

TEACHING ESP IN THE DIGITALIZED POST PANDEMIC ERA: A PROMISING GATE FOR THE FUTURE OF ESP INSTRUCTION IN ALGERIA

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Abstract

Though the integration of digital technology in general and e-learning in particular in Algerian Higher education during the Pandemic has brought much reconsideration to English for Specific Purposes teaching and learning, general agreement on this method's efficacy and suitability has not been yet reached. Along this line, the aim of the conducted research work is first, to examine the stakeholders' motivation about the radical shift from face-to-face classes to digitalization, second, to report on the impact of using this online environment on students' achievements in the ESP course, then, to explore the perceptions of the stakeholders in the Algerian universities towards the integration of digitalized technology in ESP teaching. For this purpose, case study research was undertaken. To collect the necessary data, the investigator employed a questionnaire administered to 40 students and an interview addressed to ESP teachers. Relying on both quantitative and qualitative data analyses, the results revealed that the population under investigation was highly motivated about the implementation of digitalization in education. Furthermore, the stakeholders showed a positive attitude towards the integration of e-learning as part of the ESP course due to its importance in creating a context for English teaching and learning. Among the most significant conclusions drawn from the current study was that digitalized technology-based instruction was an interesting means that brought the students' needs to their ends, and henceforth, helped them develop their content knowledge and promote the four language skills. It also boosted their motivation, raised their interactivity and fostered their learning autonomy.

Key words: ESP, digitalization, e- learning, attitudes and perceptions.

1. Introduction

The use of Information and Communication Technologies is increasingly proliferated in teaching and learning situations mainly during the Pandemics when schools and universities were forced to suspend. Recent studies considered digitalization, blended, distance, hybrid and flipped learning as the "harbinger of substantial change" at higher education (Dziuban et. al., 2018). At the same line of thought, Vera (2014) posits:

A purposive dedicated process of acquiring expertise, knowledge and skills through the integration of in-class and extracurricular learning activities of educational process subjects with the auxiliary of mutually complementary traditional, e-learning, distance courses and mobile learning technologies under condition when learning activities' time, place, path and pace are self-controlled by the student (Vera, 2014 p. 209)

In the realm of English for Specific Purposes (ESP), the process of instructing learners in this specialized domain is often perceived as a complex endeavor, particularly when new technological advancements are incorporated within the ESP classroom setting. In this regard, Moreno and Mayer (2007) argue that integrating educational technology into the teaching process enhances its effectiveness by enabling the acquisition and storage of a vast amount of information. Additionally, incorporating digital technology into ESP learning environments provides learners with valuable opportunities to access and engage with subject-specific information (Simin, 2012: 10). Hence, it can be concluded that this approach serves as a dependable source of information, fostering the autonomy of English for Specific Purposes (ESP) learners.

However, it is crucial to ensure that online teaching materials are appropriate for the specific context of English for Specific Purposes (ESP). This can be achieved by ensuring that these teaching aids effectively address the language and technological competencies of ESP learners. In fact, teachers implement e-learning in their courses as a way to "equip students to independently organize their learning process...so students

using technology become active users” (Moeller and Reitzes, 2011:6) as the common core of today’s educational process and ESP teaching focuses on developing learner-centeredness approach.

It is important to note that the incorporation of innovative educational technology within the realm of language instruction is not a recent development. According to Chapelle and Jamieson (2008), there exists a plethora of potential avenues through which language acquisition can be augmented by leveraging the power of technology. The integration of CALL (computer-assisted language learning), WELL (web-enhanced language learning), and MALL (mobile-assisted language learning) is suggested, alongside blended learning, to facilitate the exchange of ideas and interactions between learners and teachers as well as among learners through computer-based platforms. In addition, they facilitate the transformation of traditional face-to-face teaching methods into technology-driven modes of communication. In a similar vein, Blake et al. (2008) present the notion of "distance learning," which pertains to the utilization of multimedia programs disseminated through apps, platforms, as well as internet-based materials and activities. Henceforth, it can be stated that to foster the development of learners' English proficiency and optimize the teaching and learning of English for Specific Purposes (ESP), a wide range of online resources can be effectively utilized.

2. Literature Review

The use of technology in language teaching and learning has evolved significantly to Web 2.0 since the 1980s, with the introduction of computer-assisted language learning (CALL) and technology-enhanced language learning (TELL) (Kholis & Iryanti, 2021). The focus lies on online platforms and IoT. This includes virtual communication, videoconferencing, and browsing. Massive open online courses (MOOCs), learning management systems (LMSs), cloud technology, and AI systems have significantly impacted teachers, students, and administrators. Mobile-assisted language learning apps like Instagram and WhatsApp promote English learning (Ahmed, 2019). In fact, technology is integral to language teaching, as it provides learners and teachers with a vast array of original language materials, such as films, cartoons, music, videos, and documentaries. These resources enhance classroom learning efficiency and effectiveness (Bećirović et al., 2021).

Digital learning environments refer to a collection of technological tools and resources used to support the learning process. Authentic digital learning environments are created when students consistently interact using web 2.0 tools. When embedded within the syllabus, these environments function as a traditional Learning Management System, providing new learning opportunities for students (Kirovska-Simjanoska, 2020). Similarly, digitalization in language teaching aims to simplify the educational system, requiring teachers to adapt to the latest technological applications and be more creative in designing teaching activities (Baryshnikova et al., 2021).

Digital learning is an instructional practice that uses technology to enhance students' learning experiences. It includes interactive resources, digital content, software, simulations, access to online databases, and data use to personalize learning and provide targeted instruction. Digital learning significantly changes instruction and teaching delivery, offering more opportunities for students to improve their language ability (Li, 2019). Technical solutions that facilitate teaching, learning, and studying are known as digital learning environments. These may consist of learning resources, online study courses, instructional software, or digital learning tools. According to Anohina (2005), the basis of an e-learning program can be a digital learning environment that combines various technological solutions. But creating digital learning environments that work is not an easy task. Even though using digital learning outside of the classroom can be flexible and affordable, doing it incorrectly can result in time and financial waste. Research in computer-assisted language learning has shown that technology promotes a more creative and active teaching and learning process, aligning with the industrial revolution 4.0 (Tu, 2022). Digital instructional tools can enhance students' learning and practice, enabling them to speak through their phones virtually, improving their listening skills, reading comprehension, and vocabulary understanding (Marlowe, 2018).

Digitalization has revolutionized modernization by providing advanced standards and supporting the educational environment (Ling et al., 2020). Multimedia education and e-learning have led to diverse teaching approaches and increased computer literacy for students and teachers (Mital et al., 2021). Digitalized technology integration in language classrooms makes classes more interactive, flexible, and innovative. Teachers must integrate appropriate technology tools into instructional content, support learners' thinking skills, and design effective technology uses across contexts and populations (Asiri et al., 2021).

Digitally literate teachers integrate ICT tools with the learning curriculum to support efficient language learning, encourage critical thinking, and consider learning contexts and student levels.

language learning engagement relies on teachers' techniques, facilities, and students' language competencies (Pham, 2022). Technology-based devices like WhatsApp, Instagram, Zoom, and Google Meet can be effective in education 4.0 contexts. Teachers can use these platforms to support teaching and learning processes, allowing students to submit assignments electronically. Technology-based learning can enhance students' learning interests and motivation by utilizing digital devices and audio-visual equipment. This approach involves students using computers, the internet, and other devices to complete homework and exercises, deepening their understanding of class material. This approach can lead to learner autonomy and self-regulation, especially for language teachers who may struggle with arranging and presenting learning materials in online classrooms. Therefore, effective use of technology can significantly enhance the learning experience for students (Fauzi et al,2023).

As English becomes the world's primary medium of communication, there is a growing demand for English for Specific Purposes (ESP) (Purpura & King, 2003). In the context of ESP, the aim is to equip students with language skills and professional knowledge for success in the job market. This approach is student-centred, focusing on developing English communication skills in a specific discipline. Modern technologies and resources support unique learning goals and knowledge construction (Young, 2003), promoting active and collaborative learning.

Consequently, teaching English for Specific Purposes (ESP) in the digital era involves integrating technology into the learning environment. Blended learning, which combines online and traditional methods, is a popular approach for delivering ESP knowledge and teachings. Technology, such as project-based learning (PBL) and information and communication tools, has been widely used in ESP instruction, offering benefits such as access to authentic texts and motivating students to explore real-world issues (Marculescu,2015). It is essential to address students' needs in today's digital world by embedding digital instruction systematically in the syllabus. Despite the use of technologies in ESP teaching, more research is needed to identify the widespread use of technology tools in ESP and to empower practitioners with the help they need.

Accordingly, the use of digital technology in English for Specific Purposes (ESP) teaching has become increasingly prevalent, offering various benefits for both educators and learners. Digital tools can be integrated into ESP instruction through blended learning, computer-assisted language learning (CALL), and information and communication technology (ICT) tools. These tools provide access to authentic texts, support interactive and communicative activities, and offer opportunities for collaborative and independent learning. Additionally, the implementation of new technologies as instructional models into ESP classes can enhance the teaching and learning process, expand the classroom environment, and increase student motivation. Despite the widespread use of technology in ESP teaching, further research is needed to identify the full extent of its utilization and to provide support for practitioners in effectively integrating these tools into their teaching practices.

3. Research Design

In fact, the study first tends to examine the students' motivation about the integration of digital learning in the ESP course. Then, it tries to report on the impact of using this approach on students' achievements in the English language. At last, it searches to explore ESP teachers' and students' attitudes towards teaching ESP via digitalized technology-based learning.

3.1 Research Context

To fulfil the intended task, the investigator undertakes research in three faculties at Tlemcen University namely law, biology and technology in the academic year of 2022-2023. The ESP course is a two semesters course. The teaching time load differs from one department to another. It rates of one hour and a half (01h30) hour to three (03) hours per week. It is designed to meet students' needs and targeted to improve their academic and professional performance in English language.

The course has been thoughtfully structured to incorporate a combination of both in-person and online activities. In essence, the students are introduced to the course topic during their in-class sessions, after which they are expected to complete regular online assignments and vice versa. This particular approach guarantees ample opportunities for English language immersion beyond the confines of the traditional classroom setting. E-learning offers the advantage of flexible learning, allowing students to tailor their study

schedule to their individual needs and preferences. This flexibility empowers students to learn at their own pace, regardless of time and space constraints.

The informants took face-to-face and online sessions with an average of three weeks for each. The instructor used some hours on-line to conduct a review of weekly learning activities, providing feedback, and on-line lectures. A variety of digital tools and resources like Wikipedia, Google Docs, WhatsApp, and Web resources and Google apps like Zoom Cloud, Gogle Meet, Microsoft Teams and Google Classroom were integrated.

3.2 Methodology

In order to gather valuable data, the researcher administered a questionnaire via e-mail to 40 randomly selected students who were in the age group between 18 and 26 years old. This research instrument was used to assess students' perceptions towards the integration of digital learning in the ESP course. She also conducted an interview with four ESP teachers via facebook. The questions put emphasis on the importance of using hybrid learning environments to deliver ESP courses at the aforementioned faculties. By using this tool, the investigator tends to obtain further support on students' responses.

3.3 Results

The students' questionnaire and the ESP teachers' interview revealed important data concerning the integration of digitalized learning in the English course. In other words, the obtained results gave insights into the students' and teachers' attitudes in additions to their motivation. It also displayed their perceptions regarding the use of e-learning. Therefore, it allowed the researcher to draw clear conclusions about the importance and efficacy of digitalization in education in general and ESP in particular.

3.3.1 Students' questionnaire

The data obtained from the students' questionnaire provided valuable insights into the incorporation of digitalized learning within the English course.

Table 3.1 The apps used within digitalization

Google Apps	Percentages
Microsoft Teams	33%
Google Meet	26%
Zoom Cloud	30%
Google Classroom	11%

The table above showed that 33% of the students confirmed that their teachers deliver the ESP course via Microsoft Teams, followed by Zoom Cloud (30%) and Google Meet (26%), then came Google Classroom (11%).

Table 3.2 Students attitudes towards traditional learning and digitalized instruction

Course Type	Responses
Traditional classroom	05%
digitalized learning	95%

While 95% of the students showed a high level of satisfaction towards learning English via online approach, only 05% preferred to study English in the traditional way.

Table 3.3 Students' perceptions about the integration of digitalization

Statements	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I cannot learn English via digitalized learning	0%	6%	8%	13%	73%
I am motivated to study ESP online	72%	20%	5%	3%	0%
E-learning improves my interest in ESP	80%	15%	1%	3%	1%
Digitalization enhances my proficiency level in English language	85%	15%	0%	0%	0%
I feel confused each time I study online	2%	3%	0%	27%	68%

Concerning the integration of digitalized learning in the English course, a great majority of the informants (i.e. 80% and 85% relatively) acknowledged that the use of blended learning improved their interest in ESP learning and enhanced their proficiency level in English language. 72% of them said that they were motivated to study ESP online, 73% strongly disagreed on the idea that they cannot learn English via blended learning and 68% denied the fact that they feel confused each time they study online.

3.3.2 Teachers' Interview

Based on the interview findings, it was observed that ESP teachers demonstrated a commendable level of understanding regarding the significance of delivering English instruction through distance learning platforms. It had been expressed that the latter option was the sole solution in order to guarantee language practice beyond the confines of the university. This approach also afforded learners the opportunity to receive guidance from their esteemed teachers.

The informants' responses demonstrated high level of satisfaction with blended learning and students' significant improvements in the use of the English skills. The instructors acknowledged that blended learning, enhances learners' linguistic abilities, enriches their language knowledge and understanding, and facilitates the learning experiences.

Regarding the traditional classes, the teachers showed inadequate satisfaction. They justified that the students encountered some difficulties in understanding the course unlike blended learning which fostered their learning autonomy as they feel confident and responsible upon their learning. Since the online support covers the same content in face to face classes, the teachers believed that blended learning motivates the students to study independently and helps them better understand the lectures.

3.4 Discussion and Interpretation of the results

The obtained data revealed that the ESP teachers are in favour of digitalized learning because they are aware of its importance in developing the teaching process. They assert that through the integration of blended learning, they tried to make their students learn the language and motivate them to explore more on their subject matter.

It was also found that ESP teachers assigned a variety of activities like language tasks, translation and vocabulary, online by making the students use Wikis, Blogs and Google apps like Google Meet, Zoom Cloud and Google Classroom. In fact, their answers showed that they are conscious about the vital role that this approach plays to improve the students' language skills and foster their learning autonomy.

The data gathered from the aforementioned instruments revealed that both teachers and learners consider blended learning as beneficial and interesting and they showed positive attitudes towards its implementation in the ESP course as a way for stimulating their motivation. They believe that it helps in enhancing students' language skills, increasing their collaboration and raising their interactivity. Furthermore, the use of digitalized technology helped to provide a context for language learning, enhancing the learners' focus by keeping them engaged. Consequently, this facilitated the development of their language skills and ability to communicate effectively.

4. Conclusion

Education in general and ESP teaching and learning in particular have witnessed a revolution due to the introduction of digital learning as a way to overcome the Pandemic lockdown. Digitalized technology-based learning refers to an instructional approach that integrates traditional face-to-face classroom teaching with online instruction through the use of web-based platforms. The use of such instructional methods is recommended as a means to establish a conducive environment for the facilitation of English language education, thereby enabling students to actively participate in the English for Specific Purposes (ESP) curriculum. In addition, this platform offers a diverse array of instructional resources, thereby facilitating the acquisition of valuable knowledge and skills for students from different specialties. Furthermore, it guarantees the availability of reliable and genuine information, which is essential for effective communication within the realms of technology and science, law and biology, catering to the needs of both students and workplace managers. However, the integration of digital learning in the ESP course presents a compelling opportunity to establish a supportive environment that facilitates enhanced exploration of the English language by students. Overall, the use of digital technology in ESP is a current practice that requires further exploration and support for ESP teachers. That is why it is imperative for education stakeholders in Algeria to delve into the realm of digitalization and harness the potential of the internet in order to enhance and streamline the teaching and learning of English for Specific Purposes (ESP).

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