

Teachers' Perceptions of the Use of Technology and Innovative Educational Tools in Secondary EFL Moroccan Classrooms

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Abstract: *The present study aims to investigate EFL (English as a foreign language) teachers' perception about use of technology and innovative educational tools in Moroccan secondary schools. Participants in the study are EFL Moroccan teachers working at secondary schools. A questionnaire is used to collect data to identify technological tools used in EFL Moroccan classrooms, and to explore barriers and challenges teachers face in integrating technology in their English teaching. The data analysis results reveal that many educational technology tools are not used or underutilized in the Moroccan EFL classrooms.*

Keywords: Moroccan EFL, educational technology, EFL teachers' perceptions, barriers

1. Introduction

The importance of technology in EFL classrooms

Advances in Information and Communication Technologies (ICT) provides English teachers with ample opportunities to enhance their teaching practices, motivate learners, and make language learning fun and enjoyable experience. In addition, technology can offer teachers many new and innovative ideas to use in EFL classrooms. Findings from previous research show that ICT can positively affect learner's motivation and engagement, autonomy, and critical thinking.

Wang and Winstead (2016) believe that Digital language learners (DLL) should have opportunities to move beyond traditional and rigid barriers of traditional language teaching and learning. Instead, language should mirror informal learning modes as experienced via internet technology, computer games, social media, and mobile devices. Wang and Winstead (2016) further explain that broader access to knowledge enables learners to learn independently from formal school education. Self - educated technological innovators, such as Microsoft's Bill Gates, Apple's Steve Jobs, and Facebook's Mark Zuckerberg reached their levels of success by following nontraditional career paths counter to those prescribed by the norms of society. Their successes in discovering, creating, and innovating prompt researchers, educators, and learners alike to consider whether schools are taking the appropriate approaches towards cultivating tech giants in the field of education. Thus, a movement towards alternative patterns of learning and doing should be employed in order to move learning away from rigid boxes and enclosed spaces.

Pegrum (2009, p.5) affirms 'that technology and education have a tightly intertwined future'. Technology has changed the way languages are taught. Today's learners, who are living in the digital age, are comfortable with using smartphones, computers, tablets, etc. Educators and teachers should exploit this to support their learning and motivate learners. Teachers can make use of technology to find new ways of stimulating and engaging learners in the learning process. In fact, the rapid advances in technology necessities

that teachers need to develop new and innovative teaching methods and practices. "If we language teachers do not keep pace and adapt our practice then we risk being left behind in the current context of global communication and information access provided by IT resources" (Pennington 2010).

Wang and Winstead (2016) clarify that with increased computer access and the ability to go online, face - to - face classroom practice has changed. Increased usage of technology provides opportunities for multiple learning styles, and multiple modes of communication, interaction, and understanding. Innovative digital devices and platforms are enhancing foreign language teaching and learning in classrooms as well as creating new spaces inside and outside of the classroom (e. g., hybrid, flipped, online, home school). Authentic language exchange has become available through present - day digital media and devices that provide windows into virtual realms.

Indeed, teachers need to be "directly involved in resolving computer issues and deciding the best ways to make use of computer potentials for our own population of students" (Pennington, 2003, p.306) because "technology is no longer at the periphery of the ELT field, but at its centre, providing teachers with the means to enhance the teaching of languages in classrooms all over the world" (Motteram 2013, p.12).

Factors affecting technology integration in EFL classrooms

Despite the benefits of technology in EFL classrooms, educational technology tools are underutilized. To use Thomas's words "...the reality is that a rather limited percentage of any given group of educators, either in the school or university sector, consistently integrate technology to any great effect" (2009, p. xxi).

Researchers discuss a number of factors that hinder the integration of technology in teaching. Elfatih & AitHammou (2019) note that among the factors that affect the integration of ICT into language teaching and learning is

the teachers' personal characteristics such as age, working experience, and gender. They conducted a study investigating Moroccan male and female teachers' level of ICT integration in teaching English as a foreign language (EFL) in the public secondary schools in the Moroccan city, Agadir. Their analysis reveals no significant difference in using ICT in language teaching between male and female teachers.

One of the important factors that affect the use of technology in language teaching is the teachers' attitude. Teachers have different views regarding integrating technology in classrooms. While some are ready to embrace novelty and innovation, open to new methods that ICT offers, and willing to alter their practice to meet the changing needs of their learners, others still use the traditional way of teaching, and reluctant to try new methods. Wang and Winstead (2016) maintain that instructors across the globe feel less prepared and supported to teach with technology in classroom environments (Bilbatua & Herrero de Haro; 2014; Gallardo del Puerto & Gamboa, 2009; Jianli, 2012). Comparatively, instructors who feel more comfortable with digital media are more likely to utilize it (Bilbatua & Herrero de Haro; Wang, 2012).

Other factors that may prevent teachers from integrating technology into their teaching include lack of support from the administration, lack of training, and lack of facilities. Sargent & Pennington (2001) explain that a centralized curriculum is one of the contextual factors that prevent the marriage of language teaching and IT as it pressures against teachers' independent initiative and creativity. Hew & Brush (2007) clarified some barriers to using technology in the classroom, namely, teacher knowledge and skills, teacher attitudes and beliefs, and resource limitations.

Elfatihi & Ait Hammou (2021) classifies barriers to teachers' incorporation of ICT into teaching practices into 'teacher - level barriers' and 'school - level barriers'. 'Teacher - level barriers' include lack of confidence and experience with ICT which impacts teachers' motivation to integrate ICT into their English teaching, teachers' attitudes towards ICT tools, and teachers' resistance to change (some teachers are unwilling to change their teaching style, and reluctant to learn new and innovative ways to teach the language). 'School - level barriers' includes lack of effective training in ICT, lack of technical support in the classroom, lack of or poor inclusion of pedagogical aspects in ICT use, lack of competencies and skills required for effective integration of ICT in teaching, lack of time, scheduling difficulties, lack of sufficient ICT tools and materials, lack of quality ICT hardware and software, technical problems, poor administrative support, and poor funding.

Teachers' training is an important factor. Many teachers do not get enough training in using technology in language teaching. Researchers (e. g., Lam, 2000; Yildirim, 2000) found that teachers, due to training programs, improved their capabilities with computers, gained confidence with technology and expressed the view that teacher development programs influenced their attitudes toward technology positively.

Schechter, E. L. (2000) examined the levels of educational computer technology integration and stages of instructional practices in elementary schools in a selected New York City school district. The results indicated that hardware problems, time - management problems, inadequate staff development, and software problems accounted for 89% of all responses to questions on factors that hinder computer implementation. Not owning a computer and lack of technical support were also mentioned often. Technophobia was cited 1% of the time.

The concept of innovation and technology

"In recent years the concept of innovation, particularly in education, has been closely linked to technology. Yet, innovation is about more than that; it is about using technology creatively to empower students, to foster new skills, and to transform education."

(UAE Public Policy Forum 2017, p.24)

The term 'innovation' brings about new teaching methods and practices. Carless David (2013) uses the term 'innovation' interchangeably with the term "change." Examples of innovation in language education over the past few decades, according to him, includes new pedagogic approaches, such as task - based language teaching; changes to teaching materials; technological developments, such as computer - assisted language learning; and alternative assessment methods, such as the use of portfolios. On his part, Fullan (2007) notes that innovation includes three stages: initiation (deciding to go ahead with an innovation), implementation (attempting to put the innovation into practice), and institutionalisation (seeking to achieve sustainability).

Innovation is linked to technology as the latter can offer new innovative methods that cater for the different learning styles of learners. Teachers can find new ways to motivate their learners. They are advised to look for more effective teaching methods that promote their students' learning. For example, teachers can support their English teaching by creating innovative mobile phone applications or creating videos that suit their students' learning styles, age and level.

To compete in the global marketplace, we need innovative classrooms which encourage the 21st century skills such as learner autonomy, critical and innovative thinking, communicative leadership skills, analytical, problem - solving, decision - making skills.

Innovative educational tools

Digital literacy and mobile learning

Motteram, G. (2013) highlights the interrelation between digital literacy and mobile learning. Digital literacy can be defined as ' [a] person's ability to perform tasks effectively in a digital environment. . . Literacy includes the ability to read and interpret media, to reproduce data and images through digital manipulation, and to evaluate and apply new knowledge gained from digital environments' (Jones - Kavalier and Flannigan, 2006, p.1). Motteram, G. (2013) affirms that Mobile Assisted Language Learning (MALL) is one of the most interesting emerging types of technology enhanced learning, especially now that mobile devices are

carried by more and more people every day. Indeed, a mobile phone 'has evolved from a simple voice device to a multimedia communications tool capable of downloading and uploading text, data, audio, and video – from text messages to social network updates to breaking news, the latest hit song, or the latest viral video' and that it can also 'be used as a wallet, a compass, or a television, as well as an alarm clock, calculator, address book, newspaper, and camera' (Kelly and Minges, 2012, p.11).

Wang and Winstead (2016) elaborate a variety of new innovative educational tools that are very effective and useful in English teaching:

- Content management systems (CMS) such as Moodle, Blackboard, E - learning, BrainHoney are widely utilized for middle school up to university language courses. These CMSs extend learning time and allow students to organize their assignments and track learning goals flexibly outside of class (e. g., taking online quizzes, using discussion boards, journals, and audio - visual - text materials). Moreover, these CMSs allow students to use laptop and smartphone to access course syllabi, calendars, discussion board, and their gradebook anywhere and anytime (Wang 2012).
- Google Docs (both the teacher and students can edit the same document online simultaneously or asynchronously)
- Digital and video cameras, as well as mobile phone cameras, students can create movies and dramas. Video editing software also furthers their New Literacies skills as they create audio, video, and graphics, and add subtitles, transitions, and animations.
- A variety of websites and software, e. g., nawmal, Animoto, allows students to become 3D cartoon figures, or create personal animations and movies, respectively. These types of technologies are, however, underutilized in the foreign language classroom.
- The Smartboard, an interactive whiteboard, motivates students' learning through interaction and promotes willingness to engage in classrooms. Its interactive projection display creates scenarios for language learning (Saine, 2012). Digital markers allow multiple learners to collaborate during storytelling. Notes on the smartboard can be saved on computer in digital format (Al - Saleem, 2012).
- Mobile devices such as the iPad and software apps make language learning portable. Using Pleco apps on a smart phone, Chinese language learners, especially study abroad students, can handwrite unfamiliar Chinese characters on a touch screen and look up the meaning in an online digital dictionary. Online dictionaries (e. g., Pleco, PowerWord) allow students to hear how a new Chinese character is pronounced, see animation of how it is written, read examples of how it is used in sentences, as well as watch videos of how it is used in real life situations. Language cellphone games (e. g., ChineseSkill) enable students to learn vocabulary, pronunciation and sentences, and entertain the learning experience. Game and quiz methods widely used in TV programs in the past are now being utilized to promote learning and assessment in language classrooms. Through smart phone text message polls and mobile voting (e. g., Kahoot), instructors can engage students in

sharing their opinions about topics, quickly assess students' learning, and display percentage results on the screen for immediate feedback. With mobile voting, students can find out whether they answered the question correctly and the teacher can also review global classroom student performance results.

- Social media (e. g., Facebook, Twitter, LinkedIn, Google Plus+), blogs, video - sharing websites (e. g., Vimeo, YouTube) and website builders enable students to absorb vast audio - visual information as well as display their creative work. The video chat and text chat function allow foreign language learners to partner with native speakers outside the country and practice speaking online. Wireless internet and smart phone camera also allows learners to stream video images.
- Website content builders such as Weebly, Wix, Wordpress allows instructors and students to easily develop websites without programming skills. Embedded functions and templates for video, document, audio, discussion board, and text display enable users to develop personal websites based on their own ideas. Moreover, these sites can also be connected to and display online course content in a variety of formats.

These types of digital software devices and apps also permit individualized and differentiated language instruction at the student's pace as well as in cooperative and collaborative formats, especially in mixed - level FL classrooms. The spaces for language learning have similarly expanded to hybrid, online, distance learning, and outside language class learning frontiers.

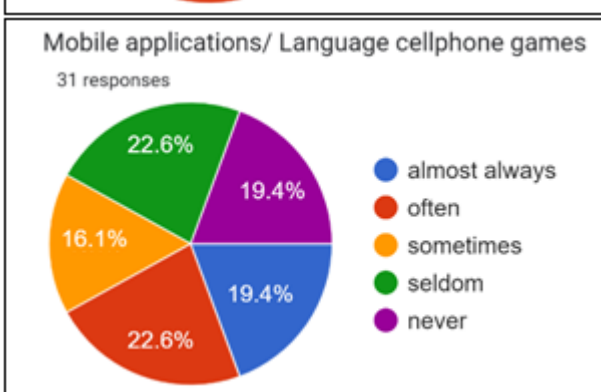
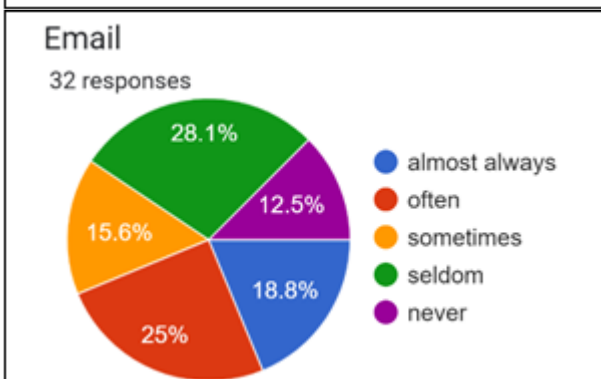
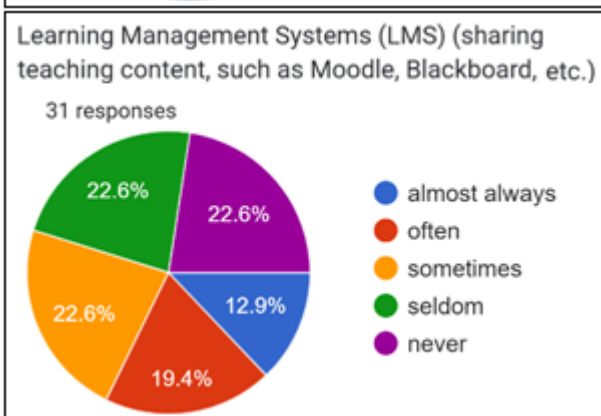
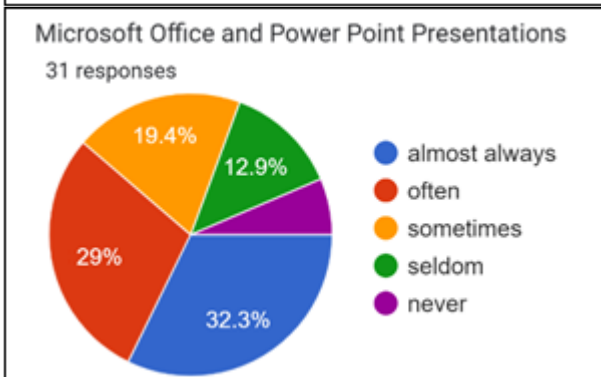
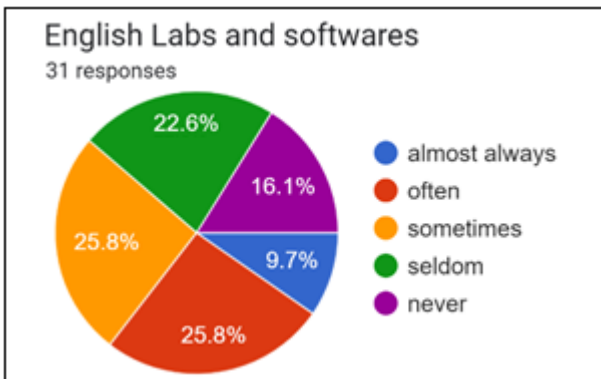
- Online/Distance Learning, Hybrid/Blended/Flipped, Homeschool and Informal Learning.
- Digital/Virtual Universal Language (D - Language) (The Digital/Virtual Universal Language or D - Language refers to a language that is effective for human interaction in the virtual world as well as a language that is easy, effective and efficient for human - robot and robot - robot communication, which includes but is not limited to current programming languages. The technology of D - Language makes communication possible among different human speakers as well as robots).

2. Methodology

Both quantitative and qualitative methods are used. The participants are 31 EFL teachers selected randomly from both public and private Moroccan secondary schools. The instrument used in the data collection is questionnaires. A questionnaire is emailed to the participants along with a letter of consent. As the questionnaire is anonymous, it is more reliable than interviews and it encourages greater honesty (Cohen et al.2011, p.158).

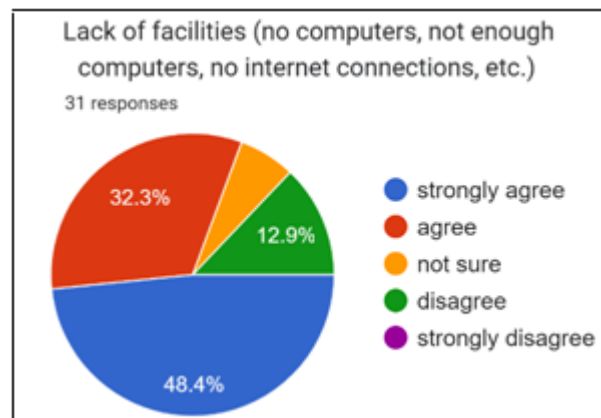
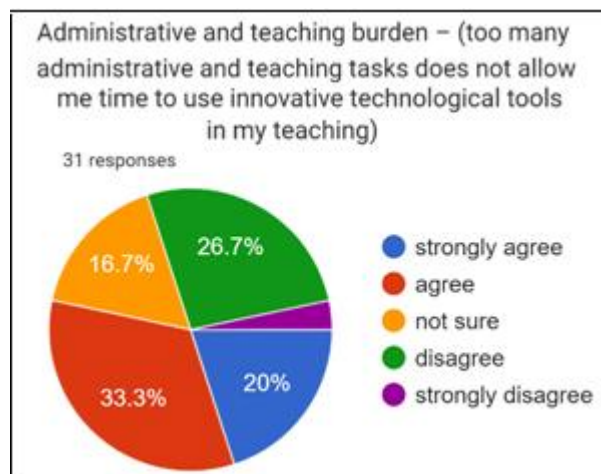
Data analysis

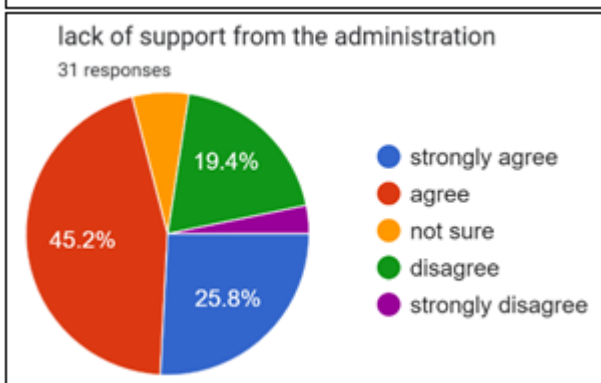
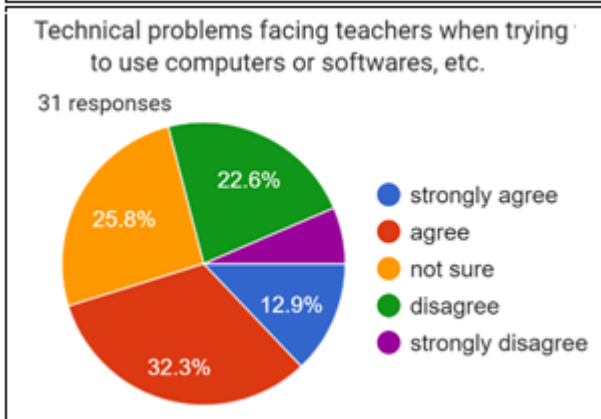
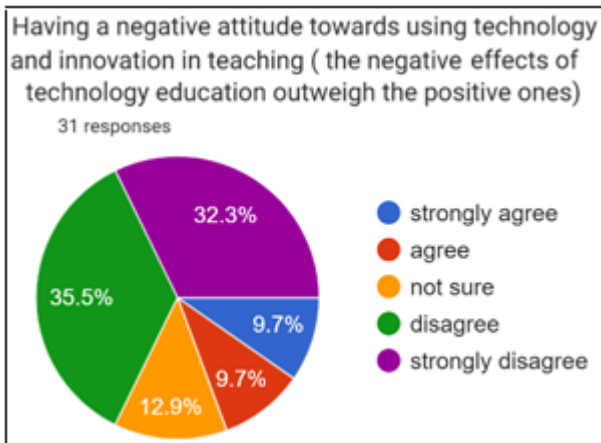
The first question was 'how often do you use the following technological tools?' the participants were given a number of technological tools and they select which ones are used in their teaching. Their answers are summarized as follows:



54.8% of the participants are between the age of 31 - 40. While some technological tools are used frequently, namely Microsoft Office, Power Point presentations, and emails, many other useful technological tools are used very seldom, namely Learning Management Systems (LMS), English labs and software.

The second question was ‘what are the obstacles that prevent you from using technology in teaching?’. The participants were given a number of hindrances that may prevent them from integrating technology into their teaching. Their answers are summarized as follows:





The majority of the participants do not have a negative attitude towards using technology in English teaching. This indicates that they are willing to use and support their English teaching with technological tools. However, there are a number of barriers that affect their use of technology in EFL classrooms. The first barrier is lack of facilities (i. e., no computers, not enough computers, no internet connections, etc.). 48.4% of the participants strongly agree and 32.3 % agree that lack of facilities is the barrier that prevents them from integrating technology into their English teaching. Another important barrier is lack of training (i. e., they have not received enough training in using technology in language teaching). 45.2% agree and 22.6 % strongly agree that lack of the training is the main hindrance. Another barrier is lack of support from administration. 45.2% agree and 25.8 % strongly agree that this is the main obstacle. Technical problems are another issue. (32.3 % agree 12.9% strongly agree). Administrative and teaching burden is another barrier (i. e., too many administrative and teaching tasks do not allow them time to use innovative technological tools in my teaching) (33.3% agree/20% strongly agree)

3. Conclusion

The present study is an attempt to investigate the use of technology in Moroccan classrooms. The finding of the study revealed that the current EFL Moroccan teachers have a positive attitude towards using technology in their teaching. Two main conclusions can be drawn. First, only limited technological tools are used by ELT Moroccan teachers. Teachers are advised to try integrating other important technological tools. Second, lack of facilities, lack of training, lack of support from administration, administrative and teaching burden are the main barriers that prevent many teachers from integrating technology in their teaching. Indeed, the importance of technology in enhancing language learning is undeniable. It allows learner's autonomy, more students' centered approach, it allows more interaction and more engagement of learners, as well as it boosts learners' motivation. Thus, teachers are required to discover innovative ways to integrate more types of technology in their teaching.

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