Pedagogical implications of a blended learning model at Temouchent University

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Abstract

With the expansion of technology and the rapid spread of Internet use 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 in terms of demand and supply of 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. E-learning is one of these modes. This work aims to explore the effectiveness of this new model (mixed education) in English language departments, inparticular for third-Year students. It explores the pedagogical issues of e-learning in education for development thus it offers a descriptive study between face-to-face and distance education, which highlights the characteristics and difficulties encountered by EFL Learners. As a result of the study, students found obstacles that hinder course continuity, and they are detailed in the study.

Keywords: Blended learning; EFL Learners; higher education; students' achievement.

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1. Introduction

Over the centuries, the education system has undergone enormous changes (Shi, Tong & Long, 2021). 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 (Cabauatan, Uy, Manalo & Castro, 2021; Wörner, Kuhn & Scheiter, 2022). The Covid-19 pandemic has changed many aspects of daily life in all sectors (economy, health, technology, industry, and politics) across the world. During the Covid-19 pandemic 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 in the University of Ain Témouchent and to enable all students to learn their courses, teachers are expected to submit them to the learning platform, or a lifetime Google Meet, Zoom, or Google Classroom videoconference.

1.1. Literature review

There are several definitions of blended learning. Ismail (2009), defined it as the employment of technological innovations in blending the two methods of education face-to-face as well as distance education to bring about an interaction between the faculty member being a teacher or a mentor with learners face-to-face through these innovations, which are not required to have specific electronic tools or specific quality with the availability of learning sources linked with content and learning activities. Hassan (2010) sees that it is a way of learning aiming to help the learner achieve the targeted learning outcomes through the blending between the forms of traditional education and e-learning with its patterns inside and outside the classroom.

Salamah (2005), indicated some features and characteristics that distinguish blended learning as providing face-to-face communication, which increases the interaction between the student and the trainer, (teacher) and students, students among each other, and students and content, and reduces the teaching costs through increasing the learning proportion to cost, enhancing the humanitarian aspects and the social relations between learners and teachers, meeting the needs of each learner according to his abilities, integrating structural and final evaluation systems, transmitting from the collective learning pattern to the learning concentrated on the student and using the physical and virtual materials in the best way.

Blended learning is also beneficial in using technological development in the design, implementation, and use, supporting the traditional teaching methods used by the faculty staff in appropriate interactive 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 (Kannan et al., 2020; McKellar & Wang, 2023; Müller, Mildenberger, & Steingruber, 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.

1.2. Related studies

Many studies showed the effectiveness of blended learning compared with the traditional way as (Maccoun, 2016; Asarta & Schmidt, 2020; Xu et al., 2023); some studies showed a statistically significant difference in the student's achievement due to the method of blended learning (Al-Rimawi,2014), studies focusing on the trends and development of skills such as (Al-Hassan, 2013), studies concerning with the fundamental stage as Shahin, (2008), studies on the high level as Maccoun (2016), and studies on the stage of university education. This study is consistent with some of the

previous studies in focusing on blended learning. 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 means of direct and delayed achievement for the members of the experimental group. Shahin, (2008) aimed to measure the extent of the effectiveness of blended learning on achievement in Tanta and their trends towards it.

The most important results of the study reached the effectiveness of blended learning since it combines e-learning and traditional learning helping to provide educational materials in many different ways through the presence of a statistically significant difference in many ways between the marks' means of the experimental group which studied via the blended learning and the degrees of 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.

1.3. Purpose of the study

The choice of this research theme, thus, the diversity of education systems, stems from the observation of the daily reality caused by the containment of Covid19, 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 that's was received in the current conditions of the coronavirus at the University of Temouchent. 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 objective of this work is to verify the effectiveness of a hybrid education at the University of Ain Témouchent by comparing distance training and face-to-face education. Moreover, blended learning is one of the contemporary trends in education and one of the new trends for the teacher in the twenty-first century; it can be described as an educational method in which more than one means is used for transmitting knowledge and experience to learners to achieve the best of the learning outputs (Freihat, 2004); accordingly, this model combines the advantages of e-learning and the benefits of classroom education; this education 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 is according to Cohen et al., (2005): '…range of approaches used in educational research to gather data which are to be used as basis for inference and interpretation, for explanation and prediction' (p.44). 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) 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" (p, 192). Yin (1994) 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" (p, 13). 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 Ain Temouchent who were randomly chosen.

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. 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 (p.236).

The purpose behind the choice of questionnaire as a data collection method, is the key features that portray it, even though it has several 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.

2.3. Ethics

The study observed strict ethical standards such that, the right permissions from the authorities and participants were sought before the commencement of the survey.

2.4. Analysis

The data analysis process represents an important stage of the study, Le Compte and Schensul (1999) define analysis as steps the researcher follows to reduce the collected data to extract useful information and have an accurate interpretation. Data analysis consists of three items: organizing data, reducing data by summarizing it, and identifying patterns to link the existing themes. The results of the student's and teachers' questionnaires are reported as follows.

3. Result

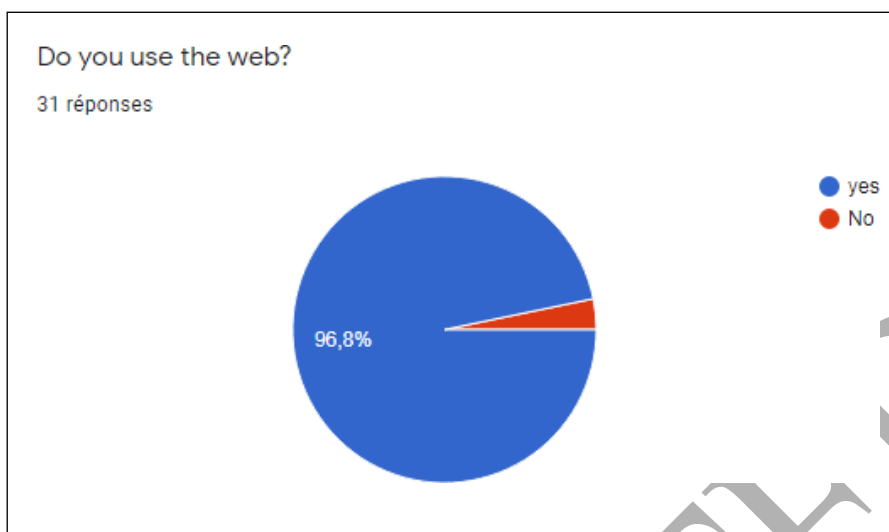### 3.1. Learners' Questionnaire Analysis

3.1.1. Q. 01: Do you use the web? this question aims to findout whether or not students use the web in their daily lives or to follow their university studies

✓ Yes.

✓ No.

Figure 1
Internet used by learners

The recorded results in Figure 1 show that thirty students, with a rate of (96.8%), use the Internet in their daily life (study, research, chats, news, etc.), on the other hand, one student, i.e. (03.2%), does not use the Internet for different reasons, maybe he does nothave the means or he does not master the use of new technologies.

3.1.2. Q2: How do you connect with your teacher? The objective of this question is to know by what means students come into contact with their teachers.

Figure 2
*Means of interaction between teachers/student*
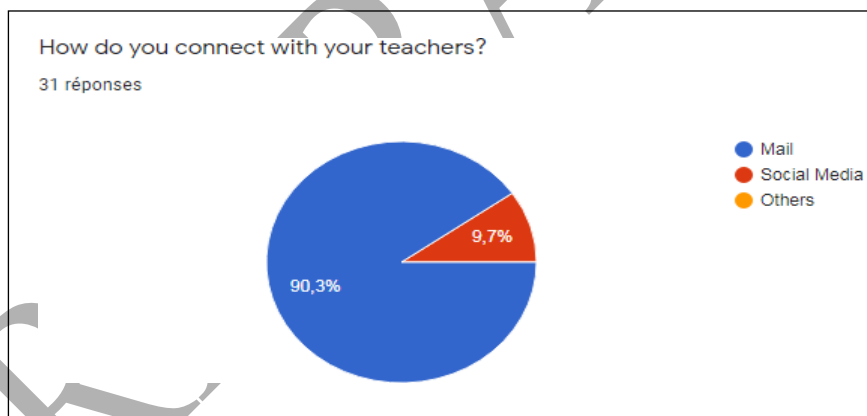
The results in figure 2 show that twenty-eight students, with a percentage of (90.3%) contact their teachers by email thanks to its interesting advantages. Indeed, this means allows you to send attachments up to 25MB such as Word files, PDFs, and videos. On the other hand, (9.7%) of respondents prefer to use social networks because they are easily accessible despite their limits (the number of attachments is limited) and are not secure.

3.1.3.Q.3: Do you think that the internet allows you to improve your autonomy (competence)? What drives us to ask this question is asked to know whether students have an idea about these applications, and which of them are the most appropriate for them.

- ✓ Yes.
- ✓ No.
- ✓

Figure 3

*The Impact of the Internet on the Development of Autonomy*
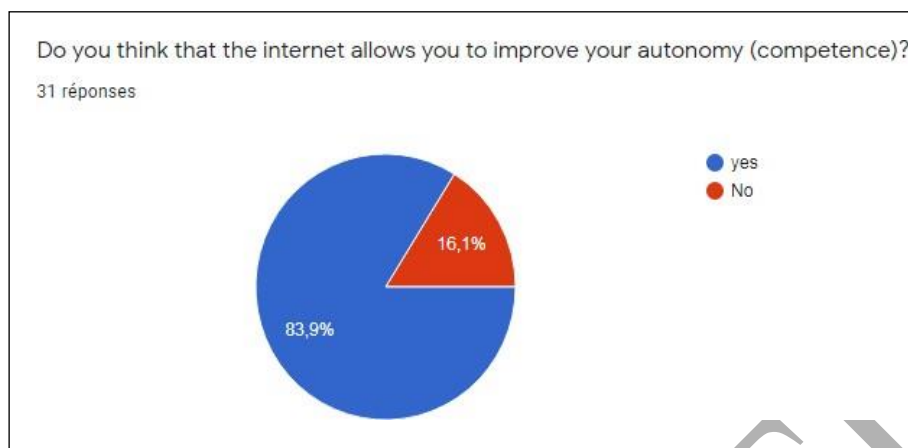
The results in Figure 3 show that twenty-one students with a rate of (67.7%) say yes, which proves that the students of our university followtechnology regularly and are always up to date with news related to the Internet. Among these applications, we can cite the following: Google Classroom, Skype, Viber, WhatsApp…etc. The interpretation of the question gives us the impression that (32.3%) did not understand the question because the majority (83.9%) say that the internet improves their autonomy which proves that they use applications.

3.1.4. Q 04: Have you ever taken online courses? To know if the students have experience in distance education is the objective of this question.

✓ Yes.
✓ No

Figure 4

The online courses
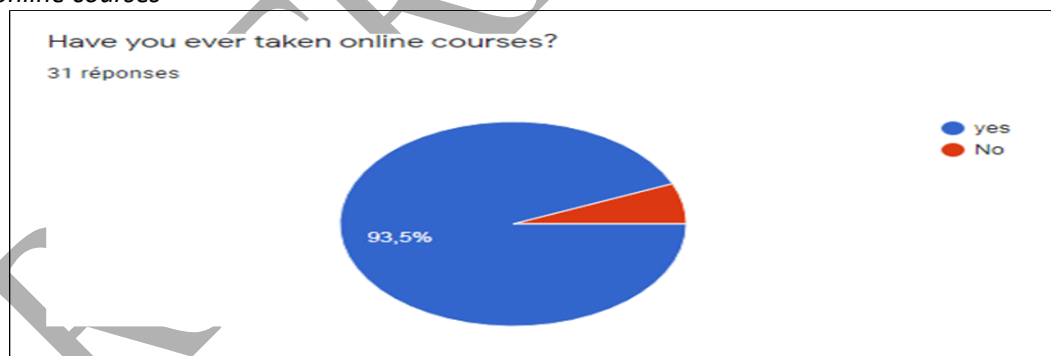
According to the results obtained and seen in figure 4, the majority of students take online courses because it allows them to follow their own pace of learning, and to define a schedule that suits the agenda of each one. (93.5%) which represents twenty-nine students who declare that they have followed online training. (6.5%) answered no because of the unavailability of means: the lack of network and equipment (computer, Smartphone, etc.), and the misappropriation of course time.
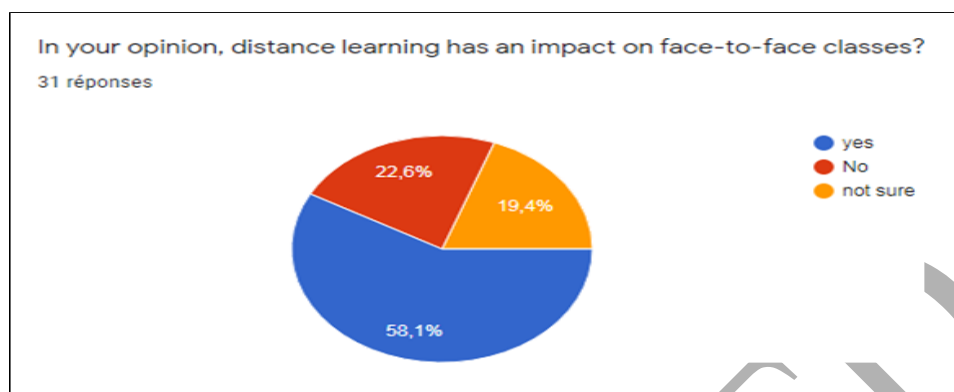
3.1.5.Q.05: Do you think that distance learning has an impact on face-to-face classes? The purpose assigned to this question is to know the opinion of students on the impact of distance learning courses on face-to-face courses.

✓ Yes
✓ No

✓ Not sure

Figure 5

*The impact of distance courses on face-to-face courses.*

The results in Figure 5 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. This result is confirmed by seven students with a percentage of (22.6%) who answered no, for them the fact of attending a face-to-face course is sufficient to validate a semester, six students with a rate of (19.4%) are not sure because it's a new experience for them. Our objective is to know the importance of the Internet in the development of the autonomy of our subjects. According to the results collected, we can say that most of the learners, with a rate of (83.9%) confirm that the Internet helps them to improve their autonomy because it provides them with all their needs according to their age, theirlevel, and also allows them to transmit and receive information anywhere in the world with just a click. Five students only with a percentage of (16.1%) said that the internet does not affect their improvement, either because of the lack of internet skills, especially with the multiplicity of sites and pages that offer unlimited number information, some are reliable and some are not.

3.1.6. Question 07: Which application did you use to follow your courses remotely? The main objective of this question is to have a precise idea about the applications used in the courses given remotely.

✓ Google Zoom
✓ Google Meet

Figure 6

*Apps used for the perception of lessons*
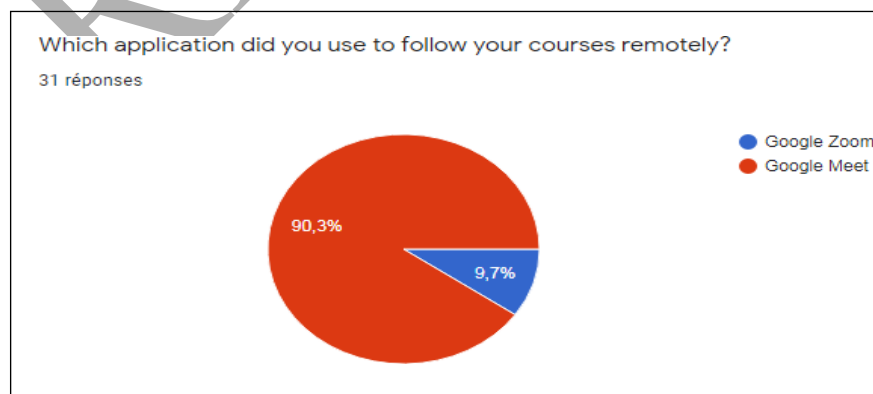
According to the results displayed in figure 6, the two applications are widely used by teachers and students; thanks to the advantages they offer. The latter allows sending text

messages, adding friends, and displaying the screen. (90.3%) answered by Google Meet, (9.7%) answered by Google Zoom.

3.1.7. Question 08: Do you think distance education is more effective than face-to-face Education? The purpose of this question is to know the most effective mode for respondents.

✓ Yes

✓ no

Figure 7
the usefulness of distance education.
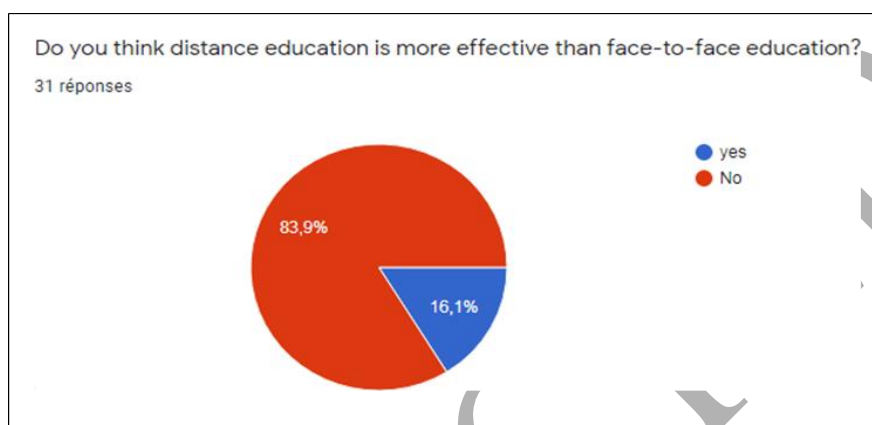
The results in Figure 7 show that face-to-face education is more effective than distance education, although online (distance) education is effective because of its ability to improve student's skills and performance, they also have the opportunity to participate without fear at a higher rate compared to traditional courses, and learners have a steady pace. (83.9%) answered no, (16.1%) said yes, so the majority prefers face-to-face teaching.

3.1.9. Q.09: What are the problems encountered during the distance learning courses? during distance learning courses, students have encountered obstacles, but our objective is to know what the nature of these is, and which of these problems has had the most negative impact on their learning.

✓ Technical problems.

✓ overlap and noise (two or more people are talking at the same time.

✓ The programmed time during the course is not appropriate

Figure 8
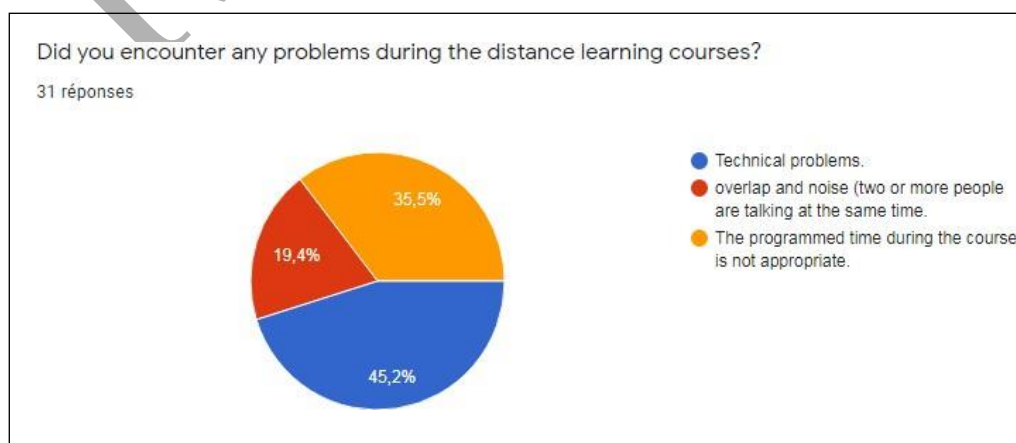*problems encountered during distance learning.*

Figure 8 which shows the results of this question say that: fourteen students with a percentage of (45.2%) mentioned technical problems such as network failure, and connection speed, which hinder the teaching process. (19.4%) of students confirm that the problem is overlapping and noise interrupting lessons. And eleven students say that the time scheduled in class is not appropriate and this answer was given by the teachers because the sessions are scheduled at work time or during the night.

3.1.10. Q10: What are problems you encountered during face-to-face or during COVID-19 classes?

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

Figure 9
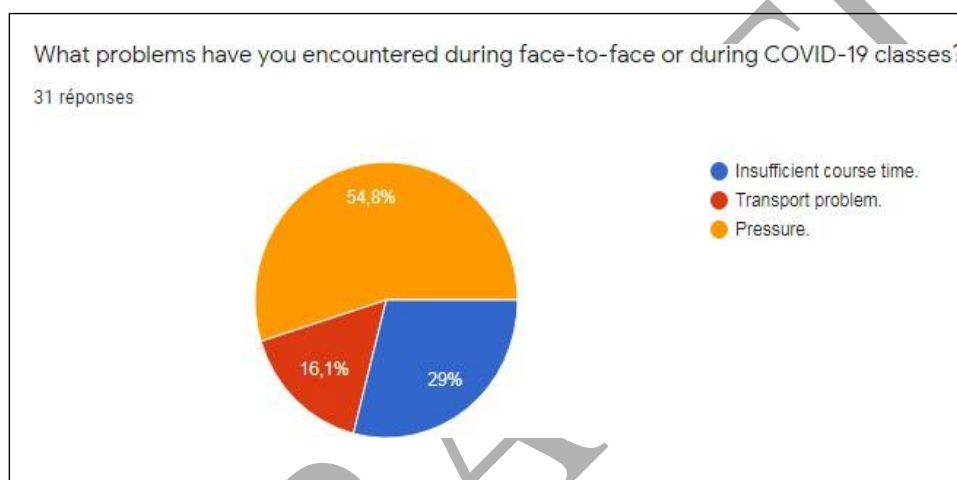*Problems encountered in face-to-face lessons*

Figure 9 shows 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,   seventeen 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 degree of Internet use and its importance through their responses have been analyzed as to what context they use the Internet and whether   the latter is effective or not. The second aspect of our questionnaire concerns usability and the use of the Internet. this measure plays a very important role in student life where it has many uses (learning, communication, etc.). The third aspect was distance education and its role, and applications that students used during their studies.

Finally, the problems that students encounter during classes are both in text and direct form, a comparison of the forms of teaching and the evaluation of the training provided by teachers (Shi, Tong & Long, 2021). So, it is found that students found obstacles that hinder 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, and transport problem). 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 (Cabauatan, Uy, Manalo & Castro, 2021). Each mode has its characteristics.

5. Conclusion

The work followed a quantitative approach by using the questionnaire. Through this research protocol, the researcher sought to know the impact of the useof ICT on the course of learners, whether

during courses given face-to-face or remotely, 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.

The study discovered that 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, the impact of distance learning on residential courses as they are complementary.

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