The effect of blended learning model in improving English foreign language learning students' achievement

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Abstract

Higher education institutions are researching and adopting pedagogical approaches to meet the changing needs of education in response to various challenges, especially with Covid19 and E-learning is one of these modes. This study aimed to explore the effectiveness of this new model (mixed education) in the English language on Third-year English foreign learners' achievement and their attitudes toward using it. It compares the results of various ways of teaching and students' attitudes toward their use. The case study is used as a research design. The participants of the study were 30 students, the questionnaire was designed to confirm the study's validity and reliability, and quantities were used to analyze the data. The findings have shown that there were positive towards using blended learning. The study recommends further research into the use of blended learning in higher education.

Keywords: Blended learning; EFL Learners; E-learning; face-to-face learning; students' achievement; higher education.

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1. Introduction

The education system has undergone enormous changes. Thus, teaching/learning practices and methods have been considerably developed; this development is linked to the needs generated by the socio-political transformation of our community. The Covid19 pandemic has changed many aspects of daily life in all sectors (economy, health, technology, industry, and politics) across the world and most countries in the world have experienced a health crisis, leading to the closure of several educational institutions (schools, research institutes, and universities), prompting officials to consider alternative methods by choosing distance education for face-to-face education to ensure the continuity of school and university courses, various solutions suddenly appeared to enable all students to learn their courses, teachers are expected to submit them to the e-Learning platform, or a lifetime Google Meet, Zoom or Google Classroom video conference.

Among different definitions of blended learning, Ismail (2009) defined it as the incorporation of technological tools and joining together the two methods of education face-to-face as well as distance education aiming to facilitate interaction between the teacher and learners face-to-face, which does not need specific electronic tools and quality in addition to learning sources linked with content and learning activities. Hasan (2010) argues that it is a method that helps the learners achieve their learning outcomes through the amalgamation between both forms of education meaning traditional and e-learning with its patterns inside and outside the classroom. Meanwhile, Salameh (2005) highlights some features and characteristics to compare blended learning as providing face-to-face communication and increasing the interaction between the student and the (teacher) and among students(students/students) as well as students and content, which minimizes the teaching costs through increasing the learning proportion to cost-meeting the needs of each learner according to his abilities, integrating structural and final evaluation systems, transmitting from the collective learning pattern.

Blended learning is also valuable in using the technological development in the design to support the traditional teaching methods used by the staff to interact appropriately in learning, providing training members in the job or study environment through using a minimum amount of effort and resources to gain the maximum results, and finally enabling individuals to continuously apply skills to become a habit with practice (Huang, Kuang & Ling, 2022; Evenhouse et al., 2023). Therefore, the central problem is: what are the technical and educational challenges of mixed courses? Representing two forms of teaching may have certain effects and poses a challenge:

➢ Insufficient means and lack of experience may affect the courses of the students.
➢ Face-to-face teaching may be more useful than other types.

1.1. Related Studies

Many studies showed the effectiveness of blended learning compared with the traditional way (Maccoun, 2016); some studies showed a statistically significant difference in the student's achievement by the method of blended learning (Al-Rimawi, 2014; Santoso et al., 2023), studies that mainly stress the trends and development of skills as (Al-Hasan, 2013; Dulai et al., 2022), studies which concentrate on the fundamental stage (Shahin, 2008), studies on the high level (Maccoun, 2016; Yang, Cai, Yang & Wang, 2023), and studies on the stage of university education such as Al-Rimawi (2016). Such studies were beneficial in the methodology and design of the current study and the structure of its tools. This study differs from the previous studies in focusing on the third year who consider blended learning a vital source in learning science and a main entrance for their mental and physical growth. One of the studies on blended learning (Maccoun, 2016), aimed to explore the effect of using blended learning on students' achievement and information preservation in the biology course.

Al-Rimawi (2014) aimed to investigate the effect of blended learning on direct and delayed achievement in the English language course; to achieve the objectives of the study, the quasi-experimental approach was used, and the researcher prepared an achievement test, whose validity

and reliability were checked. The study results showed the presence of statistically significant differences between the control group which studied through the traditional way in the post-application of the achievement test in science in favor of the experimental group.

To sum up, numerous studies demonstrated that blended learning could be beneficial to learning and teaching. Collaborative learning, a universally acknowledged learning mode, can be facilitated under blended learning. It is also argued that blended learning can improve higher education, receiving growing popularity among tertiary students and lecturers (Harper et al., 2021). Besides, blended learning is especially useful for largely enrolled classes, where students can interact and collaborate with online technologies and classroom face-to-face activities. Blended learning models have been well adopted in many educational and non-educational institutions since many institutions came to acknowledge that blended learning was a useful construct when considered a mental model.

1.2. Purpose of the study

Therefore, the choice of this research theme, namely the diversity of education systems, stems from the observation of the daily reality caused by the containment ofCovid19, which has forced many institutions to change their educational ways between systems is a subject of reflection on the modalities and characteristics of these types. The beginning of this research was formed during this research on the training that's received in the current conditions of the coronavirus. This phenomenon allows reflecting on the pros and cons of each form of education, and it also allows understanding of the obstacles faced by students. The present work aims to check the effectiveness of a hybrid education using a sort of comparison between distance training and face-to-face education.

Moreover, blended learning is considered one of the contemporary and new trends of education in the 21st century; it is viewed as an educational method in which more than one means is used to convey knowledge and experience to students to help them achieve the best of the learning outputs in the same line of thought (Freihat, 2004) argues that this model tries to join the advantages of e-learning and the benefits of classroom education; which is based on the integration between the traditional learning and e-learning (Al-Rimawi, 2016).

2. Materials and methods

This research is conducted within the descriptive case study research design and the decision of which method to use often relies upon the subject of the research, its aim, and the sample under investigation. A method, according to Cohen et al. (2005, p.44): is '…range of approaches used in educational research to gather data which are to be used as the basis for inference and interpretation, explanation, and prediction'. Therefore, methods of research illustrate the researchers' presumptions about the expected results. Both qualitative and quantitative approaches were employed in conducting this work; the qualitative approach sought to explore the problems of a targeted population, whereas the quantitative one examines the connection between variables, to either confirm or deny the research hypotheses by the end of the study.

Mitchell (1983, p. 192) defined a case study as a 'detailed examination of an event (or series of related events) which the analyst believes exhibits (or exhibits) the operation of some identified general theoretical principles. Yin (1994, p. 13) defined a case study as 'an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not evident… relies on multiple sources of evidence'. Therefore, most researchers who use the case study research framework usually endorse this method because of its high-reliability level. It is an inclusive analysis of a given event, which the researcher illustrates as the operation of some recognized general hypothetical principles.

2.1. Participants

The study population consisted of all the third-year students at the University of Tlemcen, a random sampling technique was opted for the selection of a group of (30) third-year learners the selectivity was a matter of non-probability sampling.

2.2. Data collection instruments

Data collection is a methodical process of gathering and analyzing specific information to proffer solutions to relevant questions and evaluate the results. It focuses on finding out all there is to a particular subject matter. Data is collected to be further subjected to hypothesis testing which seeks to explain a phenomenon. For collectors of data, there is a range of outcomes for which the data is collected. But the key purpose for which data is collected is to put a researcher in a vantage position to make predictions about future probabilities and trends. Any research requires a method to gather data. In this study, the researcher has selected the questionnaire. The questionnaire is a decent strategy that empowers the researcher to ask questions and get answers without conversing with individuals from the selected sample. Besides, it is a very adaptable tool to satisfy the prerequisite of any research.

The purpose behind the choice of questionnaire as a data collection method, is the key features that portray it, even though it has some controversial features and disadvantages. The questionnaire is regarded as a list of survey questions submitted to a selected sample of respondents, and designed to extract specific formations related to the research. It serves four major purposes: (1) to collect the relevant data, (2) to make data comparable and manageable to analysis, (3) to decrease bias in asking and formulating questions, and (4) to make questions fitting and diverse. For this reason, therefore to achieve the objectives of this study, the following tool is used to collect information from students' questionnaire

3. Results

The data analysis process represents an important stage of the study. Data analysis consists of three items: organizing data, reducing data by summarising it, and identifying patterns to link the existing themes. The results of the students 'questionnaire are reported as follows.
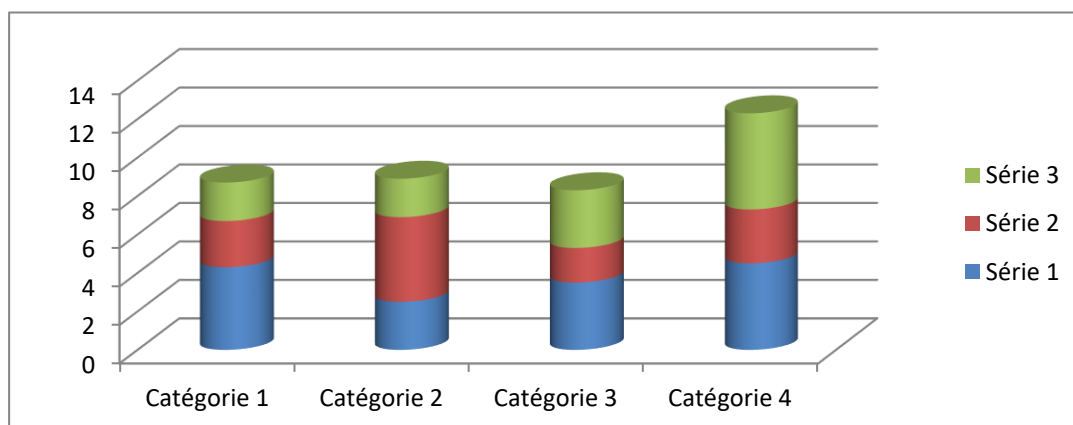
3.1. Learners' questionnaire analysis

3.1.1.Q.01: Do you think that the internet allows you to improve your autonomy(competence)?

This question is asked to know if students have an idea about these applications, and most appropriate for them.

✓ Yes
✓ No

Figure 1
Internet and autonomy development

The results in Figure 1 show that (40%) of students say yes, which proves that they follow technology regularly and are always up to date with news related to the Internet. Among these applications: are Google Classroom, Skype, Viber; and WhatsApp…etc. the majority (50%) say that the internet improves their autonomy which proves that they use applications and only (10%) did not understand the question.

3.1.2.Q02: Have you ever taken online courses? This is to know if the students have experience in distance education is the objective of this question.

✓ Yes.

✓ No

Figure 2
The online courses
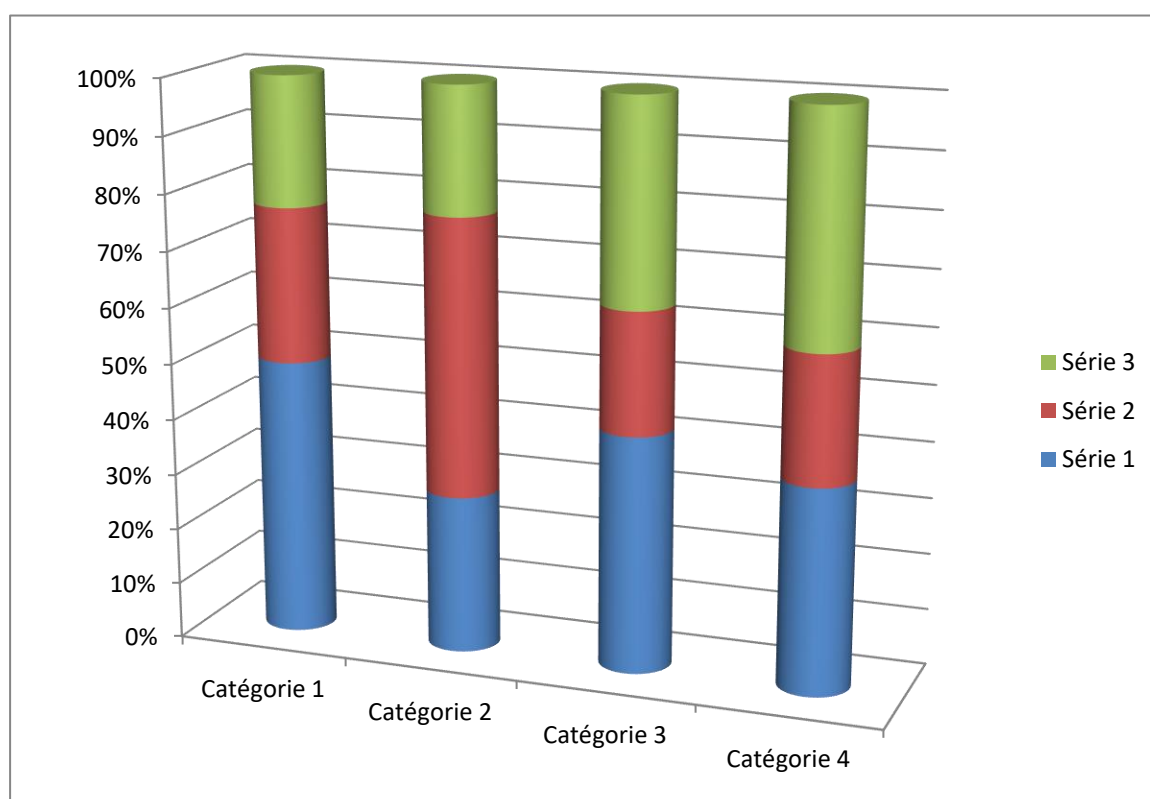
The majority of students (90%) take online courses because it allows them to follow their own pace of learning, and to define a schedule that suits the agenda of each one. Others declared that they have followed online training. (10%) answered no because of the unavailability of means: the lack of network and equipment (computer, Smartphone, etc.) in addition to time issues (figure 2).

3.1.3.Q.03: Do you think that distance learning has an impact on face-to-face classes? The purpose of this question is to know the opinion of students about the impact of distance learning courses on face-to-face courses.

✓ Yes

✓ No

✓ Not sure

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Figure 3

*The impact of distance courses on face-to-face courses*
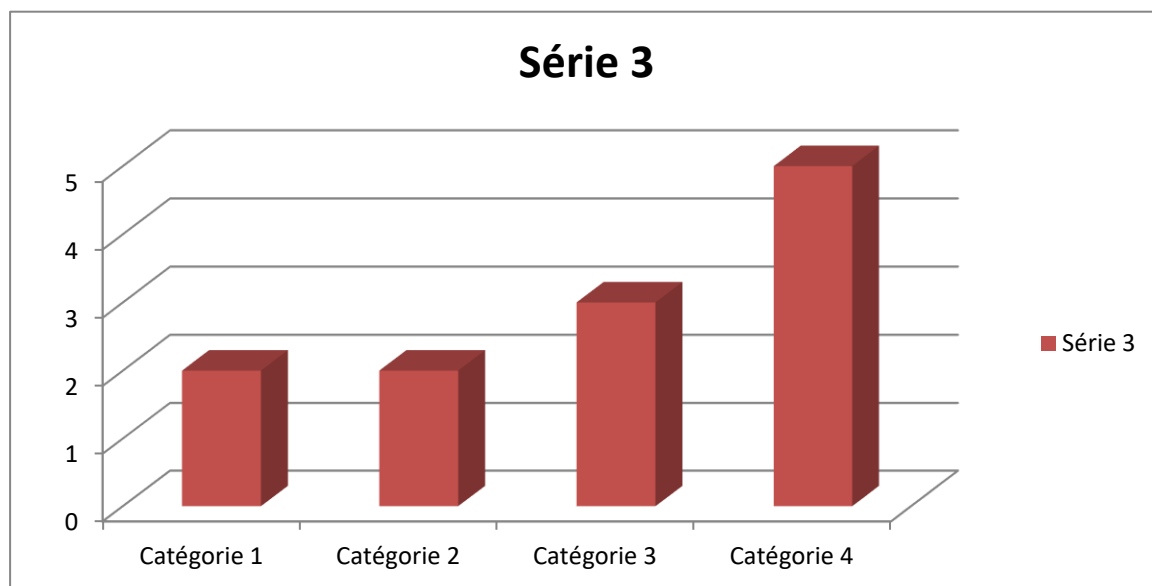
The results in Figure 3 revealed that there is an influence, especially after the reduction of face-to-face lessons, which prompted teachers to use additional distance learning courses, to ensure the continuity of educational programs. (33. %) answered no, for them, teaching in the face-to-face course is sufficient to validate a semester, and (22%) are not sure because it is a new experience for them.

3.1.4.Q.04: is distance education more effective than face-to-faceeducation? The purpose of this question is to know the most effective mode for respondents.

✓ Yes

✓ No

Figure 4

The usefulness of distance education
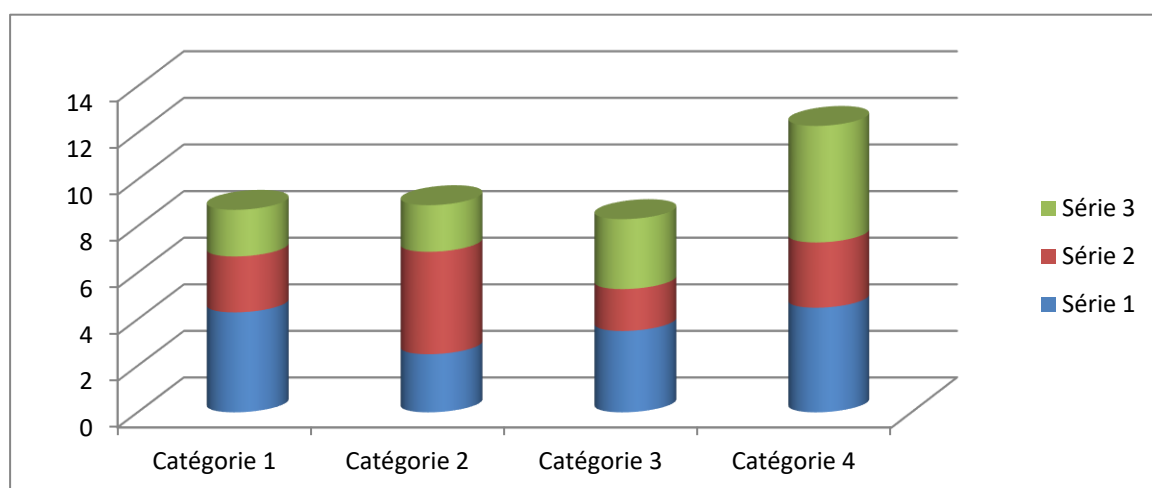
The results in Figure 4 show that face-to-face education is more effective than distance education, although online (distance) education is effective because of its ability to improve student's skills and performance, they also have the opportunity to participate without fear at a higher rate compared to traditional courses, and learners have a steady pace. (70. %) answered

no, and (30%) said yes, so the majority prefers face-to-face teaching.

3.1.5.Q.05: What are the problems encountered during the distance learning courses?

The objective is to know the nature of obstacles students have encountered during distance learning.

- ✓ Technical problems.
- ✓ Overlap and noise.
- ✓ The programmed time during the course is not appropriate.

Figure 5

Problems encountered during distance learning
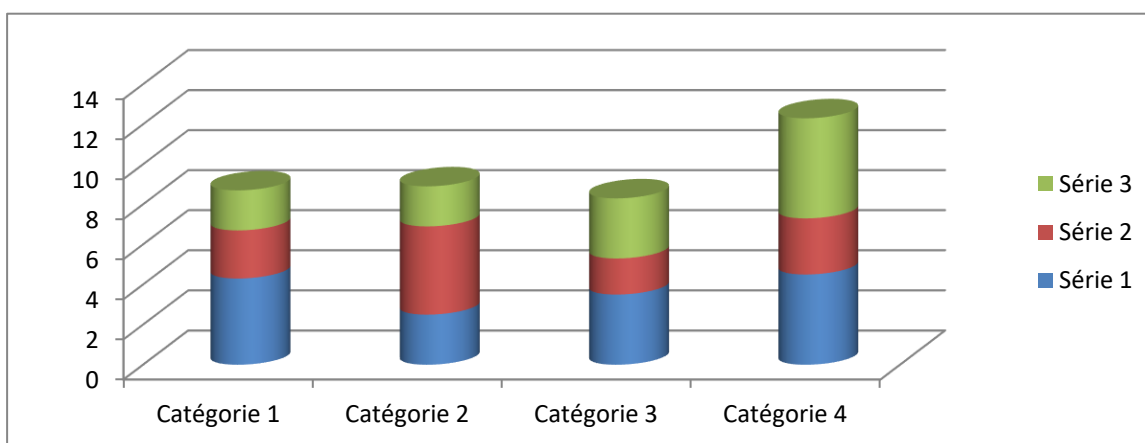
The results in Figure 5 have shown that (40%) mentioned technical problems such as network failure, and connection speed, which hinder the teaching process. (40%) of students confirm that the problem is overlapping and noise interrupting lessons. Other students say that the time scheduled in class is not appropriate.

3.1.6.Q06: What are the problems you encountered during face-to-face classes?

- ✓ Insufficient course time.
- ✓ Transport problems.
- ✓ Pressure.

Figure 6

Problems encountered in face-to-face lessons
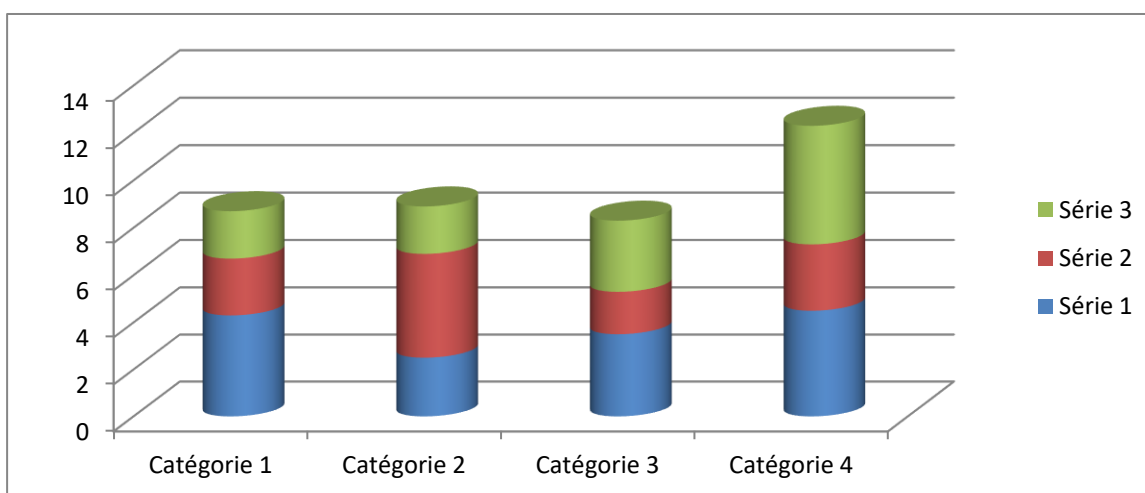
The results as seen in figure 6 have shown that nine students suffer from less than sufficient

course time because conditions force universities to reduce course time. This prevents the continuity of the courses. Among our respondents, 17 students confirm that pressure has a negative influence on their studies (load, work, etc.). The transport problem hinders the presence of students in class on time, especially during quarantine and this is what was confirmed by five students.

4. Discussion

In this study the first aspect discussed was distance education and its role, applications that students used during their studies during the health crisis, distance learning was in its prime, it was a continuity solution and enabled students to use tools such as Google Meet and Zoom. In addition to the impact of distance learning on residential courses as they are complementary.

The second aspect was the problems encountered during classes, both in text and direct form, a comparison of the forms of teaching and the evaluation reported by students. Therefore, the findings showed that students found obstacles that obstruct course continuity. The problems raised by students are different: they encountered technical problems, inadequate time problems, noise..., etc during distance courses, while the problems related to classroom courses are (course time, pressure…, etc.). In general, the choice of one type or another remains open, it all depends on the training, the student, and what he is looking for, everyone can choose the mode that will serve him (Kannan et al., 2020; Müller, Mildenberger & Steingruber, 2023). Each mode has its characteristics.

5. Conclusion

Due to the expansion of technology and the rapid spread of Internet users around the world, the supply and demand for education have shifted. In some cases, demographic changes have led to population increases, posing challenges to higher education, especially given the global challenges of Covid19. Higher education institutions are researching and adopting pedagogical approaches to meet the changing needs of education in response to various challenges, especially with Covid19 and E-learning is one of these modes. Therefore, this study aimed to explore the effectiveness of this new model (mixed education) in the English language on Third-year English foreign learners' achievement and their attitudes toward using it.

The present study followed a quantitative approach by using the questionnaire as a research protocol, the researcher sought to know the impact of the use of information and communications technology on the course of learners, whether during courses given face-to-face or distance, and the problems encountered by students in both modes. Another point as important as the first was to know which of the two modes of teaching / learning best suits our subjects.

References

AI-Rimawi, F. (2014). The effect of using blended learning in teaching English language on the direct and delayed achievement among the sixth graders. *Unpublished Master Thesis, Faculty of Educational Sciences, Middle East University, Jordan*.

Al Fiky, A. I. (2011). Blended Learning: Educational Design, Multi-media, Creative Thinking. Dar Athaqafa for publishing and distribution. https://files.eric.ed.gov/fulltext/EJ1126508.pdf

Al-Hasan, I. k., (2013). The Effectiveness of using the blended learning on the academic achievement in the biology course among the second graders in the private secondary schools in um aldurman and their Trends towards it.; psychological and Educational Research Journal, (36) 59- 85. https://files.eric.ed.gov/fulltext/EJ1126508.pdf

Al-Shunnaq, Q., & Bani Dumi, H. (2010). Teachers and students' trends towards using E-learning in the Jordanian secondary schools. *The University of Damascus Journal*, *26*(1 + 2), 235–271. https://files.eric.ed.gov/fulltext/EJ1084215.pdf

Bani, H.A., (2011). The effect of blended learning on the achievement of the third graders in the Arabic language and their motivation to learn Arabic, *journal of educational science studies 38* (1), 176 -188. https://journals.ju.edu.jo/DirasatEdu/article/view/2365

Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education, 6. *Baskı, Oxon:*

Routledge. https://vdoc.mx/documents/research-methods-in-education-6e-5jot0biadvi0

Dulai, K. S., Kranzfelder, P., Signorini, A., Pusey, T. S., Valencia, A. P., Urbina, C., & Oviedo, N. J. (2022). Collaborative Teaching Plus (CT+): A Timely, Flexible, and Dynamic Course Design Implemented during Emergency Remote Teaching in an Introductory Biology Course. *CBE—Life Sciences Education*, *21*(4), ar61. https://www.lifescied.org/doi/abs/10.1187/cbe.21-08-0199

Evenhouse, D., Lee, Y., Berger, E., Rhoads, J. F., & DeBoer, J. (2023). Engineering student experience and self-direction in implementations of blended learning: a cross-institutional analysis. *International Journal of STEM Education*, *10*(1), 19. https://link.springer.com/article/10.1186/s40594-023-00406-x

Freihat, E.A. (2004). Blended Learning, *Training and Technicality Journal*, (62)36-42.

Harper, D., Bowles, A. R., Amer, L., Pandža, N. B., & Linck, J. A. (2021). Improving Outcomes for English Learners Through Technology: A Randomized Controlled Trial. *AERA Open*, *7*. https://doi.org/10.1177/23328584211025528

Hasan, I.M. (2010). blended learning. *E-Learning Magazine*. https://files.eric.ed.gov/fulltext/EJ1126508.pdf.

Huang, M., Kuang, F., & Ling, Y. (2022). EFL learners' engagement in different activities of blended learning environment. *Asian-Pacific Journal of Second and Foreign Language Education*, *7*(1), 9. https://link.springer.com/article/10.1186/s40862-022-00136-7

Ismail, A.Z. (2009). E-learning from application to professionalism. Alam Al-Kutob (the world of books). https://files.eric.ed.gov/fulltext/EJ1126508.pdf

Kannan, V., Kuromiya, H., Gouripeddi, S. P., Majumdar, R., Madathil Warriem, J., & Ogata, H. (2020). Flip & Pair–a strategy to augment a blended course with active-learning components: effects on engagement and learning. *Smart Learning Environments*, *7*(1), 1-23. https://slejournal.springeropen.com/articles/10.1186/s40561-020-00138-3

Khamis, M.A. (2003). Educational technology products. Dar Al-Kalima.

Maccoun, H.S. (2016). The effect of using blended learning on the achievement of students and information retention of fifth graders in the biology Course.; Faculty of Education Journal, 22 (95) 209-240. Harriman, G. (2004). Blending Learning (Online)

Mitchell, J. C. (1983). Case and situation analysis 1. *The sociological review, 31*(2), 187-211. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-954X.1983.tb00387.x

Müller, C., Mildenberger, T., & Steingruber, D. (2023). Learning effectiveness of a flexible learning study programme in a blended learning design: why are some courses more effective than others? *International Journal of Educational Technology in Higher Education*, *20*(1), 1-25. https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-022-00379-x

Salameh, H.A. (2005). Blended learning the natural development of E-Learning. South valley university, college of Education. https://www.scribd.com/document/524713054/Salameh

Santoso, R. T. P. B., Priyanto, S. H., Junaedi, I. W. R., Santoso, D. S. S., & Sunaryanto, L. T. (2023). Project-based entrepreneurial learning (PBEL): a blended model for startup creations at higher education institutions. *Journal of Innovation and Entrepreneurship*, *12*(1), 18. https://link.springer.com/article/10.1186/s13731-023-00276-1

Shahin, S.A. (2008). The effect of Blended learning on achievement and the Development of Science operations among the students of the elementary level and their Trends towards it. Faculty of Education, Tanta University.

Yang, H., Cai, J., Yang, H. H., & Wang, X. (2023). Examining key factors of beginner's continuance intention in blended learning in higher education. *Journal of Computing in Higher Education*, *35*(1), 126-143. https://link.springer.com/article/10.1007/s12528-022-09322-5

Yin, R. (1994). Case Study Research: Design and Methods (2nd ed.). Beverly