T I E Journal
Volume 2 Issue 2, 2024
http://ijtie.com/v202/n72
ISSN: 2820-7521

The International Journal of Technology, Innovation, & Education

The Impact of Digital Tools on Learning: A Case Study from FEM-USMS in Morocco

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Received: May 06, 2024; **Accepted**: May 25, 2024; **Published**: June 01, 2024

Abstract

The use of information and communication technologies (ICTs) in Moroccan university classrooms has been boosted by the COVID 19 health crisis. Higher education has seen the emergence of digital platforms and e-learning. Digital technology is at the heart of the Moroccan government's major concerns, and is transforming and developing educational practices to teach differently and increase learning opportunities and access to knowledge for all. The current challenge is to take the digital plunge and offer a more interactive, immersive form of education, encouraging students to participate more actively. Digital technology makes it possible to create new learning situations to develop specific skills. With this in mind, and following the strengthening of face-to-face teaching, the Faculty of Economics and Management at the Sultan Moulay Slimane University (USMS) in Beni Mellal has embraced this dynamic transition to digital by offering students a wide range of rich content via its digital teaching platforms to ensure teaching performance and continuity. This raises two questions: To what extent could educational platforms be a source of educational innovation and facilitate access to knowledge? And what contribution could they make to the individualised regulation of learning and student support? This study investigates how digital technology enhances the educational experiences of students in the Economics and Management stream at FEM-USMS in Beni Mellal. By analyzing student responses to a comprehensive questionnaire, the research aims to understand the perceived benefits and challenges of digital technology and its impact on academic performance. The findings provide valuable understandings into the role of digital tools in higher education and suggest strategies for optimizing their use in Moroccan universities.

Keywords: ICTs, e-learning, digital technology and knowledge.

El Kotbi, M. (2024). The Impact of Digital Tools on Learning: A Case Study from FEM-USMS in Morocco. *The International Journal of Technology, Innovation, and Education*, 2(2), 66-84. https://ijtie.com/v202/n72

1. Introduction

From the outset, new information and communication technologies (NICTs) have been seen as a veritable digital revolution, bringing about major upheavals in all areas (Balancier & Poumay, 2006; Belafhaili et al, 2020, Briñez-de León et al, 2024). Numerous decisions have been taken over the last decade to make Morocco an attractive and competitive digital territory (Digital Morocco Plan 2013, Digital Morocco Plan 2020, and National Digital Strategy 2030). The efforts made around these strategic plans have been significant for some time. We are therefore witnessing a very significant development in terms of the Internet penetration rate in Moroccan households, which has risen from 25% at the end of 2010 to 83.4% at the end of 2022 (National Telecommunications Regulatory Agency ANRT, 2019).

Faced with this trend towards digitalization, information and communication technologies have become increasingly present in all areas (Bibeau, 2004; Clark, 1998; Tiwari et al, 2023). The field of education and training, and higher education in particular, has been no exception, with the Ministry of Higher Education, Scientific Research and Innovation having for some time now initiated a new dynamic aimed at improving the quality of higher education through the introduction of institutional measures to generalise the use of digital technology in the teaching/learning of different disciplines (Nelsona et al, 2020; Pennington et al, 2024). Alongside these strategies, which have been developed in universities and other higher education establishments, teaching platforms have been created to provide students with a hub of documents, courses and information. Teachers also have the opportunity to record their lessons in the form of video clips, MOOCs (massive open online courses) or digital media. Moreover, the use of these teaching platforms was more or less a priority, with the exception of a certain number of establishments, until the health crisis (Covid 19 pandemic) made it an undeniable emergency (ERNST, 2008; Suciu et al, 2021; Ali et al, 2022). It is with this in mind that *Abdellatif Miraoui*, the Minister for Higher Education, Scientific Research and Innovation, has stated that: “Digital is a cross-cutting theme that affects all areas of life”. (Abdellatif Miraoui, 2023)[1].

In the space of a few months, the use of educational platforms has rapidly moved from a distant vision to a concrete obligation following the accelerating effect of the pandemic (Lollia & Issaieva, 2020; Pennington et al, 2024). As a result, profound transformations in the ways in

[1] *https://www.medi1news.com/fr/tag/Abdellatif-Miraoui*

which knowledge and learning are accessed have been brought about, calling for new learning methods that are largely reflected in a fundamental change in the role of the teacher and the student, in the way teaching is structured and in the way learning is conceived (Karsenti, 2006; Karsenti & Ngamo, 2007; Alpert et al, 2016; Tautz et al, 2021). In order to keep pace with this technological change in higher education, generate a new dynamic and encourage students to use educational platforms as a means of acquiring autonomy in their learning, it was necessary to assess the impact of using educational platforms as a means of support and individualised regulation of learning (Sandika et al, 2024). With this in mind, we carried out a field study with students in the Economic Sciences and Management stream at the Sultan Moulay Slimane Faculty of Economics and Management in Beni Mellal. The main concern was to establish a certain continuity between the learners' experiences and the university, and thus to highlight the validity of using ICT in the educational context (Hillmayr et al, 2020; Martoredjo, 2023).

We therefore formulate the following questions: To what extent could educational platforms be a source of educational innovation and facilitate access to knowledge? And what contribution could they make to the individualised regulation of learning and student support?

To provide some answers to these questions, this study is based on a methodology combining qualitative and quantitative approaches. Within this framework. We designed a questionnaire based on the results obtained using the nominal group technique (TGN), then tested it on a small sample and the final form was adopted and submitted to a sample of 160 students enrolled in the Economics and Management Sciences stream at the FEM Sultan Moulay Slimane in Beni Mellal. The questionnaire we administered enabled us to gather information on two areas: the impact of the use of ICT in training and the evaluation of the use of educational platforms at the Sultan Moulay Slimane FEM (USMS) in Beni Mellal as a means of supporting and regulating learning. We used electronic means to distribute our questionnaire. A total of 154 questionnaires were received and validated. In the context of this work, we shall first present the general context in which this project took shape and made sense, the assessment of the strategies for the digitalisation of higher education undertaken in Morocco and the main challenges and issues involved in the use of these teaching platforms in Moroccan higher education. Secondly, we will outline the methodological framework adopted to conduct this research in accordance with current scientific standards, the field survey and, finally, the results of the data analysis.

2. The digital transition of Moroccan higher education

Against a backdrop of globalisation and competition between national economies, everyone agrees that students and future project leaders need to take full advantage of the era of digitalisation (Bouchaib, 2018). Since the 2000s, Moroccan higher education has undergone a number of reforms and upgrading programmes to meet the many challenges facing the sector, namely: the massification of open-access courses and the arrival of a new generation of 'digital natives' (generation Z) who have mastered these new technological tools and tend to use them outside the university campus (Endrizzi, 2012). This shift towards digital technology has also brought about more or less remarkable changes in content, and has led to the emergence of different ways of teaching (Chekour et al, 2014). We are now witnessing the use of information and communication technologies as a means of mediating multiple pedagogical models and mediatising several types of course, or even training (ERNST, 2008).

Thus, as opposed to entirely face-to-face training, the literature on teaching practices and the ways in which new technologies are deployed in higher education makes it possible to distinguish two characteristic models of learning distributed by technology, whether entirely or partially at a distance. This involves, on the one hand, completely online learning (e-Learning) which, along with the MOOC (Massive Open Online Course) and MOODLE phenomenon, represents the most significant form of digitalisation of the Moroccan university. In addition, this strategy of technological renewal has made it possible to develop a hybrid learning model, resulting from a combination of online and face-to-face training sequences (CSEFRS, 2018).

As part of the same drive to digitalise higher education, every Moroccan university now has its own digital platform enabling students to log on to their 'student' areas, which provide them with online courses, digital course materials, video clips of lectures recorded by their lecturers, as well as all the information they need about teaching news, calendars, timetables and so on. In addition, the numerous quantitative and qualitative strategies that have been carried out over the last two decades have all been aimed at bringing e-learning and distance education into line with international digital standards, in order to respond more effectively to the demands of the modern age.

2.1. Assessment of Morocco's strategy for digitising higher education

As part of a dynamic of pedagogical innovation in higher education, a number of reforms and upgrading programmes have been implemented over the last few decades, giving priority to

integrating ICT into the training provided at university level, while providing the necessary equipment and infrastructure (Alem Noureddine, et al, 2012):

The Education Reform (Law 0100), initiated in 2002/2003, introduced the "bachelor - master - doctorate" (LMD) system and gave universities educational autonomy. With regard to the digitalisation of higher education, this reform introduced the use of ICTs as learning and governance tools for all disciplines and in all higher education establishments. With a view to accelerating industrial development, the emergence project, launched in 2005, laid the foundations for a genuine digital policy. Previously, this had been the preserve of the major executive training colleges (Fizazi, 2019). Since then, Moroccan universities have taken on the task of training engineers in the fields of information and communication technologies and offshoring. The main objectives of the Emergency Programme (2009-2012) were to increase the capacity of universities, to revamp their teaching methods and to promote scientific and technical research, with particular emphasis on continuing training for teaching staff. In the same vein, universities are obliged to equip themselves with a Digital Working Environment (ENT) and to have a clear strategy for integrating ICT into university teaching practices.

The main objective of the 2015-2030 reform is to establish an education system whose main pillars are fairness and equal opportunities, quality for all and the promotion of the individual and society. In the same vein, a roadmap has been put in place to put digital technology at the service of university transformation, with a view to tackling the weaknesses in higher education and making universities more attractive in terms of: the quality of their training, innovation, governance and transparency. Similarly, distance learning, MOOCs, hybrid teaching, online continuing education, e-governance, etc. are at the heart of this new strategic vision (Higher Council for Education, Training and Scientific Research, June 2019).

Framework Law 17-51 also emphasised the importance of integrating ICT into education. This obliges the government to take all necessary and appropriate measures to enable education, teaching, training and scientific research establishments in the public and private sectors to develop teaching, learning and research resources and facilities, by:

- Increasing the adoption of ICT to improve the quality and cost-effectiveness of teaching.
- Creating laboratories for innovation and production of digital resources and training specialists in the field.
- Gradually integrating online teaching and ensuring its widespread use.

This national desire to restructure the field of education and training has been accompanied by the launch of several programmes and projects in the Moroccan educational context: GENIE, the INJAZ programme, the LAWHATI programme, the MARWAN programme and the E-SUP programme. Most of these programmes have focused on three key areas: firstly, upgrading infrastructure and equipment; secondly, widening the scope of Internet access; and thirdly, organising workshops and training courses for the various players in the education system to introduce them to the use of ICTs in education. In addition, the first e-Learning initiatives were launched in Morocco in 2014 as part of Code Project Learning. This initiative led to the establishment of the Moroccan Virtual Campus, the aim of which was to develop university resource centres for the transfer of ICT and e-Learning skills. In the same perspective, and in order to take full advantage of digital leverage, a new digital platform dedicated to online courses: "Morocco Digital University" (Digital Morocco University) will see the light of day. The first of its kind on the continent, this platform aims to provide its users with massive open online courses (MOOCs) and small group private online courses (SPOCs) or any other form of online course with a view to: “fostering innovative learning that necessarily involves digital.” (Amzazi, 2019)[2].

The Moroccan platform offers a variety of MOOCs taught by Moroccan universities on subjects so varied that anyone can benefit from them in an interactive way, adapted to the learner’s pace, anywhere and at any time. In the same vein, several universities are using the MOODLE platform to create communities learning around a wide range of educational content and activities. The platform is made available to teachers, administrators and students to provide them with a personalised learning environment by adding pedagogical and communicative functions between students and teachers, using discussion forums and chats.

2.2. Challenges and problems in the use of educational platforms in Moroccan higher education

It goes without saying that the development of the use of educational platforms in higher education has never been the result of a strategy predefined for this purpose by the universities, or by the ministry responsible. For the most part, it was a question of scattered initiatives that were at the root of the emergence of this wave of digital transformation. In the space of a few months, the use of teaching platforms in the space of a few months, the use of teaching platforms in higher education has metamorphosed into a concrete reality due to the accelerating effect of

[2] *https://www.maroc.ma/fr/actualites/lancement-rabat-de-la-plateforme-nationale-maroc-universite-numerique*

the pandemic. Forced to act with urgency, higher education players have more or less succeeded in taking advantage of it, despite the obstacles they have faced. Since then, there have been increasing calls for the use of educational platforms as learning mediators in higher education, even if at present they are only used as a complement to classroom teaching. In terms of educational provision, the use of educational platforms will contribute to the democratisation of education and promote equal opportunities by substantially narrowing the gap between students by transcending geographical boundaries and adapting content to students' individual needs and pace, particularly in open-access courses.

Similarly, the regulation and mediation activities offered via these educational platforms make it possible to ensure more effective educational continuity thanks to their ability to vary the types of resources offered to students: images, videos, sounds, etc., and to store the various classroom documents (resources, instructions, lessons, collaborative or individual productions, etc.). From a pedagogical point of view, the use of educational platforms is a real opportunity to transform teaching practices and one of the factors encouraging the emergence of a new field of research called “digital pedagogy”, which refers to: “All the human, technological and material resources dedicated to the learning of knowledge and skills that incorporate digital uses, whether face-to-face or at a distance via the Internet” (Economic, Social and Environmental Council, 2015) and which allows a mix of traditional face-to-face teaching approaches with new online or distance learning methods and tools, while giving students the opportunity to develop their autonomy and take responsibility as the main player in the learning process.

All these advantages have made digitisation an important component of the Moroccan educational landscape, both as an object and as a learning tool. However, numerous studies have been quick to show that these new ways of accessing knowledge and learning conceal a number of issues that define the challenges associated with this process of appropriation. In fact, the use of educational platforms comes up against three types of challenge, in terms of the human element, assessment and the credibility of certification:

- The first issue relates to the student and the ability of these systems to meet the requirements of all student profiles. In this type of learning, the student is alone with the learning material, which can be very simple or very complicated. In this sense, the teacher is obliged, on the one hand, to think about all the possible blocking situations

that the student may encounter and, on the other hand, to be aware of the diversity of the audience for whom the course is intended.

- The second type of issue relates to the assessment methods used when this type of system is employed. In many Moroccan universities, traditional assessments are being abandoned in favour of online questionnaires, whether in open access courses or in courses with a limited number of participants: Such an approach leaves room for doubt as to the degree of acquisition and validation of content.

- The third issue concerns the credibility of the certification obtained through this type of training. In this sense, it will be difficult to guarantee the credibility of courses such as those offered as part of MOOCs until they are incorporated into a university degree. In short, we can only assert that integrating the use of educational platforms as a genuine learning alternative in higher education is a challenge that requires in-depth consideration of the ways in which it can be implemented, while taking account of the specific contextual features of Moroccan universities. In this sense, it is indisputable that any research work aimed at answering questions about the use of educational platforms as a tool for individualised regulation of learning and student support has no chance of succeeding if it is not based on explicit experimentation.

3. Methodology

3.1. Definition of population and study sample

This phase presents the research methods and instruments that we will use to collect data in response to the questions asked and hypotheses formulated. We also specify the characteristics of the population on which we will study. Finally, we describe the data collection process and outline the data analysis plan.

The population subject of our research work is the students of the Moroccan university Sultan Moulay Slimane, the focused branch is economics and management. Furthermore, the survey was based on a sample of 160 students. With the use of the non-probability sampling technique: convenience sampling.

It should be noted that the Sultan Moulay Slimane University (USMS) of Beni Mellal currently has an educational platform designed and managed using MOODLE. The USMS teaching platform currently houses more than 120 courses, and is also a database for disseminating

teaching content (course support, corrected exercises, exams, teaching videos) produced by teachers in the various disciplines. Our diagnosis will focus in particular on the content provided via this platform as well as the digital content distributed via the YouTube channel of the Faculty of Economics and Management (FEM).

In this sense, this article aims to provide an assessment of the use of these educational platforms as a tool for individualised regulation of learning and support for students in the Economics and Management Sciences (SEG) stream of the USMS Faculty of Economics and Management.

3.2. Methods used for data collection

To answer our question and compare the theoretical framework outlined above with the reality in the field, we opted for a questionnaire survey combining qualitative and quantitative approaches in order to get to the heart of the matter. It makes it possible to mobilize the advantages of the qualitative mode as well as those of the quantitative mode. This behavior makes it possible to control the phenomenon studied in all its dimensions, because the two approaches are complementary rather than opposed. We began our work with an exploratory survey of the students concerned who provided us with preliminary information. This exploratory study allowed us to lay the groundwork, locate the problems, confront the populations that are the subject of our study and observe real problems. We collected a lot of information, especially content data. We then compared the data collected with the literature review to draw out the central problem and the research hypotheses.

For each hypothesis of our research work, we verified the related factors, the direction of the relationship and the results of the relationship. A quantitative study was conducted using an online survey. This was carried out in the form of an online questionnaire on Google, the principle of which is to put the questionnaire on an easily accessible electronic link, and which offers operational flexibility (this means that there is possibility of completing the questionnaire many times, above all, which allows the respondents to provide more complete data). We sent personalized messages including the questionnaire link to the respondents who make up our sample, we carried out follow-ups by email, telephone, and also by travel.

Our questionnaire consists of three parts. The first will give general information on our respondents, the second part will highlight the use of ICT in training and the third part will question, from the students' point of view, the use of the educational platforms of the FEM of Sultan Moulay Slimane as a means of supporting and regulating learning. With this in mind,

the questionnaire was distributed electronically to 160 students who had taken part in the experimentation of courses implemented on the educational platforms of the host institution.

The data collected during the quantitative study will be analyzed and processed using the IBM SPSS Statistics V21 software. Our questionnaire contains three types of measurement scales: 5-point Likert, closed and interval. The variable coding and entry stage was based on a methodical approach that respects the nature of the variables in the model and the types of analysis that we hope to apply for each variable. We started with the Principal Component Analysis (PCA) method, and then we mobilized diagrams, graphs and histograms in order to analyze our results obtained. Without forgetting that our two fundamental questions were asked and addressed in our questionnaire. Our questionnaire was validated by two main tests namely: Cronbach test and the validity test with respective percentages, 0.75 and 0.72.

3.3. Central question and study hypothesis

The purpose of this study is to examine the question of the integration of ICT and its uses, as well as its contribution as a means of regulating learning in the Moroccan university context. Our question can be formulated as follows: To what extent could educational platforms be sources of educational innovation and facilitators of access to knowledge? And what contribution could they make to the individualised regulation of learning and student support? This leads us to test the validity of the following hypothesis:

- *Exploiting the potential offered by distance learning platforms can improve student results by adapting them to the needs and learning pace of each student.*

3.4. Sample size

Several methods can be used to determine the size of the sample, but for our part we have opted for the random method based on the principle of random selection of the elements of the sample. From this point of view, any element of the target population can belong to the sample with a similar and common probability for all elements. We used the simple random method, with a sample of 160 students from a population of over 1,000 students enrolled in the Economics and Management stream, spread over the six semesters of the basic degree cycle.

The available sample meets the conditions of a random sample. It is also valid because there is a relationship between the sample and the population. This relationship lies in the fact that the students who make up the sample and the population have all benefited from online teaching

via the same educational platform designed to ensure continuity of teaching and to encourage distance learning.

4. Main results and discussions

4.1. Part 1: sociological profile

The sample selected for our study is made up of 61% girls and 39% men (figure 1), spread over the six semesters of the basic degree in French Studies in different proportions (figure 2). This sample obviously represents generation Z, since the age of the students in it is generally between 18 and 30, with a cumulative percentage of 88% (figure 3).

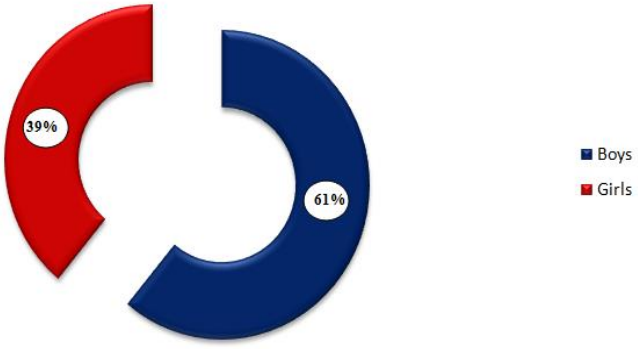

Figure 2. *Distribution of students by gender (Source: Questionnaire data)*

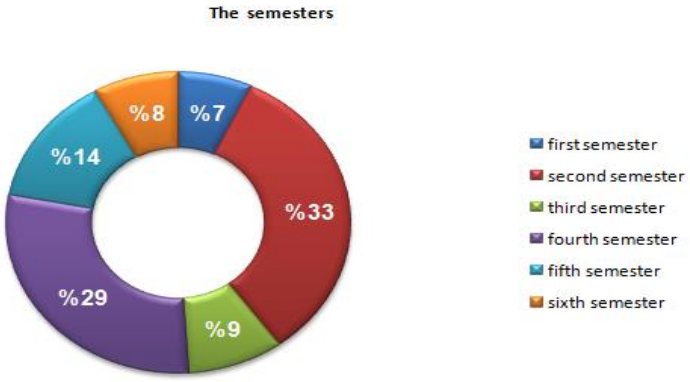

Figure 2. *Age groups of students surveyed (Source: Questionnaire data)*

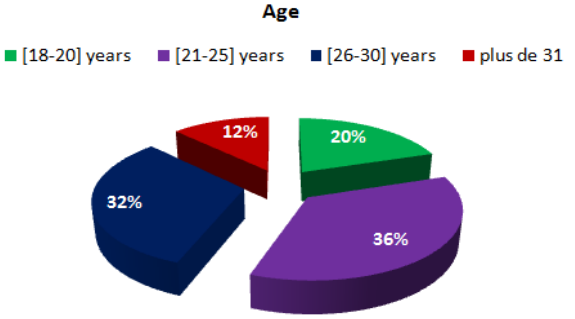

Figure 3. *Classification of students surveyed by level of study (Source: Questionnaire data)*

4.2. Part 2: the use of new information and communication technologies in educational training

First of all, the survey shows that all students use ICTs to access course-related information (figure 4). In this respect, 40% of students primarily use teaching platforms as a support, 23% use YouTube, 34% of students use social networks (15% Facebook groups, 15% WhatsApp groups and 4% Instagram groups) and only 3% of students say they do not use communication tools to access courses.

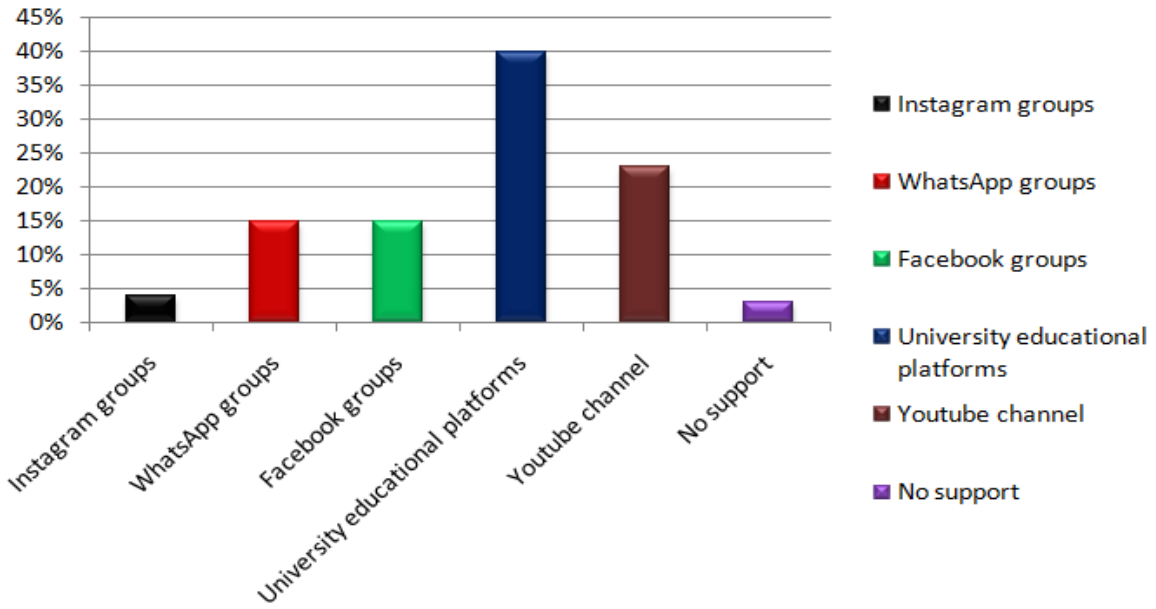

Figure 4. *Communication tools used by students to access learning content*

As the only available means of ensuring course continuity, 26% of students log on to the teaching platforms of the Faculty of Arts and Humanities on a daily basis to access the teaching resources available there. Half of the students said that they usually visit the platform more than five times a week, while 57% of our target group use the FEM's learning platforms more than 3 times a week (figure 5). These data show that students are making use of the tools that enable them to access the information and teaching materials that these platforms offer. According to student statements, use has intensified in parallel with the decision to halt face-to-face classes, previously as a preventive measure linked to the Covid19 pandemic. Faced with this constraint, the teaching staff at the FEM of Sultan Moulay Slimane University has enhanced the faculty's teaching platforms to date with various media in order to make a success of distance learning and ensure teaching continuity so as to combine these two tools.

From the figure 6, we can see that 77% of students use ICT as part of educational programmes imposed by the institution, while 23% use it for self-learning.

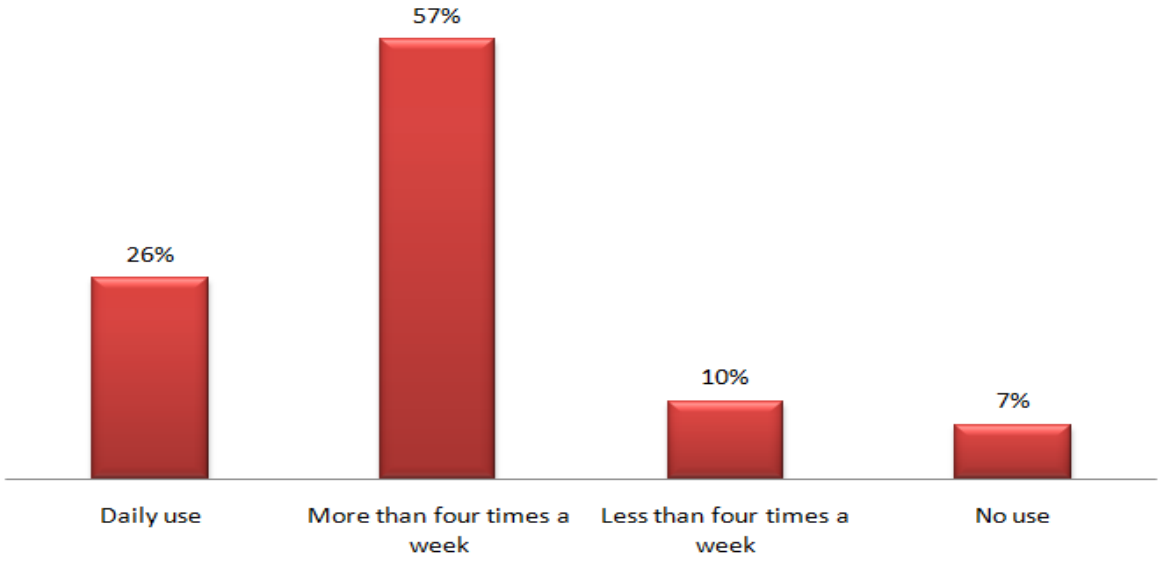

Figure 5. *Frequency of connection to the Beni Mellal FEM teaching platforms*

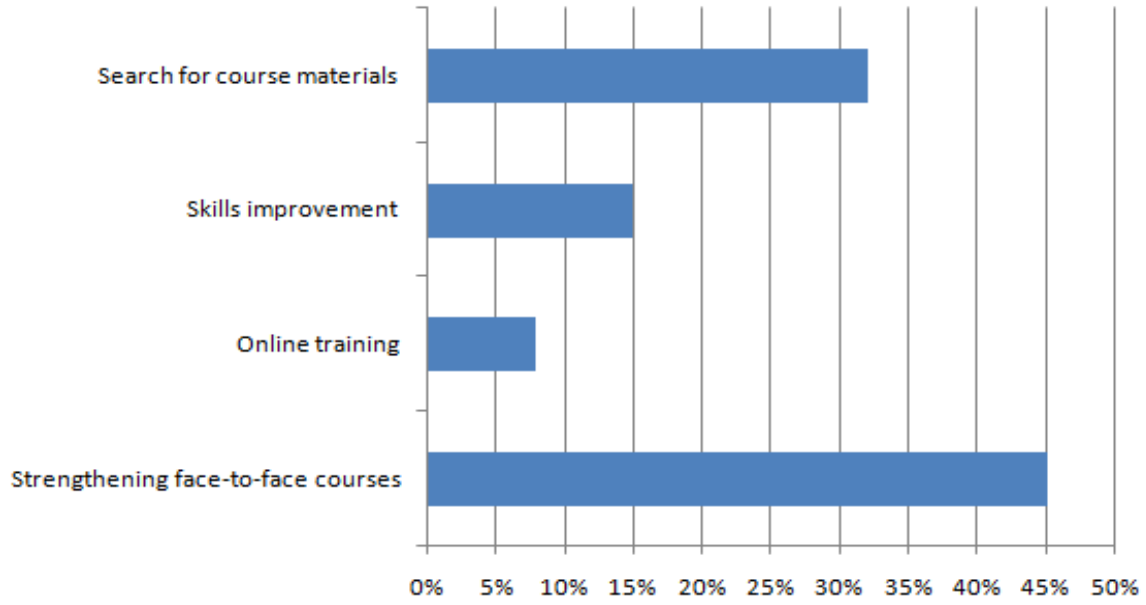

Figure 6. *The main reasons behind the use of the educational platforms of the FEM of Sultan Moulay Slimane of Beni Mellal*

4.3. Part 3: Evaluation of the use of educational platforms at the FEM of Sultan Moulay Slimane University as a means of supporting and regulating learning

When asked about the content provided by the learning platforms (figure 7), only 8% of students said that the content was insufficient or fairly sufficient. Students' satisfaction with the content of the platforms became clear when we looked at their level of satisfaction with the involvement of teachers in developing the content. According to the results, 79% of students are satisfied with the involvement and efforts made by lecturers to meet the requirements of distance learning (figure 8).

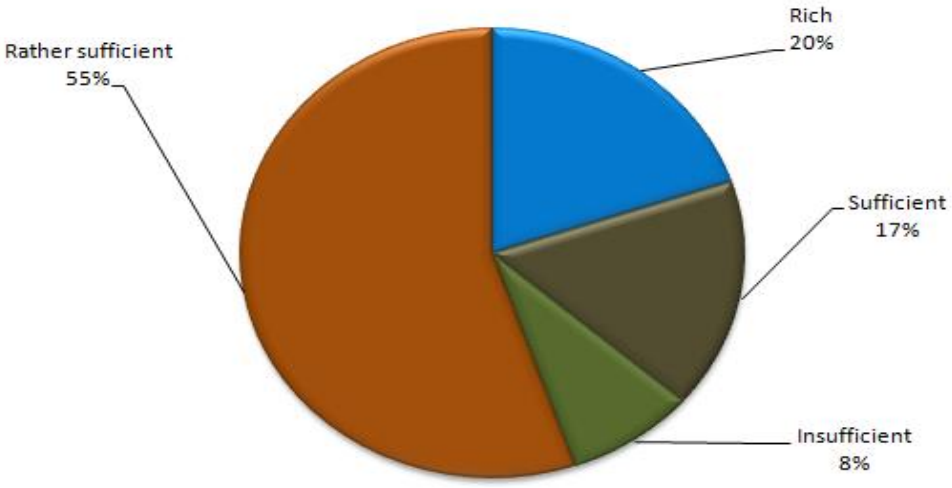

Figure 7. *Level of content provided by platforms*

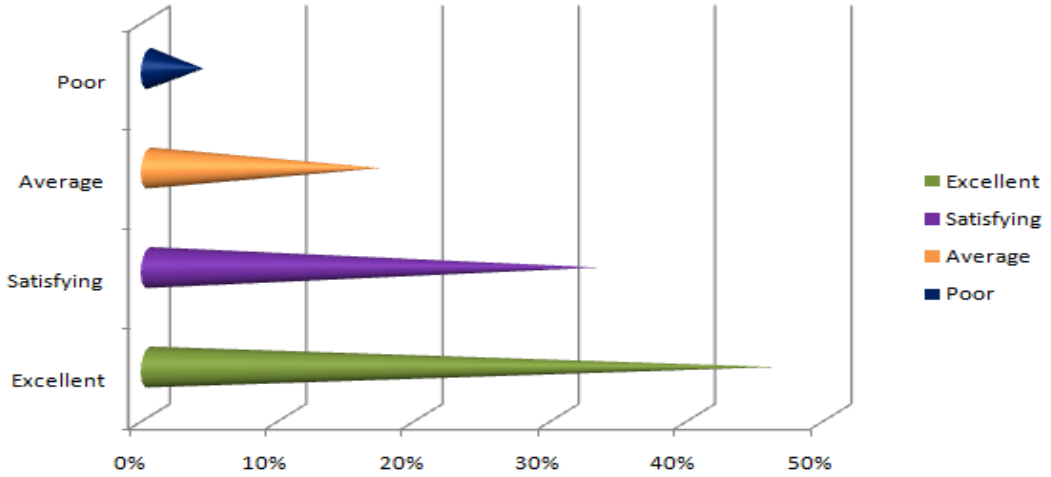

Figure 8. *Level of satisfaction with teacher engagement*

The majority of students agree on the role played by the educational platforms of the FEM of the Sultan Moulay Slimane University of Beni Mellal (figure 9), both in terms of educational continuity and in terms of support and individualised learning regulation. Many students have noted an improvement in their performance following the use of the content (lessons, video exercises, exam answers, etc.) made available to them via the various educational platforms (figure 10). In order to identify the pedagogical values associated with the use of educational platforms as a means of supporting and regulating learning, we used the "TGN" nominal group technique. Developed by DELBECQ and VAN DE VAN at the end of the 60s, this technique enables: "by ranking groups to produce and prioritise a list of ideas, opinions and solutions, in order to facilitate decision-making." (Grenier & Lagarde, 2000). Using this technique in this section enabled us to produce a collective point of view without the participants having to reach

a consensus, which reduces the sometimes-significant influence of a few members of the group of people consulted.

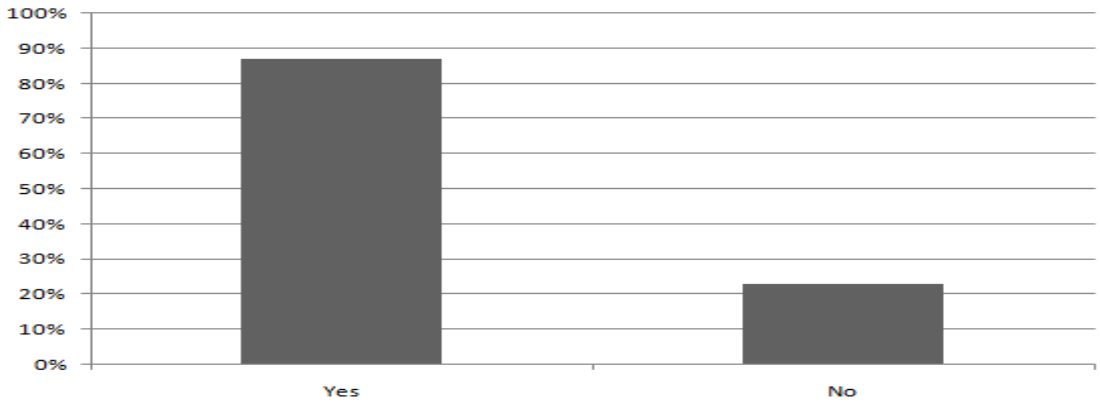

Figure 9. *The capacity of educational platforms to ensure continuity and educational reinforcement*

Figure 10. *Effectiveness of Teaching Platforms as a means of supporting and regulating learning*

We selected 7 ideas. These were ranked in order of priority, with values ranging from 3 (for the most important idea) to 1 (the least important idea). As demonstrated in table 1, student comments:

Table 1. *educational values linked to the use of educational platforms as a means of supporting and regulating learning (elaborated by the author).*

Statement	Ranking order, according to importance after the student vote
Very practical and empowering	3
Allows you to work at your own pace	5
The diversity of devices offered by educational platforms facilitates the assimilation of content	6
Allows you to ensure personalized regulation of learning	7
A tool for sustainable access to reliable scientific information	3
Allows students to complete exercises and consult additional resources for the course	2
The absence of interactivity with the teacher weakens learning	3

The analysis of the results of the TGN confirms the hypothesis that we put forward at the beginning of our research with regard to the regulation and support effect induced by the use of the teaching platforms of the Faculty of Economics and Management, Sultan Moulay Slimane of Beni Mellal. The results show that the majority of students are satisfied with the diversity of facilities offered by the teaching platforms, which makes it easier for them to assimilate the content. The students confirmed that the relocation of learning in time and space, the diversity of the systems on offer and the adaptability of the learning pace to their individual potential are all factors that have made the learning platforms a real alternative for personalised learning regulation. This individual adjustment is very difficult to implement in face-to-face courses, given the pressure that teachers have to cope with the density of the syllabus and the huge number of students, especially in open-access courses.

Furthermore, the participants in this survey agree that the main limitation of using these platforms is the lack of interactivity, which is a key factor in face-to-face teaching and even essential in distance learning. This means that it is impossible for students or teachers to talk to each other, which leads to a feeling of isolation and demotivation, especially when it comes to content that is more or less difficult to assimilate. We can also point out that a significant amount of knowledge can be obtained inexpensively through the distance learning process. However, it may have some problems such as lack of technical and technological support of online learning and student skills. Furthermore, the problem is related to the organizational support of the educational process which depends on the effectiveness of the school administrative system and teachers. Another problem caused by the lack of direct contact between students and teachers which creates difficulties for students to concentrate on their lessons and not feel helpless and alone, and teachers who cannot estimate the maximum acquisition of their students as if they were met face to face.

5. Conclusion

Although it is still very early to talk about a true digitalisation of Moroccan universities, the ambition remains to achieve a qualitative leap in learning methods and resources with a view to coping with the phenomenon of massification, which particularly affects open-access courses. Similarly, the health crisis linked to the covid19 pandemic has revealed the importance of digital technology and the many benefits it could bring to the education system in general. In this respect, several initiatives have been observed and implemented through the use of educational platforms to disseminate course content.

In this study, we have attempted to highlight the relationship between the use of educational platforms made available to students in the Economics and Management Science stream of the FEM at the Sultan Moulay Slimane University in Beni Mellal and the development among these students of individualised learning regulation skills, by enabling support and remedial activities to be extended into and out of school time and space. In this sense, these platforms offer a real opportunity to engage students in active learning (Tardif, 2006), during which regulation by the teacher gradually gives way to regulation by the students themselves.

Admittedly, the results obtained throughout this research are encouraging and have enabled us to show the interest shown by students in the content placed online on the FEM platforms, but we have to say that e-Learning will never replace the teacher, which is why this new teaching method should be considered as an added value that should be enriched and perpetuated in order to derive maximum benefit from it. To this end, we believe that it will soon be essential to carry out a more in-depth evaluation of the use of educational platforms in teaching/learning, by involving the various players in the university field in the experiment, in particular: students, teachers and administrative managers.

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