

RESEARCH ARTICLE

Blended Learning in Moroccan High Schools: Perspectives and Challenges in its Implementation and Use

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ABSTRACT

This study investigates Moroccan high school students' blended learning experience. Particularly, the present study aims to investigate students' perceived impact and benefits of blended learning on their learning process, as well as the main challenges that could have hindered the successful implementation of blended learning. The study tries to address three main research questions. The first question tackles students' perceived impact of blended learning, while the third research question deals with students' perceived challenges of blended learning. Conducting this study is important to gain in-depth understanding of the main benefits and challenges of implementing blended learning in high schools in order to guarantee a successful implementation of this new mode of instruction in cases of emergency such as the previous lockdown. The study uses both a questionnaire and interviews. The questionnaire was administered to 204 high school students while 30 students were chosen for a semi-structured interview. The results revealed that while blended learning was perceived to have several benefits for the students, students faced some challenges during the online part of blended learning.

KEYWORDS

blended learning, perceived benefits, perceived challenges, perceived impact

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1. Introduction

The field of teaching has witnessed a significant shift from the traditional Teacher-Centered approach to the modern Learner-Centered approach. Instead of using the traditional teaching methods, this shift has called for innovation in the teaching pedagogies. Researchers in the field of education refer to pedagogical innovations as deliberate decisions made by stakeholders for the purpose of making improvements in the field of teaching (Huberman, 1973:7). In the same respect, Paniagua and Istance (2018:20) claim that in order to develop these 21st century skills (communication, critical thinking skills, collaboration, creativity..Etc), innovations should take place at the level of pedagogies in order to have a systematic development of such skills rather than achieving this goal by accident.

Moroccan education stakeholders realized the importance of integrating ICT in teaching practices as a new pedagogical innovation that would develop students' 21st century skills. Several previous educational reforms have tackled the use e-learning

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in Moroccan education. One of the important projects started by the ministry was the Moroccan Virtual Campus whose main aim is to promote and support the implementation of e-learning in Moroccan public higher education institutions.

This study focuses on blended learning as one of the pedagogical innovations that would develop and foster the 21st century students' competences and skills (students' autonomy, critical thinking, employability skills, problem solving....etc). Making the choice of opting for blended learning is also urgent with everything the world is undergoing right now especially with the previous pandemic, which has revealed the necessity to reconsider and question the traditional teaching and learning practices used so far and to implement new teaching practices capable of not only revolutionizing and modernizing the way teaching and learning take place and of fostering effective teaching practices that are hopefully conducive to better learning achievements but also of being sometimes a security measure and the only way out to opt for in cases of emergency when face to face teaching, large class room sizes and traditional instruction can no longer be options.

In order to improve the quality of learning within a blended learning environment, it is crucial to study the perspectives of students towards blended learning as a model and their attitudes towards their blended learning experience. (Benzehaf, Zyad, Laaboudi, & Yeou, 2023, p. 121). This study is guided by the following research questions:

- 1. How do students view the effect of blended education on their learning progress?
- 2. What do students think they benefited from their blended learning experience?
- 3. What challenges do students believe hindered the successful implementation of blended learning?

2. Literature Review

The term blended learning has been defined differently by researchers. In a general basis, blended learning stands for any educational setting that tends to blend both face-to-face teaching and online instruction. (Graham, 2013). Other researchers, Dziuban et al. (2016) defined blended learning as a *"fluid process that integrates media-facilitated technology with face-to-face classroom activities, in which a portion of the face-to-face learning is replaced by online activities."* As it can be noticed from this definition, Dziuban et al. (2016) did not specify the extent to which each model should be executed. Instead, they mentioned that a certain portion goes to online learning. This entails that the majority of time is dedicated to the traditional face-to-face instruction whereas online instruction is given little part.

Khine and Lourdusamy (2003) tried to identify students' perceptions of the blended learning experience as well as the quality of the content delivered through the blended course. The course combined face-to-face lessons, activities and online discussions. The two researchers claimed that by means of implementing both online and face-to-face modes of instructions, students' learning experience would improve. In order to test this argument, the researchers collected feedback from 250 of their students and they found out that the blended mode of teaching was perceived positively by most of the students and thus confirmed their hypothesis that offering two delivery modes gives students the chance to have a good learning experience.

Boyle (2005) explored the issue of blended learning by making use of both interviews and questionnaires as a complementary way to find out ways in which blended learning can be implemented so that it suits all students' different needs, motivations and learning preferences. The argument they maintain is that learners' different needs should serve as a motivation for implementing a blended mode of learning. Basically, they took an already blended learning course and added certain elements such as combining face-to-face with on-line mode of teaching, offering students e-learning materials and tutorials and helping students to understand difficult topics by means of monitoring students' performances and offering continuous assessment throughout the course.

At the end of the study, Boyle (2005) compared the results of the redesigned course with results from previous years and found out that students pass rates were improved and students' engagement increased to a noticeable extent. The researchers concluded that a blended learning course is helpful as it motivates students to take part in the learning discussions in the classroom and online. Also, the blended learning course was responsible for a higher passing rate as opposed to the previous years in which there was only face-to-face instruction.

Motteram (2006) tried to study the students' experiences in a blended learning course. The design of the course and its development were reviewed by the researcher over three years. The respondents' answers reported that the blended learning course enhanced their learning experience in the sense that they were able to deal with certain topics on their own time and the activities involved in the blended course encouraged students' learning autonomy. In this regard, students had to do other readings outside the classroom as a way to further understand the lesson taught and discussed inside the classroom. Moreover, some respondents reported that the activities involved in the blended the readings outside the classroom as a way to further understand the lesson taught and discussed inside the classroom. Moreover, some respondents reported that the activities involved in the blended learning course were stimulating and motivating and that they enjoyed the blended mode of instruction.

One of the studies that tackled blended learning in Morocco is Dahbi (2015) who worked on the impact of blended learning on meeting students' 21st century skills and needs. He argues that blended learning might be helpful for students in the sense that they would be in control of their own pace of learning in that they would be able to catch up with their courses whenever and however they can. Also, teachers would spend less time in the classrooms explaining lessons, and thus would have the chance to meet their students virtually either individually, in pairs or in small groups addressing their learning issues and hence developing students' outcomes. (Dahbi, 2015, p.93).

Benhadj (2021) studied the impact of blended learning on high school students' English language proficiency through the use of Google Classroom. The study consisted of 79 Moroccan first-year Baccalaureate students whose ages ranged from 16 to 18 years old. Through a quasi-experiment, the researcher found out that blended learning enabled students of any gender to develop their English language proficiency. He also claims that the blended learning mode of instruction helped students have a modernized environment where they feel the need to learn as opposed to the outdated classroom setting. (Belhadj, 2021, p. 152).

3. Methodology

This study is an attempt to investigate students' experience in a blended learning mode of instruction through determining their views, benefits and challenges within the blended learning mode of teaching. To accomplish this objective, both a questionnaire and an interview with students were used.

3.1. Participants

A total of 204 high school students were voluntarily chosen to participate in this study. The main factor behind choosing the participants is that they should have experienced a blended learning mode of teaching. Once the questionnaire was distributed to the total number of participants, only 159 students returned it. The participants were common core, first-year Baccalaureate and second-year Baccalaureate students at Imam El Ghazali High School, Sidi Bennour, Morocco. The ages of the participants ranged from 16 to 20 years old. The participants consisted of 44.61% of males (91) and 55.39% of females (113). Table 1 below represents the distribution of the participants according to their level and gender.

Number of Participants	Male	Female	Total	Percentage
Common Core	30	37	67	32.84
First-Year Bac	36	44	80	39.21
Second-Year Bac	25	32	57	27.94
Total	91	113	204	100

Table 1: The Distribution of participants depending on their level and gender.

3.2. Data Collection Instruments

This study made use of a questionnaire to get data from the participants. The questionnaire is a data collection instrument whose main function is to quantify the extent to which an issue is being used by a particular group of people. It is a quantitative data collection that is used by researchers to get data about the issue being studied. Questionnaires are characterized by the quantitative nature of the data collected from the respondents in the sense that information obtained from the participants via questionnaires can be put in the form of charts or numerical tables. (Kothari, 2004).

The questionnaire used in this study consisted of four main parts. The first part was made to gather background information on the participants. The second part contained questions about students' views about the impact of blended learning on their learning progress. The third part dealt with students' possible benefits from the blended learning mode of instruction. The last part gathered data regarding the main challenges of blended learning as they are perceived by the participants.

In order to obtain a more in-depth data regarding students' perceived impact, benefits and challenges of blended learning, this study made of a semi-structured interview with 25 participants. Kothari (2004:99) summarizes the advantages of using personal interviews as follows:

- 1. More information and that too in greater depth, can be obtained.
- 2. Interviewer by his own skill, can overcome the resistance, if any, of the respondents; the interview method can be made to yield an almost perfect sample of the general population.

3. There is greater flexibility under this method as the opportunity to restructure questions is always there, especially in the case of unstructured interviews.

The main difference between the questionnaire and the interviews in this study was the type of questions included in each instrument. In the interview, questions were more open-ended as to collect more in-depth data from the respondents which might not be feasible in the questionnaire. The interview consisted of three main parts. The first part included questions about students' perceived impact of blended learning. The second part gathered data regarding students' observed benefits of blended learning. The last part dealt with the possible barriers to blended learning as they were perceived by the respondents.

3.3. Data Analysis

Analyzing data collected from the respondents was divided into two main types. The first type has to do with quantitative and numerical data. The second part included qualitative testimonials from the respondents. The first type was processed through a software called SPSS to obtain descriptive data while thematic analysis was used for the interview transcripts of the respondents.

4. Results

This study was an attempt to investigate high school students' experience in a blended learning mode of instruction. Specifically, this study investigated students' perceived impact and benefits of blended learning on their learning progress. Also, the present study attempted to identify the possible barriers that might have hindered the success of their blended learning experience. This section is devoted to the results of the study organized according to the research questions.

4.1. Students' perceived impact of blended learning

In an attempt to obtain data regarding students' perceived impact of blended learning, the respondents were given some statements which they had to react to either strongly agree, agree, undecided, disagree or strongly disagree. The first statement "blended learning helps me become more productive" attracted 58.72 % of the respondents who strongly agreed and 25.11 agreed with it. To get more in-depth data regarding this first statement, the same questions was included in the interview. Some students claimed that blended learning offered them some flexibility of time and place in the sense that they can access the information whenever and wherever they are as one student said, "in blended learning, there is flexibility of time and place...I mean I can access the lesson when I want and where I want and read slowly to understand and do my homework."

The second statement "Blended learning helps me remember what I learn" attracted a total of 83.71 % who either strongly agreed or agreed. In this regard, students maintain that having the flexibility to access the lesson and materials at their own convenience allows them the chance to revise the lesson once more and thus remember the points discussed in the classroom as a student said, "when I go home, I access the lesson again and try to go over it and I can remember the exact points explained by my teacher in class and this helps me a lot to remember."

The other statements and their percentages are shown in Table 2 below:

Table 2: Students' perceived impact of blended learning.

		Strongly agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)
1.	Blended learning helps me become more productive	58.72	25.11	10.89	3.91	1.37
2.	Blended learning helps me remember what I learn.	60.24	23.47	9.56	4.09	1.64
3.	l understand my lessons better through blended learning	57.38	26.13	9.02	5.01	2.46
4.	l enjoy learning more with blended learning	55.74	27.05	10.15	4.75	2.31
5.	Online and in-person classes fit together well in blended learning.	53.62	28.47	9.80	5.62	2.49
6.	I find online learning easier than face-to- face classes.	59.27	25.19	8.74	4.02	2.78
7.	l find face-to-face classes easier than online learning.	45.67	30.21	12.45	7.89	3.78

4.2. Students' perceived benefits of blended learning

This section deals with the second research question which is about students' perceived benefits of blended learning. The results showed that most of the statements attracted a high percentage of agreement from the respondents who either strongly agreed or agreed. Starting with the first statement "Blended learning allows me to learn at my own pace", it was agreed on by a total of 81.08 % of the respondents. In this respect, some students claimed that through blended learning, they were able to review their lessons and do the required assignments when they feel ready as opposed to the classroom where they are obliged to finish the assignment within a specific amount of time as a student said, "during this experience, I felt that I am enjoying school because there is no pressure of doing the tasks in short periods of time and I don't have to always go to school to learn...when I feel ready I go over the resources I have online, and I do my assignments."

Another statement that attracted a high percentage of agreement was "I have access to more learning resources with blended learning". Students in the interview further clarified this claim by saying that the online part of blended learning was beneficial as the teacher gave them supplementary materials related to the lesson taught in class and thus helped them gain more understanding as opposed to the classroom only. In this regard, a student said, "imagine having the teacher explains to you in the classroom and then he gives you the same lesson plus more handouts to read online...isn't that good enough to understand the lesson?"

Table 3 below summarizes students' perception of the benefits of blended learning.

		Strongly agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)
1.	Blended learning allows me to learn at my own pace.	48.65	32.43	10.21	5.74	2.97
2.	Blended learning helps me balance my studies with other responsibilities.	47.12	31.56	11.08	6.21	3.03
3.	I have access to more learning resources with blended learning.	49.84	29.67	9.51	6.34	4.64
4.	Blended learning helps me stay organized with assignments and deadlines.	46.29	30.82	12.74	6.02	4.13
5.	Blended learning provides more opportunities for collaboration with classmates.	45.96	33.14	10.58	6.34	3.98
6.	Blended learning improves my ability to manage my time effectively.	48.92	30.47	10.34	6.01	4.26
7.	Blended learning makes it easier for me to review and revise materials.	50.12	29.75	9.02	6.09	5.02

Table 3: Students' perceived benefits of blended learning

4.3. Students' perceived challenges of blended learning.

This section tackles students' challenges during their blended learning experience. The respondents were asked to report their level of agreement towards five main statements from strongly agree to strongly disagree. Having a speed connection during the online part of blended learning was the first main barrier as it was attracted by 50 % of the respondents. The second perceived barrier was having too much work to do as it was agreed on by 48 % of the respondents. Other students (41%) reported having issues staying focused and motivated during the online learning mode while 40.5% of them had problems understanding the materials posted online. Finally, "I find it challenging to navigate the online platform" was attracted by 39.5% to be an obstacle hindering the implementation of blended learning. Table 4 below summarizes the results of this section:

		Strongly agree (%)	Agree (%)	Undecided (%)	Disagree (%)	Strongly disagree (%)
1.	I have problems with the connection speed.	9	41	19	21	10
2.	I feel there is too much work to do.	8	40	20	25	7
3.	I have difficulties understanding the materials posted online.	10	30.5	24.5	27	8
4.	I find it challenging to stay focused and motivated online compared to the classroom.	6	35	28	23	8
5.	I find it challenging to navigate the online platforms.	7.5	32	26	28	6

Table 4: Students' perceived challenges of blended learning.

5. Discussion

5.1. Students' perceived impact of blended learning

A general analysis of Table 2 reveals that most of the statement attracted a high percentage of agreement from the respondents. Also, it shows that the respondents not only they perceive positive impact of blended learning, but also claim that both face-toface instruction and online learning fit together. In this respect, some students in the interview pointed out that the online part of blended learning enabled them to clear any misunderstandings they had in class as a student said, "sometimes I don't really get the full picture until I go home and check the online resources then I say now I understand...and that's a good thing because there is always a second chance for me to understand."

Moreover, Table 2 above reveals that face-to-face instruction part of blended learning is also still preferable as it was attracted by 75.88 % who either strongly agreed or agreed with the statement that says "I find face-to-face classes easier than online learning." In this regard, students maintain that the classroom instruction cannot be replaced by online learning but a combination of the two is needed due to the importance of the teacher as one students stated, "for me I think the teacher should always be there because he knows how to explain the lesson and transform the information from the book to us not like reading online where there is nobody to ask".

As a general conclusion to students' perceived impact of blended learning, it was noticed that while a great percentage of students reported a positive impact of blended learning on their learning process, there is also a great proportion of them who still prefer the face-to-face mode of instruction as an integral part of blended learning.

5.2. Students' perceived benefits of blended learning

Generally, the majority of the respondents agreed on most of the statements regarding the benefits of blended learning on their learning progress as it enables them to work at their own pace, interact more with their peers as well as offers them more materials and learning resources.

Furthermore, the respondents reported that blended learning was a good chance for them to work and interact with their classmates. In this respect, the statement "Blended learning provides more opportunities for collaboration with classmates" was agreed on by 79.1% of the respondents. A student, in this regard, claimed "in the classroom sometimes I don't have the chance to work with as many of my classmates as possible because 1 hour is not really enough for doing so and that's why blended learning was an excellent opportunity because we had groups where we could discuss whatever was not clear about the lesson."

5.3. Students' perceived challenges of blended learning.

This section revealed that having a speed connection was the highest challenge to be agreed on by the respondents. In this respect, some students claimed that blended learning has many benefits but it requires having a stable internet connection as a student said, "yes blended learning was a very good experience to be honest but sometimes I feel I am forced not to go along with the online part as I don't have a good and fast connection." Also, a great proportion of the respondents reported that blended learning resulted in an increase of the workload including the supplementary materials they have to go over as well as the

assignments they have to do. In this regard, a student maintained, "having face to face classes and online sessions was unbelievable because I have too many handouts to read and too much homework...that's a problem since we have other school subjects."

The third most perceived challenge of the blended learning mode of instruction was the inability of students to stay focused and motivated in online learning. When asked to clarify this, some students claimed that having a teacher tends to motivate them and push them to do the required work as opposed to online where they have to take the responsibility to do the work themselves. In this respect, a student claimed, "I enjoyed the online classes but I feel the need for the teacher to be there to push me to do the work because sometimes it just feels like you are not focusing anymore."

6. Conclusion

This study investigated high school students' perceived impact, benefits and challenges of blended learning. The study reveals that students perceive blended learning to be beneficial for their learning progress. For example, a great proportion of them agreed that blended learning offered them the opportunity to learn at their own pace, access more materials and resources and increase their interaction with their peers. However, the respondents reported that having a slow connection was an essential barrier to the success of their blended learning experience.

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References

- [1] Benhadj, Y. (2021). A quasi-experimental study on the impact of blended learning on EFL students' language proficiency. *International Journal of Language and Literary Studies*, 3(3), 146-155.
- [2] Benzehaf, B., Zyad, H., Laaboudi, D., & Yeou, M. (2023). Students' perceptions of blended learning: Impact, benefits, and challenges. *Journal of Applied Language and Culture Studies*, 6(2), 120-134.
- [3] Boyle, T. (2005). A dynamic, systematic method for developing blended learning. Education, Communication & Information, 5(3), 221-232.
- [4] Dahbi, M. (n.d.). Integrating blended learning to meet the needs of the 21st-century learners: Implications for higher education in Morocco. International Foundation for Research and Development (IFRD), 92.
- [5] Dziuban, C. D., Picciano, A. G., Graham, C. R., & Moskal, P. D. (2016). Conducting research in online and blended learning environments: New pedagogical frontiers. Routledge.
- [6] Graham, C. R., Henrie, C. R., & Gibbons, A. S. (2013). Developing models and theory for blended learning research. In *Blended learning* (pp. 13-33). Routledge.
- [7] Huberman, A. M. (1973). Understanding change in education: An introduction. Experiments and innovations in education No. 4. UNESCO.
- [8] Khine, M. S., & Lourdusamy, A. (2003). Using conversant media as a collaborative learning tool in teacher education. *Australasian Journal of Educational Technology*, 19(2), 140-157.
- [9] Motteram, G. (2006). 'Blended' education and the transformation of teachers: A long-term case study in postgraduate UK higher education. British Journal of Educational Technology, 37(1), 17-30.
- [10] Paniagua, A., & Istance, D. (2018). Teachers as designers of learning environments. Educational Research and Innovation, 17-42.