B-LEARNING: DEPENDENT ON THE COURSE OR THE TEACHER?

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ABSTRACT

The present study aims to determine if the successful implementation of a blended learning methodology is more dependent on the course subject matter or on the teacher. Using the Evaluation Scale on the Influence of Course Subject and Teachers on B-learning, we analyzed five factors: Expectations, Web Tools 2.0, Feedback, Cooperative/collaborative Learning, and Social Relations. The results show that student expectations and cooperative/collaborative learning are dependent on the course subject matter while all five factors crucially depend on the role of the teacher. We concluded that teachers have a much greater influence than the course subject on the successful implementation of an effective blended learning model.

Keywords: *b-learning, elearning, semipresential learning, effectiveness, teacher, course*

INTRODUCTION

The 21st century has been referred to as the Communication Age (Hinojo & Fernández, 2012). Current social realities, and the current public health situation, combined with the increasingly pervasive use of Information and Communications Technology (ICT) in all areas of life, have produced a context where work, and especially education, are increasingly conducted either entirely online or using a semipresential or blended approach. These enormous social, educational, and technological transformations require individuals to be continuously updating their skills in a process of continuous learning to meet the demands of contemporary life.

One of the principal challenges is combining professional, personal, or family responsibilities and the continuous training necessary for personal and professional growth. To help meet this challenge, many universities currently offer remote or semipresential programs, at both the degree and postdegree level, for students whose schedules are incompatible with traditional classroom learning.

In recent decades, as noted by Lara Barragán Gomez et al. (2009), students have called for a change in both traditional teaching methodologies and the role of teachers. They seek a different, more active type of learning in which the student is the center of the learning process. This change is another example of the impact of new technologies on the current educational environment. Thus, there is clearly a need to implement a range of strategies and actions that harness digital technologies and tools to provide high-quality remote or semipresential education programs.

In recent years there has been an increasing demand in Spanish universities for degree and postgraduate programs offered in the elearning or b-learning format. The implementation of these distance learning methodologies requires specialized teacher training and the deployment of digital technologies at the service of students as well as the development of new teaching strategies and methodologies. These strategies must be designed and deployed to ensure student participation to boost their motivation and engagement in their own learning.

The vast majority, if not all, universities have established a virtual campus to facilitate interaction between students and teachers. These interactive platforms encourage student participation and engagement, as opposed to earlier online platforms which served merely as a repository

for course notes and resources. These new technologies and resources have allowed universities to implement new learning methodologies both in the classroom and for remote (elearning) and semipresential (b-learning) programs (Salinas Ibáñez et al., 2018).

The b-learning methodology was developed to address the shortcomings of an exclusively online, elearning format. The term "b-learning" refers to an education modality that combines online and off-line teaching-learning experiences (Escamilla-Martínez & Muriel-Amezcua, 2021), harnessing the best aspects of both modalities (Seraji et al., 2019). A review of current literature shows that authors use a number of different terms, such as hybrid, mixed, or blended learning, when referring to the b-learning modality (Salinas Ibáñez et al., 2018); other terms include semipresential learning, flexible education or mixed learning (Morán, 2012).

The present research project focusses on the b-learning methodology, which combines remote and in-class learning to "take advantage of the best of both worlds: classroom-based and online" (González-Videgaray, 2007, p. 84). The purpose of the classroom sessions in this methodology is to provide an opportunity for reflection, review, and building on previously learned material to ensure students have properly assimilated the studied material (Peralta, 2006).

Blended learning combines the benefits of face-to-face interaction in the classroom, which fosters closer relationships with the teacher and classmates, with the benefits of remote learning by making use of digital platforms and other online resources (Salinas Ibáñez et al., 2018; Graham, 2006). This learning methodology offers students greater autonomy and flexibility while also developing digital competences and new forms of interactions with teachers and classmates (Area-Moreira & Adell-Segura, 2009). This opportunity for encounter and engagement with fellow students and the use of cooperative learning strategies are among the principal drivers of effective and significant learning.

LITERATURE REVIEW

Several previous studies (Ángel Osorio & Castiblanco, 2019; Valverde-Berrocoso & Balladares Burgos, 2017) demonstrate the effectiveness of b-learning, concluding that this learning methodology offers satisfactory academic performance and greater student retention. Martínez-Berruezo and García-Varela (2013) affirmed that "student motivation in contexts which make use of virtual environments as a complement to classroom work is much higher than in similar contexts which do not use ICT" (p. 65).

Studies show that this is an effective learning-teaching modality, although it is important to note that there are drawbacks as well as advantages. According to research by Mukhtaramkhon and Jakhongirovich (2022), the principal advantages are related to the flexibility of the learning process, the relationship established with the teacher and the facility, the immediacy of contact, the possibility for more time and support for students with difficulties, and greater accessibility to information that can be adapted to the individual needs of students. On the other hand, the disadvantages are primarily associated with an inadequate availability of technological resources and a lack of the skills necessary for their use, as well as difficulties in effective group work. These difficulties were also identified by Szadziewska and Kujawski (2017), whose research also found additional disadvantages such as the lack of solutions for problems of tasks and the lack of adequate materials.

In addition to these advantages and disadvantages, there are other factors involved in semipresential teaching. The level of teacher training and experience, the motivation to learn, and the goal of better employment opportunities on the part of students are all highly relevant and significant factors in choosing b-learning. Significantly, age, gender, or prior experience with b-learning do not appear to be significant factors (Galán-Cubillo et al., 2020).

Martín-Martínez et al. (2020) determined that the predictors of a successful b-learning or the semipresential model are student expectations of the course or course subject, the use of Web Tools 2.0, feedback and communication with teachers, collaborative work with classmates, and the social relations among students and with teachers.

A number of other studies (Area Moreira et al., 2008; Bono, 2010; Castaño et al., 2017; Covarrubias Papahiu & Martínez Estrada, 2007; González-Goscón & Aljaro, 2011) have analyzed the role of the teacher and the course subject in b-learning to determine if these play a truly important role or,

on the contrary, if there are other, more important variables that determine the effectiveness of semipresential learning. González-Goscón and Aljaro (2011) analyzed four factors to determine which of them depend directly on the teacher in a semipresential environment, concluding that it is important that teachers plan adequately with quality resources and an appropriate workload. However, student interaction was considered to be the responsibility of the students themselves. Another interesting aspect revealed by this research was the two sidedness of b-learning: if students are academically unmotivated, b-learning will not build motivation; on the other hand, students who are motivated report that b-learning is a tool that further increases their motivation. According to the students, the most important factors in effective b-learning are the teacher's knowledge of the subject matter and the form of course evaluation (Zapata et al., 2010).

Teachers' expectations of their students is crucial to the student-teacher relationship. A study by Jiménez Morales and López Zafra (2013) found a significant and positive relationship between the prosocial attitudes of the students and teacher expectations regarding the general adaptation of the students and their academic performance. This research clearly demonstrates that students consider the role of the teacher to be highly important. Similar conclusions were reached by another study that noted that "teacher expectations of their students have a significant impact on the academic and intellectual achievements of students" (Valle Arias & Nuñez Perez, 1989, p. 297). Through their behavior and attitudes, teachers transmit their expectations to the students, directly influencing their performance. As affirmed by Tulic et al. (1998), "students whose teachers have high expectations of their performance have a greater probability to be high or very high achievers" (p. 6). The phenomenon of the influence of teacher expectations of their students is known as the "Pygmalion effect" (García Vargas, 2015).

Several research projects (Bono, 2010; Covarrubias Papahiu & Martínez Estrada, 2007; Escobar Medina, 2015) have found that the most important factor is the role of the teacher and their relationship with their students. There is no doubt that the teacher has an important responsibility but, in the b-learning methodology, their role is not the same as in traditional teaching methods. Feixas (2004) notes that "teacher training should be aimed at changing the conceptions of teachers about what and how students should learn" (p. 34). In blended learning, the teacher is the facilitator of learning (Torres-Coronas & Vidal-Blasco, 2019), guiding students while allowing them to construct their own learning experience, intervening only when students need help in achieving their learning goals (Lopes & Soares, 2018).

Teachers help to motivate students by offering vital support and encouraging greater acquisition of knowledge. This notion is supported by Covarrubias Papahiu and Martínez Estrada (2007), who found that students consider the teacher-student relationship to be fundamental to learning. Specifically, the attitude of the teacher (openness and interest), the teaching methodologies used, and the active participation of students, along with feedback from teachers, are essential elements in the effective learning process.

Escobar Medina (2015) also agreed on the importance of the teacher in the learning process, highlighting the importance of communication between teacher and student, and observing that "one cannot learn without someone to give orientation and one cannot teach without someone interested in learning" (p. 7). The connection provided by the teacher-student relationship is therefore fundamental to effective learning.

In addition to these studies that highlight the fundamental role of teachers in student learning, other studies (García Rodríguez & Álvarez Álvarez, 2007), while noting the importance of the teacher and their relationship with their students, also point to the course subject as a key factor. Specifically, the difficulty of the course and the amount and type of work involved are aspects that influence the level of student satisfaction; that is, courses perceived as being less difficult produce greater student satisfaction.

From the point of view of the student, research by Martínez Caro (2008) found that the extension of elearning as a substitute for traditional methods is possible but largely depends on the course subject. Elearning is preferable for courses with less practical content while courses with a greater amount of practical content require a semipresential or blended learning approach where theoretical content is provided via elearning and more practical content in the classroom. Thus, the study shows

that the type of course is highly relevant when determining the most appropriate methodology to use by assigning greater importance to the course subject to ensure the success of the b-learning model.

Similarly, research by Area Moreira et al. (2008) on semipresential university education from a student perspective gave less importance to the role of the teacher and their relationship to students, highlighting the importance of the course subject for successful b-learning. The study found that, while noting the value of positive interaction between teacher and student, in-class instruction received the lowest scores while the virtual classroom for the course, which included autonomous learning and planning of study, received the highest scores.

However, many of the studies cited above and others, such as that by Castaño et al. (2017), suggest that the course subject does not significantly influence student evaluations of content, teacher methodology, or overall satisfaction but rather it is the methodology used by the teacher that largely determines the level of student satisfaction. A study by Cabero Almenara and Llorente Cejudo (2009) found that neither course subject nor the teacher outweighed the other. They concluded that there are no significant differences between the two. The study found that students in b-learning programs in Pre-Primary Education, Primary Education, Music Education, Special Education, and Physical Education, gave generally highly positive scores to both the course subject matter and questions related to the teacher.

A review of the existing literature shows that a number of studies have analyzed the influence of the teacher and course subject on the earning process and the effectiveness of the b-learning methodology (Area Moreira et al., 2008; Bono, 2010; Cabero Almenara & Llorente Cejudo, 2009; Castaño et al., 2017; Flores Moran, 2019; García Rodríguez & Álvarez Álvarez, 2007). Furthermore, we have verified that the determining or predictive variables of a successful b-learning model are student expectations, the use of Web Tools 2.0, the use of a collaborative/cooperative methodology, the social relations among students, and the feedback provided by the teacher (Martín-Martínez et al., 2020). Thus, this study presents the following question: Are the predictive factors of a successful b-learning model dependent on the teacher or the course subject matter? To answer this question, we evaluated whether the predictive factors of successful b-learning (Expectations, Web Tools 2.0, Feedback, Cooperative/collaborative Learning, and Social Relations) depend on the teacher or on the subject.

METHOD

Participants

This research project used a sample of 145 first-year students studying Degree programs in Pre-Primary Education (68%) and Primary Education (32%), who were enrolled in semipresential or blended learning courses. With this methodology, students have one in-person classroom session per month for each course with the majority of course content and communication with teachers conducted using virtual platforms.

We decided to select first-year students in degree programs in Education to prevent any bias from previous courses and learning experiences in their response to questions about the platform, the b-learning methodology, and Web Tools 2.0. Thus, the sample consisted of students with no previous experience of the virtual platforms of the university.

The age of participants ranged from 21 to 48, with 72% of the sample between 21 and 35 years of age. Some 72% of participants resided in the Community of Madrid, 18% reported living in other Autonomous Communities (Aragón, Castilla y León, Cataluña, Navarra, Castilla-La Mancha, Cantabria, the Basque Country, Galicia, and the Balearic Islands), and 10% preferred not to give their place of residence. Also, 89% of the students enrolled in the b-learning program were working while also pursuing their studies.

Design and Variables

To achieve the study objectives, we used a nonexperimental or ex post facto, descriptive or comparative methodology, to determine if there are differences between the independent variables (teacher and subject) for each of the five dependent variables. The dependent variables in the study were five predictive factors of a successful b-learning model: Expectations, Web Tools 2.0, Feedback, Cooperative/collaborative Learning, and Social Relations.

The independent variables were Teacher, for which we evaluated 13 teachers, and Course Subject, for which we compared the courses Didactics, Education Research, Psychology of Development, and Foundations of Psycho-pedagogy.

Thus, the purpose of the study was to determine if the predictive factors of a successful b-learning model are dependent on the teacher, the course subject, or both, by identifying the most important elements within the blended learning methodology.

Instrument

To identify the variables with the greatest influence on a successful b-learning model, we developed a questionnaire: Evaluation Scale on the Influence of Course Subject and Teachers on B-learning (see Appendix). This instrument was structured in three parts.

Sociodemographic questions

The first part of the questionnaire consisted of nine questions on general aspects and the sociodemographic profile of students in the Degree in Education program experiencing the b-learning methodology for the first time. These questions asked about age, gender, place of residence, university degree being studied, previous studies, employment situation and current profession, number of hours dedicated to working, and availability of a PC and the internet in their home.

Dichotomous questions

The second part of the instrument consisted of 30 dichotomous (Yes/No) questions to evaluate specific aspects of the methodology used in the different courses analyzed and the practice of the different teachers of these courses. Thus, the same questions were answered by the participants for each of their courses (Didactics, Education Research, Psychology of Development, and Foundations of Psycho-pedagogy) and their respective teachers.

Multiple-choice questions

The third part of the questionnaire consisted of 15 multiple choice questions using a Likert-type scale of 1 to 6 where 1 = *Not at all/Nothing*, 2 = *Very little*, 3 = *Somewhat*, 4 = *Fairly*, 5 = *Very/A lot*, 6 = *Excellent*. These questions refer to student participation in the course using different resources and the student-teacher relationship. Again, participants answered these questions for all four of the courses analyzed.

Procedure and Analysis

Prior to conducting the survey of students, the instrument was validated, in terms of content and drafting of the questions, by a panel of seven experts in education and remote and blended learning. After validation, the questionnaire was delivered to students online. The participants were informed that the questionnaires were entirely anonymous and confidential and that all information would be used solely for the purposes of the research.

Descriptive analysis and ANOVA tests of intersubject effects of the resulting data were conducted using the IBM SPSS STATISTICS program version 26. The visual representation and graphics were created using Microsoft Excel.

RESULTS

The five factors or predictors of a successful b-learning model (Expectations, Web Tools 2.0, Feedback, Cooperative/collaborative Learning, and Social Relations) were analyzed to determine if there was a significant relationship with the course subject and the teacher teaching the course.

Influence of the Course Subject on B-learning Model

Expectations

Expectations refers to the value the individual assigns to the goals they hope to achieve, thus conditioning their intrinsic motivation in the task. An ANOVA test of intersubject effects was conducted to determine if there was a significant effect of the variable Expectations on the course subject ($F(3, 365) = 47.97$; $p < 0.001$; $\eta^2 = 0.28$) to determine if Expectations is dependent on the course subject.

Figure 1 shows the marginal mean scores of course subject for Expectations. There are significant differences between Education Research and the rest of the courses ($p < 0.001$). Didactics, Psychology of Development, and Foundations of Psycho-pedagogy showed significant differences compared to Education Research, a difference that is not observed when the other courses are compared to each other ($p > 0.05$).

This relation between Expectations and the course is due to the higher student expectations about some courses compared to others. Specifically, student expectations are lowest for Education Research.

Web Tools 2.0

This factor refers to the use of a range of interactive ICT resources, such as blogs, chats, forums, etc., that facilitate learning. An ANOVA test of intersubject effects for the Web Tools 2.0 factor showed no significant differences among the

Figure 1.
Marginal Averages of the Different Courses for the Factor: Expectations

courses (F(3, 365) = 1.42; $p > 0.05$; $\eta^2 = 0.01$). Thus, we can affirm that this factor does not depend on the course subject, given that all courses use the same platform with the availability of the Web Tools 2.0. The mean scores for the Web Tools 2.0 factor for the different course subjects are shown in Figure 2.

Figure 2.
Marginal Averages of the Different Courses for the Factor: Web Tools 2.0

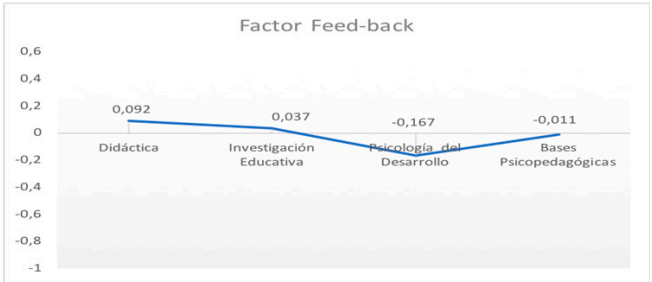
Feedback

Feedback refers to the communication and exchange between teacher and student and vice versa. An ANOVA test of intersubject effects for Feedback also showed no significant differences among the different courses (F(3, 365) = 1.41; $p > 0.05$; $\eta^2 = 0.01$). That is, the feedback between teachers and students does not depend on the subject matter of the course. The mean scores for Feedback for the different course subjects are shown in Figure 3.

Cooperative/collaborative Learning

This type of learning permits students not only to acquire specific knowledge but also to develop the social skills and competences necessary to work effectively with others. An ANOVA test of intersubject effects for Cooperative/collaborative

Figure 3.
Marginal Averages of the Different Courses for the Factor: Feedback



Learning showed a significant effect depending on the subject matter of the course (F(3, 365) = 9.56; $p < 0.001$; $\eta^2 = 0.07$). The multiple comparison tests showed statistically significant differences ($p < 0.01$) between Didactics and Education Research and Psychology of Education, the former being the course with the least amount of cooperative/collaborative group work.

These results show that cooperative learning does depend on the course. This may also be due to the fact that while students did perform group work, it did not involve cooperative and/or collaborative and interdependent student learning techniques. The mean scores for Cooperative/collaborative Learning for the different course subjects are shown in Figure 4.

Figure 4.
Marginal Averages of the Different Courses for the Factor: Cooperative/collaborative Learning

Social Relations

This factor evaluates the relationships established between students and teachers, both in the classroom and beyond and includes aspects such as engagement, communication, and interaction. An ANOVA test of intersubject effects for Social Relations showed no significant differences between the different course subjects analyzed (F(3, 365) = 2.24; $p > 0.05$; $\eta^2 = 0.02$). These results indicate that social relations among students and

with teachers did not depend on the course. The mean scores for Social Relations for the different course subjects are shown in Figure 5.

Figure 5.
Marginal Averages of the Different Courses for the Factor: Social Relations

Influence of the Teacher on B-Learning Model

Expectations

To evaluate the influence of Expectations in relation to the teacher imparting the course, an ANOVA test of intersubject effects showed a significant effect of this factor ($F(12, 356) = 13.88$; $p < 0.001$; $\eta^2 = 0.2$). That is, Expectations significantly depends on the teacher, with some teachers generating higher expectations than others. The mean scores for Expectations for the 13 teachers analyzed are shown in Figure 6.

Figure 6.
Marginal Averages of the Different Teachers for the Factor: Expectations

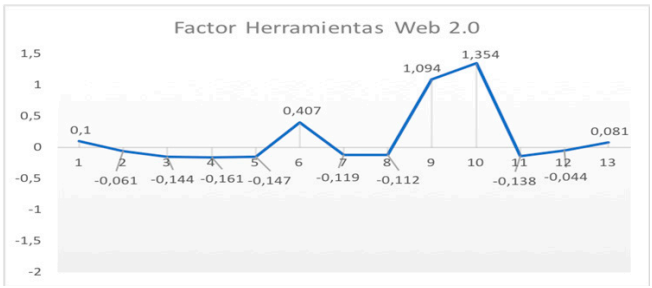
Multiple comparisons using Tukey statistics tests show statistically significant differences ($p < 0.05$) between teachers with higher scores (1, 2, 8, 9, and 12) and those with lower scores (4, 5, 6 and, 7). These results indicate that a number of teachers did not instill positive expectations in their students, thus undermining the students' motivation for learning.

Web Tools 2.0

An ANOVA test of intersubject effects for the Web Tools 2.0 variable also showed a significant effect in terms of the teacher teaching the course ($F(12, 356) = 1.88$; $p < 0.05$; $\eta^2 = 0.06$). That is, the use of Web Tools 2.0. depends on the teacher, with some teachers making greater use of this tool than others. Multiple comparisons using Tukey statistics tests showed that Teachers 9 and 10 had the highest scores for the Web Tools 2.0 factor, showing statistically significant differences ($p < 0.05$) compared to teachers with the lowest scores (1, 2, 3, 4, 5, 7, 8, and 11).

These results indicate that very few teachers make use of different technological tools (chats, blogs, forums, etc.) to increase communication with their students. However, two teachers (9 and 10) stand out favorably for their use of these tools compared to the other teachers, suggesting a greater skill and ability in the use of information and communications technologies. The mean scores for the Web Tools 2.0 factor for the 13 teachers analyzed are shown in Figure 7.

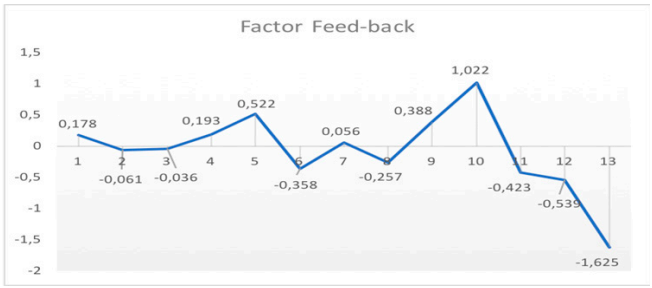
Figure 7.
Marginal Averages of the Different Teachers for the Factor: Web Tools 2.0



Feedback

An ANOVA test of intersubject effects for Feedback also showed a significant effect in terms of the teacher imparting the course ($F(12, 356) = 2.91$; $p < 0.01$; $\eta^2 = 0.09$). That means that Feedback depends on the teacher, whereby some teachers provide more feedback to their students than others. The mean scores for Feedback for the 13 teachers analyzed are shown in Figure 8.

Figure 8.
Marginal Averages of the Different Teachers for the Factor: Feedback



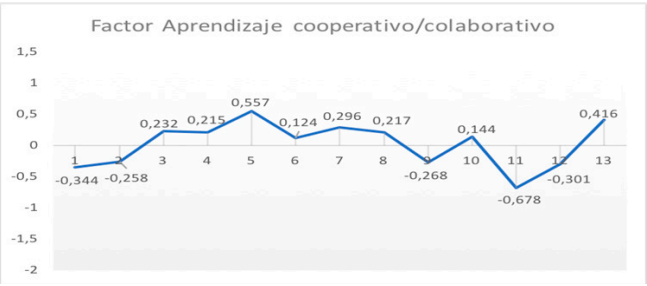
Multiple comparisons using Tukey statistics tests show that Teachers 5 and 10 had the highest scores for the Feedback factor, with statistically significant differences compared to Teachers 6, 8, 11, 12, and 13, who had the lowest scores. Notably, Teacher 13 had the lowest average score for this factor, showing significant differences compared to the other teachers. These figures indicate that the amount of feedback teachers provide to students varies widely, with significant differences in this factor between teachers.

Cooperative/collaborative Learning

An ANOVA test of intersubject effects for Cooperative/collaborative Learning also showed a significant effect in terms of the teacher ($F(12, 356) = 2.97$; $p < 0.01$; $\eta^2 = 0.09$), meaning the application of this methodology depends on the teacher, with some teachers assigning more group and collaborative work than others. Multiple comparisons using Tukey statistics tests showed that Teacher 5 received the highest score in this factor, with statistically significant differences ($p < 0.05$) from Teacher 11, who received the lowest average score. Furthermore, the tests showed that teachers with below average (1, 2, 9, and 11) demonstrated statistically significant differences compared to teachers with the highest scores in the Cooperative/collaborative Learning factor (3, 4, 5, 7, 8, and 13).

As with the previous factor, the results vary widely among different teachers. This suggests that teachers use very different approaches in encouraging cooperative/collaborative work among students. Teachers with the highest average scores clearly demonstrate greater skills in fostering collaborative work and communication among students, despite the difficulties and impediments inherent in a remote or distance learning methodology. The mean scores for Cooperative/collaborative Learning for the 13 teachers analyzed are shown in Figure 9.

Figure 9.
Marginal Averages of the Different Teachers for the Factor: Cooperative/collaborative Learning

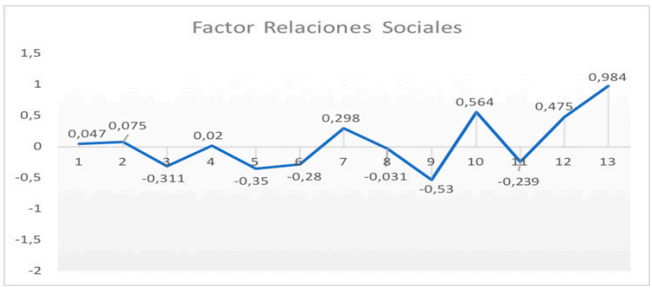


Social Relations

An ANOVA test of intersubject effects for Social Relations also showed a significant effect in terms of the teacher ($F(12, 356) = 1.81$; $p < 0.05$; $\eta^2 = 0.06$). That is, the social relations among students and with teachers depend on the interaction with the teacher. The multiple comparisons using Tukey statistics tests showed that Teacher 13 received the highest score for Social Relations, having statistically significant differences ($p < 0.05$) compared to the other teachers with the exception of Teacher 10, who received the second highest average score.

The data provided in Figure 10 indicates that many teachers scored below the average, suggesting difficulties in fostering social relations and communication both among students and between the teacher and students. These results indicate there are many shortcomings and deficiencies in the communication and interaction between many teachers and their students. The mean scores for Social Relations for the 13 teachers analyzed are shown in Figure 10.

Figure 10.
Marginal Averages of the Different Teachers for the Factor: Social Relations



It is important to note that the intersubject effect tests show that the factors Expectations and Cooperative/collaborative Learning are dependent on the course subject. Furthermore, the five predictive factors of a successful b-learning model (Expectations, Web Tools 2.0, Feedback, Cooperative/collaborative Learning, and Social Relations) are dependent on the teacher, thus demonstrating the important role played by the teacher in the success of the blended learning model.

DISCUSSION AND CONCLUSIONS

The purpose of this research project is to analyze the influence of the teacher and the course subject matter on the b-learning methodology. The results show that the role of the teacher is of greater

significance in the b-learning format compared to the course subject itself.

The analysis of the influence of the teacher and the course subject matter using the Evaluation Scale on the Influence of Course Subject and Teachers on B-learning and taking into account the five most important predictive factors or variables for a successful b-learning method (Expectations, Web Tools 2.0, Feedback, Cooperative/collaborative Learning, and Social Relations), showed that the teacher plays the most important role for each of these five variables. That is, student expectations and motivation, the use of Web Tools 2.0, cooperative learning with fellow students, and the relationships among students and with the teacher, are largely conditioned to a greater or lesser extent by the teacher impacting the course using the b-learning methodology.

These results are in line with the findings of previous studies, such as Bono (2010), which stressed the fundamental importance of the role of the teacher and their relationship with students. Similarly, a study by Covarrubias Papahiu and Martínez Estrada (2007) found that the key factor, among others, was the attitude of the teacher towards students. These findings agree with those of our study, especially the fundamental role of the teacher in terms of teacher feedback and the social relationships among students. The communication between teacher and student, and the social relationships within the learning environment are considered essential factors in the success of this methodology (Escobar Medina, 2015).

The study also found significant data on the variable Cooperative/collaborative Learning, in line with the findings of Castaño et al. (2017), who also found that the most important factor in student satisfaction is the methodology employed by the teacher. It must be noted that the prior expectations of students is a significant factor that influences their motivation during the learning process. This confirmed the findings of previous studies (Jiménez Morales & López Zafra, 2013; Tulic et al., 1998) that emphasized the importance of student expectations in achieving high student performance.

Despite the fact that the results of the present study confirm those of prior research, showing that the five factors or variables (Expectations, Web Tools 2.0, Feedback, Cooperative/collaborative Learning, Social Relations) are dependent on the teacher for a successful b-learning model, it should be noted that two of these variables, Expectations and Cooperative/collaborative Learning, also depend on the course subject matter.

The variables Expectations (referring to the degree of motivation and curiosity generated by the course itself) and Cooperative/collaborative Learning are dependent on the course subject, in line with the findings of García Rodríguez and Álvarez Álvarez (2007). In the same study, in addition to the importance of the teacher, other essential factors in a successful b-learning model are the difficulty of the course, the type of learning activities, and the amount of practice involved. A study by Area Moreira et al. (2008) also found that the most important variable for the success of the b-learning model is the type of course itself.

Furthermore, contrary to the results of Cabero Almenara and Llorente Cejudo (2009), who found that neither the course subject matter nor the teacher play an important role in the b-learning methodology, the results of the present study show significant differences regarding the role of the teacher. Most prior studies (Bono, 2010; Castaño et al., 2017; Covarrubias Papahiu & Martínez Estrada, 2007; Escobar Medina, 2015; Jiménez Morales & López Zafra, 2013; Tulic et al., 1998) corroborate these findings, showing a greater influence of the role of the teacher in the success of the b-learning model, making the role of the teacher the most salient aspect in the effective implementation of blended learning and more important than the course subject matter.

The present study shows that the successful implementation of the b-learning methodology depends on the skill and knowledge of the teacher. Our analysis shows that all the predictive variables for b-learning success depend on the teacher (Expectations, Web Tools 2.0, Feedback, Cooperative/collaborative Learning, and Social Relations), while only two are also influenced by the course subject (Expectations and Cooperative/collaborative Learning). Thus, for the success of this type of learning methodology the role of the teacher is crucial in student motivation, academic performance, and satisfaction.

For future research, it would be fruitful to study other levels of education and other university degree programs to determine if these results

are valid only for university degree programs in Pre-Primary Education and Primary Education or can if they can be extrapolated to other areas and levels of education where the b-learning methodology may be implemented. Furthermore, it may be instructive to extend our research to other degree programs that are instructed exclusively online or remotely to verify these variables have a similar influence on the elearning methodology.

Given the important role of the teacher in the success and effectiveness of the b-learning methodology, it is necessary to further analyze this and other aspects for the proper implementation of effective semipresential learning. It is essential that students enrolled in b-learning programs achieve similar learning outcomes as those in traditional classroom learning, or even additional benefits that complement the advantages of classroom learning with the multiple benefits offers by ICT and digital technologies.

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APPENDIX

EVALUATION SCALE ON THE INFLUENCE OF COURSE SUBJECT AND TEACHERS ON B-LEARNING

1. Age: _____

2. Sex:
   - ❑ Male
   - ❑ Female

3. University Degree program:
   - ❑ Pre-Primary Education
   - ❑ Primary Education
   - ❑ Music Education
   - ❑ Foreign Language Education
   - ❑ Special Education
   - ❑ Audition and Language

4. Current year:
   - ❑ First
   - ❑ Second
   - ❑ Third
   - ❑ Fourth

5. Modality of the program:
   - ❑ Presential
   - ❑ Semipresential/Blended

6. Are you currently working?
   - ❑ Yes
   - ❑ No

7. How many hours per week?
   - ❑ Less than 10 hours
   - ❑ From 10 to 20 hours
   - ❑ From 20 to 30 hours
   - ❑ More than 30 hours

8. Name of course:
   - ❑ General Didactics
   - ❑ Education Research
   - ❑ Development Psychology
   - ❑ Foundations of Psycho-pedagogy

9. Name of teacher: _____

ANSWER THE FOLLOWING QUESTIONS YES OR NO:

QUESTION	YES	NO
The teacher posts the course program on the platform.		
The teacher posts the course notes on the platform.		
The notes that the teacher posts are easily understood.		
The teacher posts schematics on the platform.		
The teacher posts instructions for exercises or assignments on the platform.		
The teacher posts glossaries.		
The teacher posts the links of interesting pages on the internet on the platform.		
The teacher posts videos (podcasts) on the platform.		
The teacher posts exam-type tests with automatic correction to do at home.		
The teacher posts practice exams with automatic correction to be taken from home.		
The teacher posts self-assessment tests with automatic correction.		
Teacher posts self-assessment tests without automatic correction.		
The teacher posts samples of standard exams.		
The teacher assigns individual work.		
The teacher allows work to be submitted through the platform.		
The teacher returns the work with corrections.		
The teacher assigns group work or projects.		
The teacher assigns group presentations in class.		
The teacher offers interactive talks/lectures.		
The professor uses forums.		
The teacher uses blogs.		
The teacher makes schematics for classroom session of the topics to be discussed.		
The schematics are easily understood.		
You can ask the teacher questions through email.		
The teacher answers your questions by email.		
The teacher is approachable/engaged with the students.		
The teacher fosters communication between classmates.		
Communication with the teacher is adequate.		
This subject is necessary for teaching practice.		
The contents of this subject are applicable to the classroom.		

ANSWER THE FOLLOWING QUESTIONS ON A SCALE OF 1 TO 6:

1. Not at all/Nothing
2. Somewhat
3. Fairly
4. Very/A lot
5. Very little
6. Excellent

QUESTION	1	2	3	4	5	6
Usefulness of asking questions by email to the teacher						
Usefulness of group work						
Usefulness of presenting group work in class						
Usefulness of returned work corrected by the teacher						
Usefulness of submitting work to the teacher on the platform						
Usefulness of using chats on the platform						
Usefulness of using forums on the platform						
Usefulness of using blogs on the platform						
Relationship/engagement with the teacher						
Relationship/engagement with classmates						
Communication with the teacher						
Usefulness of the subject for teaching practice						
Applicability of content in the classroom						
Initial motivation towards the subject						
Final motivation towards the subject						