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## TEACHERS' ATTITUDES TOWARDS INTEGRATING TECHNOLOGY IN ENGLISH LANGUAGE CLASSROOMS OF BISKRA UNIVERSITY THROUGH MOODLE PLATFORM

### Abstract

E-learning has become one of the necessities of higher educational institutions in Algeria. To offer innovative teaching technologies, these institutions integrated Moodle Platform to get with the advent of e-learning technology. The present study explores the attitudes of the teachers towards the use of Moodle Platform as a pedagogical tool in EFL classes of Biskra University, and the challenges that they face to use such a platform. To collect data, a questionnaire was administered to teachers to know their attitudes regarding to the integration of Moodle as an electronic platform in the process of teaching and learning English in the classroom and the challenges they face. The results showed that teachers do not adequately master Moodle platform access, and they still urge the use of the traditional classroom-based teaching for the reason that there is a lack of training amongst these teachers as well their students to use this platform. Furthermore, based on the teachers' views, the students have almost no idea about this electronic platform. Yet, the challenges facing the implementation of IT skills in teaching and learning the English language are mainly administrative and pedagogical. They are represented in the lack of e-learning sources for all classes and the lack of training to use technology-based classrooms from both teachers and students

**Keywords:** attitudes, challenges, e-learning technology, Moodle platform, traditional classroom.

### 1. Introduction

Integrating technology in the language classroom means using technology sources such as computer and other mobile devices like smartphones, tablets, digital cameras, social media platforms, and other software applications connected to World Wide Web. In this sense, educational technology has made a shift towards language teaching to emphasize student engagement in a virtual interactive environment. Using the huge range of ICT tools, a student can be exposed to the four skills of communication and practice them with the help of his virtual peers. Despite of the increasing importance of the technology in language classrooms, there still exists a negative attitude towards integrating ICT tool to help the teacher promote his students' language use. This can be due to absence of pre-service teacher and in-service teacher training programs and lack of equipment.

Since technology is becoming increasingly necessary in all professional fields, Algerian higher educational institution calls for the rapid integration of technology in language classrooms. Urgent teacher training programs were organized and executed since 2016 that sought primarily to spot some light on the use of ICT in the new in-service teacher classroom. Meanwhile, enormous efforts are set through the websites of the Algerian universities to launch a new era of higher education where the teacher and the students can

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keep in touch through virtual environment more officially through their own university website.

The Moodle e-learning platform is a web link that is provided by Biskra University as well as in other Algerian universities. It is an electronic platform which is a virtual classroom used between the teacher and his students where they can get access to the programmed subjects, drills, tasks and assignments. Moodle platform can be a remedial to the lack of equipment if it is used effectively in the Algerian University.

## **2. Literature review**

The use of technology has become an interesting part in the English language learning and teaching process in higher education. It enables both teacher and students to promote language learning process and facilitates getting access to classroom events rapidly across time and place. The use of software and hardware forms of technology became an obligation in universities across the world, and the word ‘integration of technology into the classroom’ became, too, widely used amongst educators. In this sense, it is time to rethink about integrating ICT tools and the Internet connectivity in the language curriculum and classroom.

### **2.1. *Technology Integration in Education***

Information and communication technology is a tool that can be either a hardware or software. ICT equipment such as computers, smartphones and other tools cannot be workable unless it is linked to Internet connectivity. It is an important aspect of electronic learning. Tracy (1995) defined the Internet as being the international network of communication in which computers in a wide area network (WAN) can communicate with each other crossing the time and space.

Integrating technology means shifting pedagogy and the role of the teacher in a classroom. Technology integration, in other words, occurs when the students are not only using technology daily, but they have access, too, to various ICT tools to match the printed tasks to understand the lessons content deeply. Technology integration means using technology to promote the educational environment (Dockstader, 2008). By integrating technology in the classroom, the teacher and the student are supported by other tools as the computer and other ICT devices added to the paper and pencil tools to achieve their English language learning goals. Teachers, then, should use ICT tools just like a calculator, a pen or a chalkboard that facilitate teaching and learning process (Jackson, 2002). Well-integrated technology in language classroom by well-trained teachers can make learning a foreign language easy and approachable.

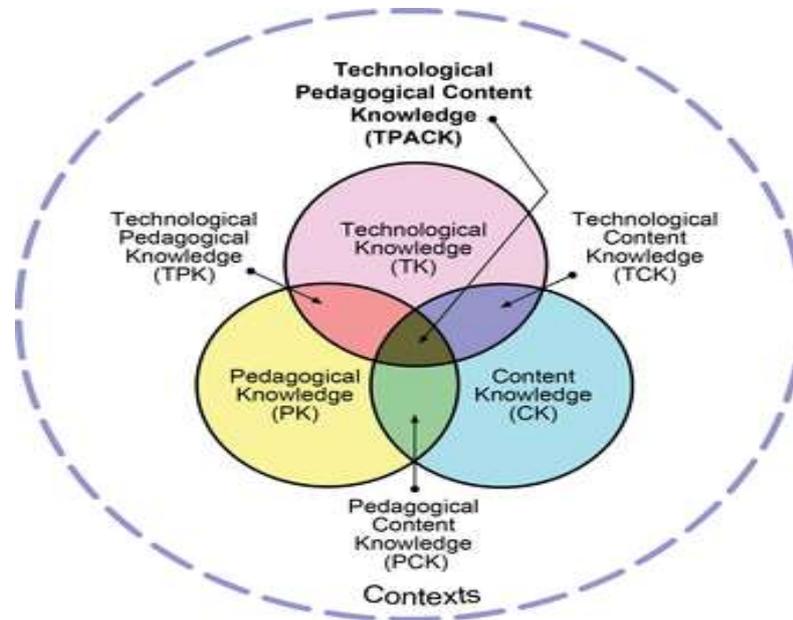
### **2.2. *Approaches to Technology Integration in Language Education***

This study departs from the technology pedagogical content knowledge approach that was depicted by Mishra and Koehler (2006) as a practical approach for integrating technology and the project based learning (PBL) approach as a suitable environment for technology integration. Both the teacher and the students need to set clear goals and objectives. O’Bannon (2002) claimed that teachers’ role is to classify objectives starting from the selection of instructional methods, media and evaluation.

On one hand, the TPACK approach, first established by Mishra and Koehler (2006), was an attempt to develop the understanding of teaching with educational technologies. Technology integration in teaching appears to be a techno-centric approach that ignores the interdependency between content, pedagogy and technology. Harris, Mishra and Koehler (2009) assume that approaches like the software-focused initiatives, demonstrations of sample resources, lessons and projects concentrate on the educational technology being used rather

than the students' learning needs and give little credit to two key domains which are content and pedagogy.

According to these scholars, the application of educational technology must comprehend more than the tools used in teaching to involve content and pedagogy (Harris, Mishra, & Koehler, 2009, p. 3), as shown in the following figure.



**Figure 1**

### The TPACK Approach

The TPACK framework provides an effective map to integrate technology in classroom. It “describes how teachers’ understandings of technology, pedagogy, and content, can interact with one another to produce effective discipline-based teaching with educational technologies” (Harris, Mishra, & Koehler, 2009, p. 4). They introduce the TPACK framework as three interdependent components of teachers’ knowledge:

1. *Content knowledge* which is the knowledge about the actual subject matter that is to be learnt or taught (Shulman, 1986).
2. *Pedagogical knowledge* that comprehends the deep knowledge a teacher should have about techniques or methods to be used in the classroom, the nature of the target audience, and the strategies followed in evaluating learners’ understanding of the subject matter.
3. *Technological knowledge* which recommends the understanding of information technology that enables a person to apply it productively on an everyday basis.

TPACK then consists of multiple interactions among content, pedagogy and technology. Isolating any component will be definitely insignificant. Learning about technology is then more different than learning what to do with it instructionally, and does little to help teachers develop knowledge about how to use technology to teach more effectively (TPK), its relationship to disciplinary content (TCK), or how to help students to meet particular

curriculum content standards using technologies appropriately (TPCK) in their learning. (Harris, Mishra, & Koehler, 2009, p. 11)

On the other hand, teachers must know that there is no specific technological solution that can function equally well for every class, course or pedagogical approach. In this sense, an understanding of the complex manner in which all three domains co-exist, co-constrain and co-create each other is recommended, so teachers have to develop fluency and cognitive flexibility.

Many scholars have considered this approach to be a productive medium for technology integration and efficacy in teaching as well as learning. In another side, project based learning (PBL), which was set by many scholars such as Thomas, Mergendoller, & Michaelson, 1991; Jones, Rasmussen & Moffit, 1997; Stoller, 1997; Thomas, 2000; Grant, 2002, is an instructional model that implies the following.

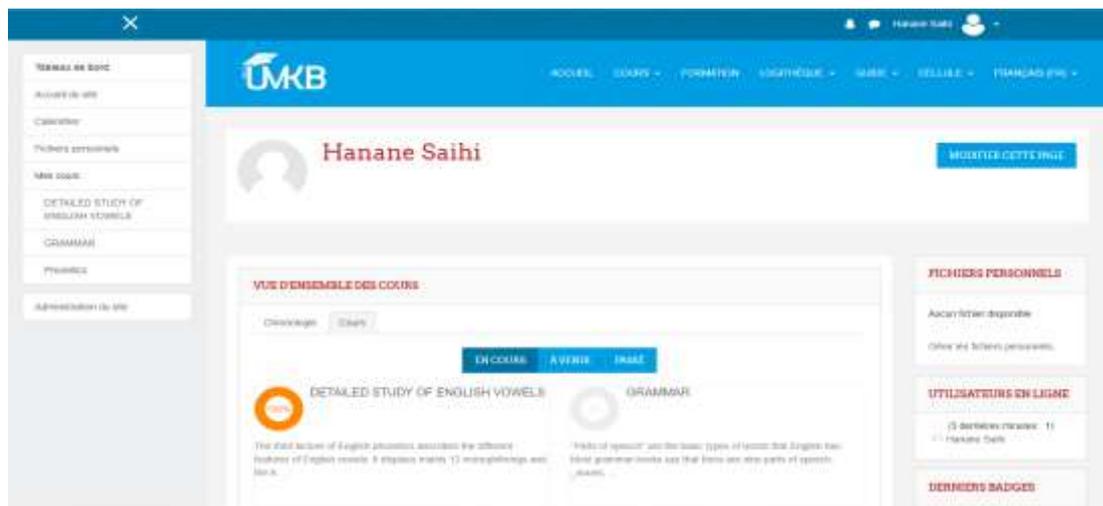
- An in-depth investigation of the topic under study.
- Stimulating higher level thinking skills by involving the students in performing projects using what they have learnt and creating their own meaningful products.
- Using authentic content and assessment.
- Involving the students in design, problem solving and decision making by exposing them to challenging authentic problems or questions.
- Learner-centered, as the teacher's role is facilitation and not direction.
- Developing learners' autonomy and motivation.

This approach is obviously appropriate to 21st century learning that uses authentic tools and resources, including technology. Accordingly, this study used both approaches to ensure efficient technology integration in the EFL classroom

### **2.3. Moodle Platform**

Modular Object-oriented Dynamic Learning Environment (MOODLE) is an online educational platform that can be a space for the learning environment for teacher and students. The Moodle system “constitutes itself as a virtual learning environment (VLE), where the learning process is completed online, representing a software open source and is destined to support a collaborative learning environment” (Oproiu, 2015, p. 427). Teachers can use Moodle to create and manage the courses and to create an interactive environment between them and their students. In the other side, students can collaborate and interact with their classmates to submit their assignment and to download their courses.

Moodle was developed by Martin Dougiamas in 2002 to help create online courses for educators around the world. It mainly focuses on interaction and collaboration in constructing the content. The first version of Moodle was launched in August, 2002, and it is now administered by the Australian Company, Moodle HQ, and funded by 84 Moodle Partner service companies all over the world. The Moodle platform is nowadays used by many learning environments such as education and business. To cope with these challenging technological advances, the Algerian University provided a Moodle platform to create a virtual classroom between the teacher and their students. Biskra University released the Moodle platform via its web server (<http://elearning.univ-biskra.dz/moodle/>). In 2018, Biskra University organized training days for teachers of all the university departments to train them how to use Moodle platform through its website.



**Figure 2**

Moodle platform via Biskra University

Due to the rapid technology integration, Moodle platform is used by higher educational institutions all over the world in order to create a central interface for e-learning. In this sense, virtual classrooms are created to ease students' access to documents in different formats, video conferences, assignments and tests. Weller (2007) stressed two roles of this e-learning platform: The first is that it enables the management of the content in terms of the courses and homework. It further ensures synchronized collaboration by chatting and video-conferencing and non-synchronized collaboration by forums and blogs. The second role is that it enables managing the courses and the student applied to the courses. Hence, Moodle classroom can provide plenty of tasks set by the teachers such as providing a wiki for the students, creating online forum for discussion, uploading documents, and providing quizzes and tests.

### **3. Research Methodology**

The study detected the teachers' attitudes towards the integration of Moodle platform since they had been exposed to certain training to learn how to use e-learning Platform. Therefore, the participants were mainly the trained teachers on how to use Moodle platform. To collect data a Likert scale questionnaire was administered.

#### **3.1. Participants**

The selection of participants was based on convenience sampling techniques; the available teachers who volunteered to take part in the study. Trained teachers (N=8) on Moodle platform have taken part in this research, and they responded to the questionnaire via email or in print. All the teachers are from Biskra University who are in-service teachers of English for more than one year. They are either hold a Magister or PhD qualified teachers.

#### **3.2. Procedures**

The questionnaire was divided into three sections. The first section was for the general information about the respondents. The second section was about the teachers' attitude towards the technology in general while the last section was about their attitude towards the use of Moodle platform in the English language classroom at a university level. The data collected were encoded using the Excel processing software package in form of Bar charts.

#### 4. Results

The eight respondents were affiliated to the English Language Section through a contest held each year by the University to recruit new teachers. These selected in-service teachers are mostly of more than 6 years in the teaching career. Most of them are Magister qualified teachers who are in the same time PhD candidates.

##### 4.1. General information

**Table 1**

Teaching experience

	<b>1 – 5 years</b>	<b>6 – 10 years</b>	<b>11 or more</b>
Teaching experience	3	4	1

**Table 2**

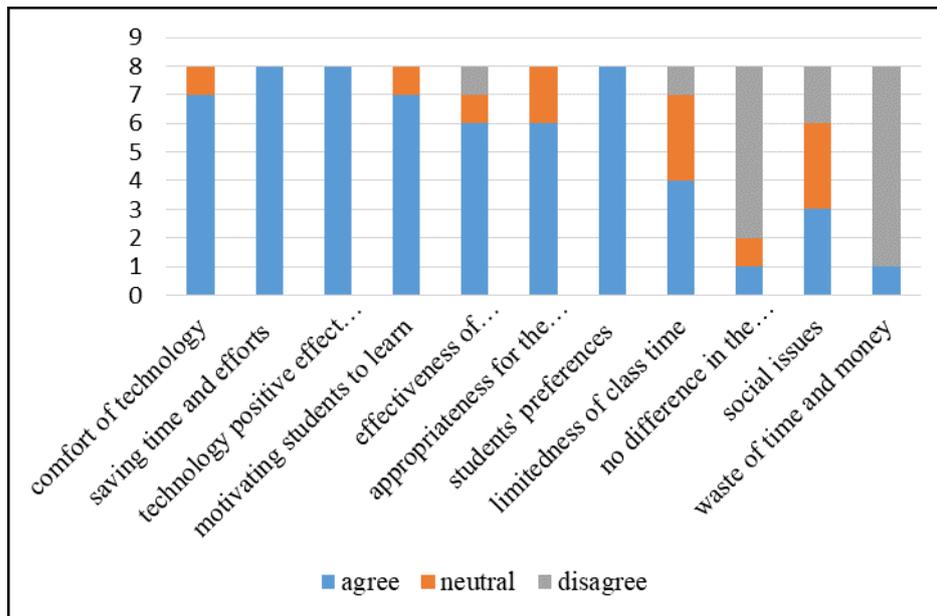
Teachers' Qualification

Magister degree	5
PhD degree	3

The above tables show the years of teaching career of the sample selected to respond to the questionnaire. Five out of eight teachers have an experience of more than six years. Five of them are Magister qualified teachers, and 3 are PhD qualified.

##### 4.2. Teachers' Attitudes toward Technology and Moodle Use and Integration in EFL Classrooms

From their responses to the questionnaire, teachers have shown their support to the technology integration in their classrooms, but they pointed out the lack of equipment (software) and the insufficient training of the use of educational technology.



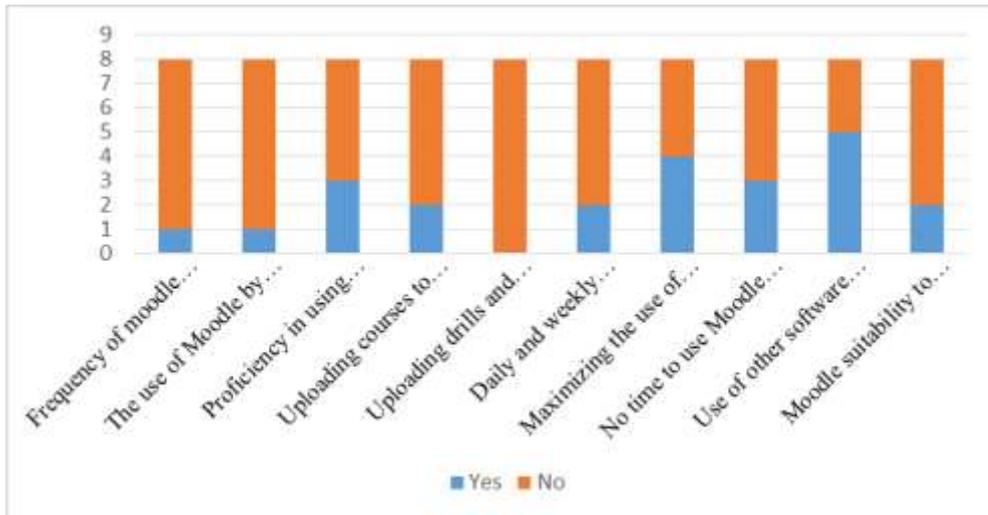
**Figure 3**

Teachers' Attitude towards Integrating Technology in the EFL **Classroom**

All the respondents agree with the fact that technology can save time and efforts, and can improve learning environment of the educational institution. They also agree that their students prefer to use technology devices such as laptops and smartphones in their classrooms. Of all the respondents (N=08), 07 teachers agree that technology makes their career much more comfortable, and it motivates their students to learn English. 06 teachers agree with the effectiveness of technology-based classroom if compared to the traditional one, and that it fits their subject goals and learning activities. Meanwhile, 04 teachers stress on the limited class time to use technology. They also disagree with the idea that technology can make no difference if it is integrated in the English language classroom. The 10<sup>th</sup> statement (cf. Appendix II) has fluctuant responses in terms of the society effect on implementing technology integration in EFL classrooms: 07 out of teachers disagree with the idea of its being waste of time and money; while 03 of the respondents (N=08) 03 agree, 3 remained neutral and 02 disagree. Always begin with the lowest rates and go increasing

**4.3. Teachers' Attitudes towards and the Use of Moodle Platform in EFL Classrooms in Biskra University**

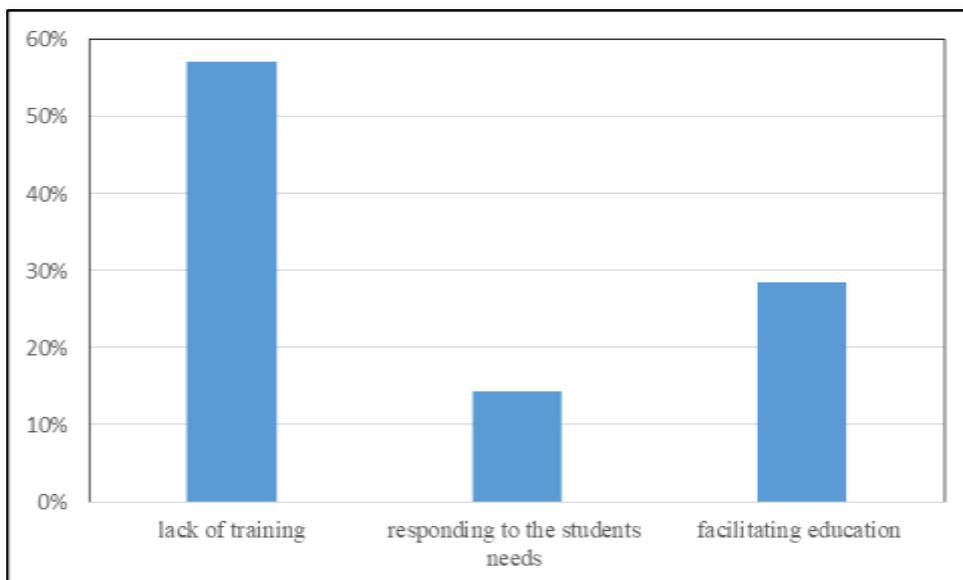
The figure below shows the teachers' attitudes towards Moodle platform in terms of its use and its fitness to their students. 7 questioned teachers support the use of Moodle platform but under certain better circumstances.



**Figure 4**  
Teachers' Attitudes towards the Use of Moodle Platform

Of all the respondents (N=08), 07 do not use Moodle platform frequently. They stress that their students also do not use Moodle platform and ignore its use. 05 of teachers assert that they are less proficient in using the platform; while the rest confirm that they need extra training.

Concerning uploading the courses via Moodle platform, 6 teachers do not upload any course. All the respondents do not assign any weekly or daily tasks via Moodle platform. Concerning teachers' trial to maximize students access to Moodle platform, there are equal responses between 'yes' and 'no'. 3 teachers agree that they do not have much time to get access to Moodle platform and that it does not suit their students' learning background. Yet, 5 teachers confirm that they use other software applications instead of Moodle platform. The questioned teachers further commented on the integration of Moodle platform.



**Figure 5**  
Teachers' Comments

Teachers do insist on training about the use of Moodle Platform. Hence, they state the necessity to cooperate with computing engineers to cope with technology advances. They add that using Moodle needs extensive training for both students and teachers with the provision of necessary tools and equipment. Based on the comment of one teacher, technology is very important in teaching, and since students are no longer motivated to use books for reading or taking notes and look for more interactive electronic environment, it is time for teachers to adapt themselves to students' interests rather than forcing students to follow a specific approach of learning. Another teacher adds that Moodle facilitates collaboration, and it copes with the new teaching methods as Competence-based Approach (CBA); while one of the teachers stressed that the practice of this platform needs time and effort on a frequent basis so that it becomes a teaching/ learning routine.

## 5. Discussion

The analysis of the teachers' responses at Biskra University reveals that although they are aware of the existence and importance of Moodle platform, they assert that time and lack of training hinder the adoption of Moodle platform. The teachers further expressed the students' ignorance of Moodle platform. The respondents expressed that using the electronic environment would be reasonable if there is a continuous training for both teachers and students. They are rather interested in interacting with their students on the platform in order to create a friendly electronic learning environment with an immediate feedback. The teaching staff's desire is to create a more active and a new teaching environment that provides a learning autonomy. The teachers call for extra material and facilities to ease the access to Moodle platform by the students and the teachers.

## 6. Conclusion

Moodle platform cannot replace traditional classroom; however, it can pave the way to access information. Furthermore, e-learning environment provided by Moodle can be accompanied by traditional English language teaching/learning. Moodle platform can be a support for English language teachers who seek to increase the quality of online courses for the students if the implementation of virtual learning environment becomes a reality in Biskra University for both teachers and students. Moodle platform is an innovative pedagogical software that can achieve better goals than traditional pedagogical tools can do for both teachers and students, but it needs more efforts and more time allotment from these two main actors.

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## Appendix

### Questionnaire

Dear colleagues,

We hereby invite you to participate in this study about your attitudes towards integrating technology in English language classrooms of Biskra University through Moodle platform.

Your knowledge and experience are important, and we would very much appreciate your cooperation.

#### I. General information

1. Qualification

Magister

Doctorate

2. Years of experience.

1-5

6-10

11 or more

3. Teachers' attitude towards integrating technology in EFL classrooms

Statements	agree	neutral	disagree
1. Technology makes me feel comfortable.			
2. Technology saves time and efforts.			
3. Technology makes university a better educational institution.			
4. It motivates students to study better.			
5. Technology-based classroom is more effective in teaching English than the traditional classroom.			
6. Technology fits my subject goals and language learning activities.			
7. My Students prefer to use technology tools such as laptops, smartphones, tablets, etc.			
8. Class time is limited to use technology.			
9. Technology will not make any difference in the classroom.			
10. Social issues can limit implementing technology at university.			
11. Learning about technology and its use is a waste of time and money.			

#### 4. Teachers' use of Moodle platform

<b>Statement</b>	<b>Yes</b>	<b>No</b>
1. I use Moodle platform frequently.		
2. My students use Moodle platform.		
3. I am proficient with the basics of Moodle platform.		
4. I upload my courses to Moodle platform to facilitate it access by my students.		
5. I upload drills and practices via Moodle platform.		
6. I assign daily and weekly tasks that support my curriculum.		
7. I seek to maximize the use of Moodle platform among my Students.		
8. I do not have time to use Moodle platform		
9. I use other software applications to assign tasks such emails, blogs and social media.		
10. Moodle does not suit my students' learning background.		

#### 5. Any further comments and suggestions

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