

MOBILE DEVICES FOR TEACHING ENGLISH AS A SECOND LANGUAGE IN HIGHER EDUCATION. THE CASE OF DUOC IN CHILE

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Mobile devices are efficient tools of language learning since they enable students to learn and practice anywhere and anytime with personalized content and progress. The article analyzes the incorporation of the use of mobile devices for teaching English as a second language in higher education. This research was developed on a positivist paradigm, with a descriptive and quantitative methodology. The sample was formed by 32 students of Basic English courses belong to DUOC UC Institute, in Chile who practice their writing skills through systematic activities developed during 2013 in the Virtual Platform Blackboard. The results of this study suggest that students reacted positively to the use of technology, but expressed concern about the technological difficulties. Main findings confirm that the use of technology enables student's practice of English, transforming and improving the learning environment inside of the classroom and students feel comfortable and secure because they have a teacher and technology's support.

Key words: M-learning, English as a second language, writing skills, virtual Platforms, Mobile devices

1 Introduction

Web Learning English, specifically for Latin-Americans graduate students is both a global imperative and an enormous challenge. According to Vasquez [22] the changes caused by globalization are affecting directly on Chilean education. Areas such as English language learning and use of Information and Communication Technologies (ICT) are essential today in the world to create better conditions for cultural development. Others authors note that ICT are fundamental in the learning, since the society is and will be invaded by them [4, 9, 10].

One of these technologies is the mobile devices, which are efficient tools of language learning since they enable students to learn and practice anywhere and anytime with personalized content and

progress [11, 18, 26] Mobile technologies have the potential to provide and facilitate personalized learning and collaborative learning.

The current telecommunications infrastructure in terms of its ability to support mobile technologies in Latin America is very high. The use of cell phones show an exponential growth in the last ten years, with rates of subscribers representing 99% of the population and more than 100% in many countries [25], including Chile, whose technologies are predominantly second generation (2G).

1.1 M-Learning

O'Malley Vavoula, Glew, Taylor, Sharples and Lefrere [19] have defined mobile learning as taking place when the learner is not at a fixed, predetermined location, or when the learner takes advantage of learning opportunities offered by mobile technologies. In addition, it can be understood as learner mobility in the sense that learners should be able to engage in educational activities without being tied to a tightly delimited physical location [14]. This learning situation can be called Ubiquitous learning, which is described as context sensitive anyhow, anytime, anywhere learning using ubiquitous devices [6] refer to the term ubiquitous learning environment.

Researchers have investigated the mobile learning (m-Learning) methodology over the last decade [2, 7, 8]. Literature review conducted by Wen-Hsiung, Yen-Chun, Chun-Yu, Hao-Yun, Che-Hung and Sih-Han [26] show that mobile learning is most frequently used in teaching and learning contexts for higher education students (51.98%) unlike studies in elementary education (17.51%). In Chile, for example, an application called Mobile PSU was developed to improve National evaluation score in order to apply to the university rates in the University Selection Test. It is a free download application that provides easy access to packs of exercises, games and podcasts to use from the cellphone sorted by themes. While there are few data on the success of this project led by Educarchile, it clearly has a significant extent by the significant differences in admission rates to higher education for different socioeconomic sectors [25].

Regarding to the categories of research directions studies fall into two broad path: evaluating the effectiveness of mobile learning [3, 15] and designing mobile learning systems [5]. Most researches in the former showed positive effectiveness. Moreover, mobile devices enable detailed metrics on how students approach subjects, the process by which they acquire knowledge, and how quickly they pick up on key concepts and skills [28].

The positive results obtained by the use of m-learning are showed by Valdivia and Nussbaum [6, 18, 23] who indicate that most mobile learning studies feature positive outcomes, in which the 86% of the 164 mobile learning studies present positive outcomes.

1.2 Mobile devices to learn English

One of the reasons for wanting to use mobiles to learn English is described by Stockwell [21] who referred to the language learners' perception finding that they could complete the activities anywhere (on the trains, in other classes, between classes etc.) and at their free time.

Moreover, Rodriguez [20] points out some advantages of the use of cell phone such as; autonomy because each person decide the time that they can spend and the space they can used; collaborative because the students can work with their classmates or teacher in order to exchange information,

answer questions and develop a social life beyond the subjects they study. At the same time, this technology has a motivating function because the contents are presented attractively so that students feel what they are learning without making it tedious or boring.

Mobile learning has been recognized as one of the main additions to the process of the main additions to the process of learning and teaching English. There are dozens of learning applications in the App Store (iOS) and Play Store (Android) markets. There is a variety of activities such as; games, quizzes, dictionaries, listening, podcast, writing and test, that enable students to choose when and how to learn.

Some good examples of m-learning applications are: Dictionary.com, English Idioms Illustrated, English Grammar in Use, Hangman, Learn English Grammar, Johnny Grammar's Quizmaster and 60-Second Word Challenge.

1.3 Research aim and questions

This study investigates the following research question:

RQ 1: What are the perceptions among students toward mobile technology use in order to learn English as a second language?

The aim was to describe the incorporation of the use of mobile devices for teaching English as a second language in higher education, specifically for writing skills through a Virtual Platform (called Blackboard).

2 Case background

In the last decades, the teaching of English has acquired greater significance [13]. This is largely due to globalization, a process that has required new competencies and skills in today's students. Thus, continuous curricular adjustments have been made in teaching English in Chile since 1996 to provide students with tools that enable them to face the demands in today's world. A good example is that English lessons are compulsory from 5th to 12th grade.

In 2004, The Ministry of Education created a special program called English Opens Doors. This program gives diagnostic test, professional training to English Teachers, scholarships and fellowships. It emphasizes the use of modern technologies including e-learning and interactive software.

Moreover, there are 500 scholarships for public school and subsidiary teachers in order to achieve level B2 in the Common European framework of reference. Pre- service teachers can apply to a scholarship that consists in spending one semester abroad.

As a consequence, the Chilean government decided to evaluate students in 2012 by applying a national English evaluation called SIMCE to 11th grade students, the SIMCE assessed to 2.688 high schools along the country. The results were low but better than the first time it was applied in 2010 [17]. Students averaged 49 points of a total of 100, an increase in the number of certificates (from 22.622 to 31.854) with respect to the previous measurement, in 2010 [1]. It means that 18% of students had certificates in levels A2 or B1, which was a significant increase.

This experience was carried out in DUOC UC San Andres headquarters, Bío-Bío Region, Chile where the native language is Spanish. It is important to mention that the English Program is a pioneer in Higher Education English teaching since it is the only program where English is obligatory in all professional and technical courses. All students are required to sit for an internationally recognized examination: the TOEIC Bridge and the TOEIC Test.

The English program used a new interactive book called the American English File, which is divided into two books; the Student Book and the Work Book (exercises). Furthermore, students use a platform called Blackboard where they develop written exercises. The activities review the same material as their English classes and are completed at home.

The problem considered for this research-project was that students do not meet the requirements of the program, It can be observed in figure 1 that only one student answered Discussion 4 in the forum.

Therefore, an innovation has been planned in the English classes by incorporating cell phones during the lessons with the aim that students develop the required activities in the Blackboard platform.

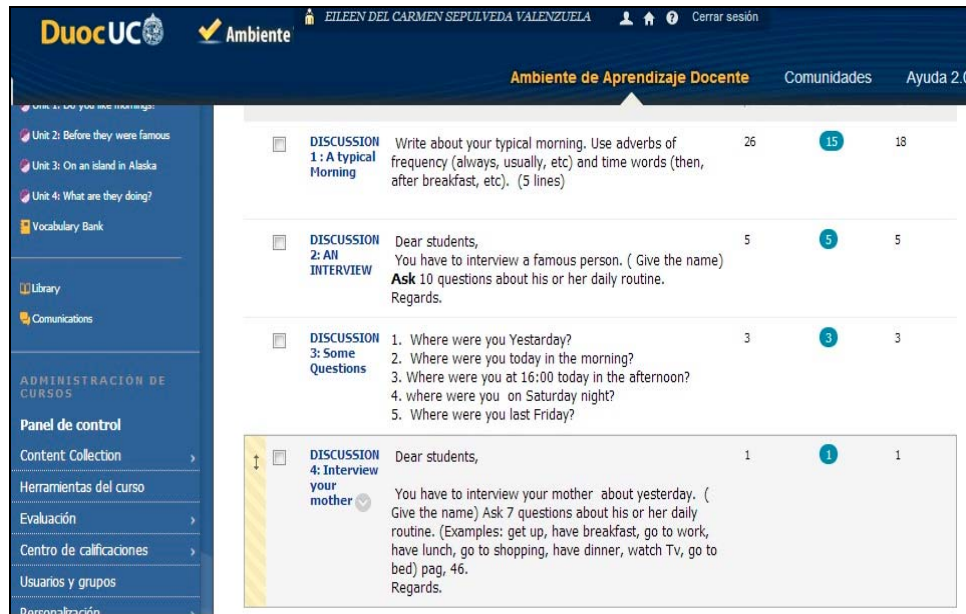


Figure 1 A platform report before the intervention with cell phones where students had to answer the forum called discussion.

2.1 Using Cell phones: Description of the activities

This course has 3 hours of classes per week divided into 2 lessons of 90 minutes. During that time, teachers need to cover the compulsory content. The innovation consisted in uploading a Task to Blackboard Platform and giving to the students 15 minutes to complete the task that can be observed in figure 2.

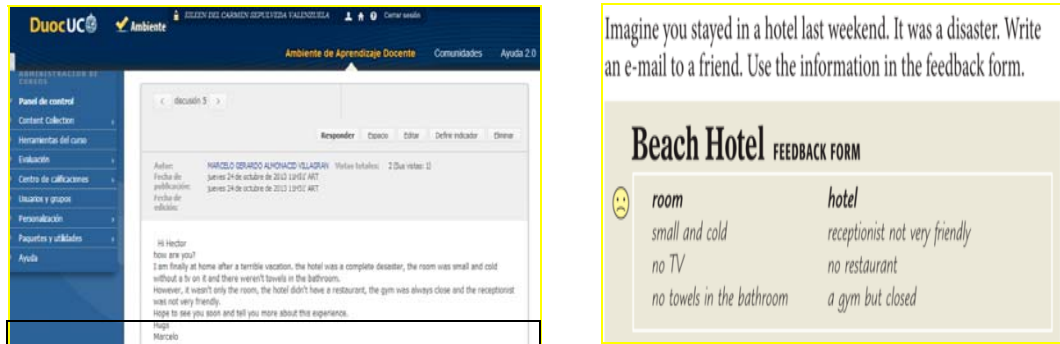


Figure 2 Example of one of the activities developed in one of the lessons.

The activity was to write an email to a friend describing how was the hotel where they stayed during their holidays (a hypothetical situation). The idea was to write directly on the Blackboard's forum an email to one friend describing the hotel, using grammar structures such as there was and there were.

Some students could achieve the goal in 15 minutes, but the rest of the class lasted 20 minutes to write a paragraph. However, the most important aspect is that students completed the task on time and in the class.

3 Research Approach

This research was developed on a positivist paradigm, with a descriptive and quantitative methodology. The sample was formed by 32 students of Basic English courses belong to DUOC UC Institute, in Chile. This sample was selected intentionally using the following criteria: students who poses a cell phone and who are taking the course named Basic 2.

Two methods were used to collect the information needed. The first one is a satisfaction survey about the use of cell phone in English Classes. This instrument was validated by the Coordinator of the English Program of DUOC and three experts in technology of Universidad Católica de la Santísima Concepción (UCSC). It has 18 questions divided into 3 dimensions: 1) Teaching and learning of English as a second language, 2) Internet Service and 3) Satisfaction level on cell phone use in English classes. The answers categories are in Likert scale which are organized from strongly disagree to strongly agree (from to 1 to 4 respectively).

The second method is the usability records of the Blackboard Platform such as dates, access hours and the forum in which the student participates.

The survey was applied at the end of the intervention activities. Then, the data was emptied into a spreadsheet in order to analyze them using the statistical software SPSS, version 20.0.

4 Results and Interpretations

T-test was applied to analyze the differences between sex and different claims about cell phone use in English classes. The results indicate no significant differences in relation to the perception of students in any of the dimensions consulted.

Regarding Dimension 1 (see table 1), the item in which there is greater agreement is *the incorporation of technology helps to improve learning English* in which most students agrees ($M=3.34$, $SD=0.60$), and related to the item, *It is a good strategy to use cell phones in class because you focus and develop better writing skills*, in which students disagree ($M=2.28$, $SD=0.85$).

The analysis of the data after the application of the statistical test Chi-square Pearson, reveals that there is a significant relationship between the perception that students have about *The incorporation of technology helps to improve learning English* and consider that *It is a good strategy to use cell phones in class because you focus and develop better writing skills* $\chi^2(1)= 0.37$, $p < .05$.

Table 1. Dimension 1 Teaching and learning of English as a second language

Items	<i>M</i>	<i>SD</i>
The incorporation of technology helps to improve learning English.	3.34	0.60
It is good to make English learning activities with phones.	2.87	0.60
The use of cell phone is a good strategy to vary the range of activities that the English department has.	3.12	0.75
It is a good strategy to use cell phones in class because you focus and develop better writing skills.	2.28	0.85
The use of cell phones accelerates the development of discussions.	2.68	0.69

Regarding Dimension 2, the item in which there is greater agreement is *the size and type of cell influences the time of the activity*, in which most students agrees ($M=3.28$, $SD=0.88$). Related to the item, *it is easy to navigate using the cell phone platform*, in which students disagree ($M=2.25$), although in this item there is also the highest standard deviation ($SD=0.85$), which is a fluctuation between opinions from strongly disagree and agree (see table 2).

Table 2. Dimension 2 Internet Service

Items	<i>M</i>	<i>SD</i>
The Internet is easily accessible.	2.68	1.06
The Internet speed works fine.	2.34	1.09
The size and type of cell influences the time of the activity.	3.28	.88
You can access the Blackboard platform easily from the phone.	2.51	1.00
It is easy to navigate the platform using the cellphone.	2.25	1.13

Regarding Dimension 3, the item in which there is greater agreement is *cell phone use allows activities that are usually done outside of school hours*, in which most students agrees ($M=3.34$, $SD=0.60$), and the item *It is a good strategy to use cell phones in class because you focus and develop better writing skills*, in which students disagree ($M=2.28$, $SD=0.85$) (see table 3).

In relation to the level of satisfaction about the use of cell phones in class, the results indicate a significant positive relationship between *enjoy more English classes using cell phones than traditional classes* and to consider *the activities developed through cell phone in classes have saved me time off* $\chi^2(1)= 0.47$, $p < .01$; and to consider that *the cell phone allows the student greater autonomy in English classes and to prefer to make class discussions via cell phone* $\chi^2(1)= 0.55$, $p < .01$.

Table 3. Dimension 3 Satisfaction level on cell phone use in English classes

Items	<i>M</i>	<i>SD</i>
Cell phone use allows activities that are usually done outside of school hours.	3.18	.59
The use of cell phones in classes keeps discipline.	2.46	.71
The cell phone is an affordable tool in all English classes.	2.96	.73
The activities developed through cell phone in classes have saved me time off.	2.81	.78
The cell phone allows the student greater autonomy in English classes.	2.68	.96
I enjoy English classes using cell phones more than traditional classes.	2.71	.85
I prefer to make class discussions via cell phone.	2.62	1.03
I want to continue doing English classes with cell phone support.	2.62	.97

According to the incorporation of cell phone in English classes, it can be observed, through the platform data, a big difference in the forums after the incorporation of cell phones (see table 4). The number of responses in the Discussions forum has greatly increased. One of the examples is Discussion N° 5, it was answered by 15 students of 18 in one of the courses, which means that 83.3% of students completed the tasks. This result shows that the use of cell phone is a useful methodology to practice writing skills since students tend to answer more discussion and in less time. Moreover, they feel more comfortable in the classroom than at home, because they have their teacher's help.

Table 4. Comparison between forums' answers before and after the integration of cell phones

ítem	Before Cell-phones	After Cell-phones	Increase
Discussion 1	100%	100%	0.0%
Discussion 2	27.7%	61.1 %	33.4%
Discussion 3	16.6%	72.2 %	55.6%
Discussion 4	5.50 %	67.0%	61.5%
Discussion 5	5.70 %	83.3%	83.3%

The analyses of each discussion showed that the last discussion was done by 83.3 % of the students which means that cell phones achieved the main objective of the intervention. Furthermore, discussion 2, 3 and 4, which had not been answered, increased their response because of the use of cell phone. Students discovered a new tool to fulfill their task and practice their written English.

5 Conclusions and discussions

As far as the proposed activities go, it can be concluded that their design is born from the need to improve English writing abilities using cell phones to help students to complete their task, not just to their social life. It is evident that the use of cell phone in English classes enables students practice writing skills through the forums of the Blackboard platform. This technology provides new content and facilitates information access. It transforms and improves the learning environment inside of the classroom and students feel comfortable and secure because they have teacher and technology's support. Teachers need to take advantage of what they have in the classroom, nowadays the majority of the students have a cell phone so this type of intervention is relatively easy to develop. Nevertheless, it is very important the willingness of students to participate therefore a good technique is to ask their opinion about the Intervention before implementing it.

Beyond its theoretical importance, the current study informs the field of ICT in higher Education. As the results shown, cell phones enable students to learn and practice anywhere and anytime as well as Rodríguez [20] and Stockwell [21] noted. At the same time, they can transform and improve the learning environment and give them different kind of activities and different resources to help their learning such as; web-pages, mobile applications for English, dictionaries, among others. Moreover, students feel more comfortable because the teacher is there for helping them any time during the activity.

Despite the results, it is important to mention that there are meaningful weaknesses in this kind of intervention that it is necessary to overcome. First, improve the internet connection that enables students to access easily to the Blackboard platform from a cell phone either in the classroom or at home. Second, the teachers need to be trained on how to use technological devices to promote the learning of English. Third, the perception of teachers about using cell phones, that influences a lot in the incorporation of this device because they considered it distract students' attention easily.

Despite these weaknesses, according to Martin and Jeffrey [16], Viberg and Grönlund [24] results shown that students enjoy English classes with cell phones and their level of satisfaction is optimistic. It is also shown that students have a positive perception and they believe that activity helps them to save time in their task because they can do it in class with their teacher. This can be proved with the growth in the activities in the platform that increase after the incorporation of cell phone in English classes.

However, this intervention provides information that will allow working on virtual platforms using cell phone in a normal English Class. Developing these small activities should help to expand the learning environment, to increase interactions in the platform, and to change the perception of students about English Classes.

Moreover, it is expected to increase the use of ICT tools such as cell phones and tablets to provide answer the forums and at the same time give feedback to students. Chilean society needs to teach students or future students in a global context to fill the society needs. ICT and Mobile learning makes this challenge possible at least in the teaching and learning of English.

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