are similar. That is, behavioral intention predicts the actual use. Results showed that teachers predicted using LMS to teach their students writing skills. Therefore, it can be concluded that teachers' behavioral intention strongly predicts the actual use of LMS platforms.

Table 13 below provides a descriptive analysis of the teachers' behavioral intention to use LMS platforms to teach writing skills. All the mean scores and standard deviations are more or less the same for all the questions in the behavioral intention construct. The highest mean score is (BI2 : $\bar{X}$ = 2.1446, SD= .73), while the lowest is (BI3 $\bar{X}$ = 2.0045, SD= .89).   which means that most teachers predict that they will use LMS platforms to teach writing skills to their students.

Table 13 Descriptive statistics for Behavioral Intention.

Descriptive Statistics			
Behavioral Intention	N	Mean	Std. Deviation
BI1: I intend to use LMS to teach writing skills in the future	83	2.0482	0.81
BI2: I predict to use LMS to teach writing skills in the future.	83	2.1446	0.73
BI3: I plan to use LMS to teach writing in the future	83	2.0045	0.89
Overall mean score		2.1124	0.74

4. Implications and Conclusion

This study has some pedagogical implications for all the stakeholders in the education sector. Undeniably, LMS integration will have an added value in the learning and teaching processes, backed up by previous research studies in the field. LMS has the potential to revolutionize and bring a wind of change to our educational sector. With all the flexible instructional tools available for teachers and learners on LMS platforms, students can learn at their own pace, especially when it comes to learning and teaching writing. The latter is time-consuming and energy-draining for teachers and students because of the metacognitive processes required.

LMS is, therefore, an outlet for teachers to make this activity more appealing and more engaging to the learners to help them attain the ultimate goal of becoming influential writers. Further, adopting LMS to teach writing activities is time efficient as it saves more time for teachers in the classroom. Moreover, adopting a hybrid type of education has become necessary to immunize our educational system against any potential interruption and disruption of the school year and to ensure the continuity of course delivery during pandemics and unexpected curfews.

Effective integration of LMS in education cannot materialize without acknowledging the teachers' central role in this equation. This study has some implications for teachers. As previously mentioned, Morocco has invested colossal budgets to modernize the educational system through many projects, including the MARWAN project and the GENIE program. The MARWAN project aimed at connecting Moroccan universities, thus allowing the dissemination of academic knowledge among these educational institutions in higher education and providing them with low-cost Internet access. The GENIE program aimed at equipping all Moroccan high schools with computers and internet-connected multimedia rooms.

 Additionally, teachers benefited from training on how to use ICTs in teaching effectively. These substantial programs and other ICT programs laid the foundation for ICT infrastructure in the educational sector, confirmed by facilitating condition and effort expectancy constructs, in which teachers agreed that they have the necessary electronic gadgets and have no issues related to using LMS in their teaching. Besides, it was also found that social influence significantly influences teachers' behavioral intention to use technology in mandatory settings. This means teachers would adopt the LMS platforms if the Ministry of Education supports and recommends using them.

Understanding the factors that affect teachers' acceptance and use of technology is an overarching issue in technology integration. The more we know about the leading factors to the acceptance and use of technology, the more we guarantee the effective integration of technology. Moreover, raising all the stakeholders' awareness (teachers, the Ministry of Education, educators, parents…etc) of the determinant factors affecting LMS integration and the merits students can get from LMS platforms is likely to yield a better and more effective integration. So, conducting awareness campaigns that would tackle this topic in depth is paramount.

Compliance with ethical standards

Disclosure of conflict of interest

The author declares no conflicts of interest and takes full responsibility for the paper's content and writing.

Statement of informed consent

All individual participants included in the study provided informed consent.

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