Mobile Learning in the Foreign Language Classroom

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Abstract: This paper deals with Mobile learning (m-learning) and how it can be used to teach a second or foreign language in the classroom. First, a review of the use of technology in the classroom is considered. Second, m-learning is defined in connection with diverse educational theories such as behaviourism and constructivism. Third, an exhaustive listing of those features, functionalities and affordances intended specifically to teach a foreign language is provided. Fourth, these characteristics and possible uses are implemented through a lesson plan for Baccalaureate students in which there is an educational use of social networks and mobile devices. Fifth and last, we state some attitudes towards mobile devices across schools and institutions which are holding back their implementation in language classrooms, concluding on a positive note: these new technologies can actually improve language learning.

Keywords: m-learning; mobile devices; foreign language learning; lesson plan.

Resumen: Este trabajo estudia el uso del aprendizaje mediante dispositivos móviles en el aula de inglés como lengua extranjera. Primero se realiza una revisión del uso de la tecnología en el aula. Segundo, se define el aprendizaje móvil respecto a las diversas teorías educativas desarrolladas hasta la fecha, como el conductismo y el constructivismo. Tercero, se especifican los rasgos, recursos y funcionalidades que los dispositivos móviles ofrecen para la enseñanza de la lengua extranjera. A continuación se describe el posible desarrollo de las diferentes destrezas y componentes lingüísticos a través de estas funcionalidades. Por último, se ofrece una unidad didáctica que ejemplifica el uso de dispositivos móviles integrándolo en la enseñanza en el aula, concluyendo con una revisión de los posibles riesgos que pueden presentarse por un uso indebido y sus ventajas, presentes v futuras.

Palabras clave: aprendizaje mediante dispositivos móviles; aprendizaje de lenguas extranjeras, unidad didáctica.

I. Introduction

The advances in technology in recent years, the invention of the Internet and the advent of personal computers have been signaled as the reasons of the introduction of new technologies in today's classrooms. Either in Primary, Secondary or in Higher Education, Technology Enhanced Learning (TEL) is being promoted by the European Commission, which is funding many programs researching learning outcomes enhanced with the use of one or several technologies (for a detailed report, see de la Fuente Valentín, Carrasco, Konya and Burgos, 2013).

Notwithstanding the educational level, the use of technology in second language learning and teaching is far from new, particularly in the Foreign Language (FL) classroom. Multiple devices such as photographs, radio cassettes and televisions have been used to access language materials. In the 1950s, the Audiolingual approach brought the application of language laboratories to the educational field. A decade later, computers began to be used in the classroom for language teaching and learning; hence these laboratories were replaced by drill-based computer-assisted instruction or web-based instruction. Afterwards, computer-assisted language learning emerged (CALL). The advent of Internet in the 1990s led to the development of computer-mediated communication. In the 21st century, «other technologies that hold the capacity for language learning include PDAs, multimedia cellular phones, MP3 players, DVD players, and digital dictionaries» (Zhao 2005: 447) are also being introduced. Thus, the first decade of this century has introduced Mobile Assisted Language Learning (MALL or m-learning for short) as a new pedagogical application for language learning and teaching.

With mobile devices it is also possible to access the World Wide Web and develop all the activities exploited for Computer Assisted Language Learning (CALL). These devices are a portable technology that can help students at any moment and at any point, and involve many possibilities that are in the process of being discovered by educators and learners.

Several discussions have been raised about whether or not to use mobile devices in the classroom, hence, the discussion between 'formal' and 'informal' learning has also been revived. In fact, «since 2009, mobiles adoption is expected to occur, but the goal does not seem to be achieved» (de la Fuente Valentín et al., 2013:58). Regardless of how teaching and learning approaches are evolving, m-learning is currently gaining some importance and, even if it is still in «its infancy», (Kukulska-Hulme and Shield, 2008: 283) it shows a very fast development.

II. Mobile learning: towards a definition

M-learning is thought to be the predecessor of what is known as electronic learning (henceforth e-learning), and CALL (Computer Assisted Language Learning), leading to MALL (Mobile-Assisted Language Learning). For some researchers (see Kress and Pachler, 2007), the most important thing is how the learner builds knowledge, whereas for some others the key aspect lies in the process of transmission of the information; i.e. the mobile device. Does m-learning deserve its own literature or should it be included within previous learning methodologies? That is to say, is it really a new kind of learning or does it just make reference to the tool that we use to learn?

Pachler et al. (2010: 4-5) assert that «there exist a lack of clarity about what best be understood by this term», but most definitions of m-learning include the use of portable devices, a reference to electronic learning and the mobility of learners (Keegan, 2005; Quinn, 2000; O'Malley et al., 2003), being the third feature the most commonly stated. In general, m-learning involves «environmental learning based on mobility of technology, mobility of learners and mobility of learning that augment the higher educational landscape» (El-Hussein and Cronje, 2010:17). According to Ally (2009:1), it offers the possibility of «accessing information and learning materials from anywhere and at anytime [...]. Learners will not have to wait for a certain time to learn or go to a certain place to learn». Finally, O'Malley et al. (2003: 6) define m-learning as «any sort of learning that happens when the learner is not at a fixed, predetermined location, or when the learner takes advantage of the learning opportunities offered by mobile technologies».

Thus, mobile learning differs from computer-assisted language learning because it uses portable devices, emphasizing the interaction and spontaneity of access (Kukulska-Hulme and Shield, 2008). However, a clearer definition involves establishing its main features, which refer to the contexts and type of interaction these devices involve (Traxler, 2005). In detail, m-learning can be:

- Spontaneous, as it can occur at any time without any previous arrangement.
- Private, in the sense it is personalized.
- Portable, because it can start in a place and finish in another one.
- Situated in a real-world context. Learners can take mobile devices into authentic learning settings or 'context-aware' environments, such as especially equipped museums.
- Informal, in the sense it may occur outside the classroom.

- Bite-sized, because learners can study or practice manageable chunks of information at any place on their own time. In fact m-learning deals with shorter but more direct learning periods regarding the time and duration of the study process.
- Light-weight, contrarily to most textbooks and reference manuals. The learner can select, insert and adapt all his/her learning materials.
- Context aware, both in the sense that it offers current real-world information and digital augmentation.
- Connected, being online and interactive. In fact, collaboration and communication are deemed essential.
- Personalized, as the learning process is adaptable to diverse learners' cognitive styles.
- Creative, as it enables creating and sharing diverse contents and materials.
- Ubiquitous, that is to say, mobile devices are everywhere, so even though sometimes they might be disruptive, they have infiltrated in all levels of society, and within diverse cultures and backgrounds, subsequently expanding human beings' learning possibilities.

However, m-learning is not primarily concerned with the use of technology, but with the process of *how to learn*, as it entails a constructivist framework which involves the construction of knowledge and the development of problem-solving techniques, strategies and skills in an autonomous way through the use of portable devices (Brazuelo Grund and Gallego Gil, 2011). In this sense, mobile devices constitute a means towards an end, not the end itself: they may enrich the learning experience but they are not considered as the focus of learning.

III. Educational theories underlying m-learning

As previously stated, m-learning does not constitute a new learning theory, although it might foster, favor and improve the learning process. In fact, it shares some characteristics of certain educational theories; particularly, behaviorism and constructivism (Aliende Povedano and de Oro Martínez 2009). Behaviorism is based on the ideas of Pavlov (classical conditioning) and Skinner (operant conditioning). «It was postulated that all human behavior could be explained in terms of the way in which simple Stimulus-Response (S-R) connections were built up» (Williams and Burden 1999: 8). In this sense, through mobile devices rapid feedback or positive or negative reinforcement can be facilitated. The majority of the applications available through mobile devices follow the S-R paradigm; particularly those dealing with second language learning or English Learning (Corbeil and Valdes-Corbeil 2007).

The second approach which entails connections with m-learning is constructivism. Within this theory learning is an activity process in which learners construct new ideas or concepts based on their current and past knowledge (Bruner 1966). Mobile devices also foster *collaborative* learning (see Richards and Rodgers 2001:192) in the *constructive* sense as a:

Group learning activity organized so that the learning is dependent on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others.

Furthermore, through mobile devices computer-mediated *communication* is enhanced via social networking sites or different educational platforms or environments. The construction of knowledge is carried out in a collaborative *virtual* atmosphere where participants are not physically present. Mobile devices also foster *situated* and *meaningful* learning since learners can take their handheld computers into authentic learning environments such as a museum or a zoo. An additional outcome of m-learning is that it promotes *lifelong learning*. In this sense, it fulfills all the requisites established in the constructivist framework, maximizing the different competences and learning outcomes ascertained in official documents (Royal Decree 1467/2007) and the Common European Framework for Languages (Council of Europe 2001:101-108).

As a conclusion, m-learning has its foundations in these theories, but it also shows multiple connections with other methodologies, ideas and paradigms. However, it is not, as stated above, a new learning theory or a teaching method, although it might facilitate both, learning and teaching.

IV. Mobile learning in the classroom: possibilities

Within educational m-learning, there is a two-fold distinction. Academically speaking, two important stages are recognized: the secondary school phase and the university phase. In each of these phases, we might use mobile devices for different purposes.

In Secondary education portable devices tend to be used to keep in touch with the family, other students and it is a means to be informed of the timetable, the subjects and the daily chores. When being at the university, students tend to use it more as a tool to improve the learning experience, that is, collaborative learning through social networking sites, guides of subjects, contact between them and their professors... In addition, these mobile devices help students to manage their data, their fees, and their enrolment phases. In the end, it represents a way to be informed of the situation of the university and their situation within the university system.

Regardless of the stage in which m-learning is employed, mobile devices show a wide range of learning possibilities (Kolb, 2008; Brazuelo Grund and Gallego Gil, 2011; Mosavi Miangah and Nezarat, 2012) which can integrate the use of older and newer technologies for developing certain language skills in second/foreign language learning. Specifically, mobile devices may promote vocabulary learning, listening comprehension, grammar learning, pronunciation and reading comprehension, although writing and speaking can also be integrated.

Most of the activities carried out to foster vocabulary acquisition are based on sending e-mails or SMS to students in relation to the topics which have been covered in class. Learners can be given already-designed vocabulary practices based on activities done in the lessons as well. Vocabulary can be also accompanied with pictures in order to understand better the new items. Additionally, online dictionaries accessed through mobile devices might help improve vocabulary and pronunciation since students can hear words which are unfamiliar and correct their pronunciation. On the other hand, mobile devices include recorders which learners might use to record their voices, listen to themselves and compare them with the version provided. Applications (apps) specially designed for specific lexical areas can also be used (Reinders, 2010). For instance, there are free applications to make flashcards for mobile phones. These flashcards can be stored, shared and revised somewhere else.

Regarding listening comprehension, mobile devices offer multimedia systems for learning through listening exercises. Students can access different websites in order to listen to podcasts, videos, news, etc. They can also use the Voice Memo Recorder feature to record language from media outlets. Students can record those ads and analyze the kind of language they hear. They can also save classroom listenings in their telephone memory and reproduce them as many times as they need.

Grammar issues can be learnt through different specifically designed applications installed on mobile devices. These programmes, which are quite interactive, can include multiple-choice activities, cloze tests, true or false, fill in the blanks, quizzes, games, etc., and they are usually designed to provide immediate feedback, a fact learners tend to appreciate.

Reading comprehension might be done through either applications or via SMS. In both cases, however, the reading activity might be followed by exerci-

ses in order to evaluate the students' comprehension skills. These activities are useful for learning vocabulary as well. Classroom readings can also be saved in the telephone memory to be read outside the classroom.

Regarding the writing skill, social networking sites such as Twitter, Facebook and MySpace seem to be quite useful since most of the interaction takes place in writing. These sites can be accessed through mobile devices. Additionally, Blogs can be used both by students to practice writing and by teachers to provide feedback. Another way to practice the writing skill is to use the Notes feature to collect everyday language. Students could take notes and write down the English words, sentences or expressions they hear outside the classroom (Reinders, 2010). The Text Messaging feature may also offer possibilities for involving students in circular writing or tandem learning.

The speaking skill can also be fostered through the use of the mobile phone for a language exchange. Two students who want to learn each other's native language are in contact through mobile phones and talk in the target language. They can also dramatize conversations outside the classroom, record them and self-assess their pronunciation. Role-plays are another possible activity. «Phlogging» may also enhance speaking, as it involves calling a number and leaving a message on a website, which later transcribes the recordings.

To conclude, mobile phones allow working with the different areas of language, both in isolation and also in an integrated way, depending on the design of the activities and the functionality used.

Table 1 shows a list of these functionalities and their possible use for language learning. All the sections show the potential activities to be developed and their connection with the different language skills.

V. Mobile Learning and its implementation in the EFL classroom

M-learning is broadening its educational scope and a number of initiatives are being developed for their use in the classroom. There exists a new scheme called 'BYOD or BYOT' (Bring Your Own Device or Bring Your Own Technology). It is aimed to encourage students to take their mobile devices with them and use them during the lessons (Camacho and Lara 2011: 38). Students can access and save valuable information from the Internet, communicate with other learners, and engage and share learning experiences. Certain schools in the U.S.A. and in The Netherlands have already adopted this approach.

Additionally, in countries such as Korea, textbooks are estimated to disappear in between 2014 and 2015 since they are being replaced by tablets and

smartphones (Camacho and Lara 2011; Cortina-Pérez et al., 2014). «Mobiles allow very simple tools to be easily integrated into classroom activities with no need for involvement of IT or support staff» (Johnson et al. 2011: 13).

However, the introduction of this new methodology requires that teachers and educators adapt the contents methodologically and pedagogically. Although m-learning shows a very high potential for learning (see Table 1), there is still a long way towards introducing systematically these devices for classroom learning.

1. Use of audio to reproduce and record sounds	Listening to the radio, Listening to explanations, tales, stories, concerts, simultane- ous reading and listening of texts. Revising exams, gathering opinions from the members of the community, taking audio notes from the lessons in class, recording the teacher's explanation, poems plays, musical compositions, creating oral summaries of the lessons. Practicing oral expression through tales, poems, debates, creating a radio pro- gramme, creating a collection of natural sounds of the atmosphere around the stu- dent, making oral reports on works to do in the lessons.		
2. Use of camera Taking pictures or videos to make a slide-based presentation with Po afterwards, taking pictures on curricular and extra-curricular activities, experiments, create a photomontage based on previously read texts, making shots to make reports, recording specific aspects of the learning process of to gather feedback, taking pictures of an explanation on the blackboard documentaries, carrying out photo contests.			
3. Use of SMS (Short Message Service)	Sending marks to the students, reporting the family about their child's absence and proper or improper behavior, informing about the absence of a teacher, informing students about the presence of learning materials in the virtual platforms, notifying students about dates of exams, enrolment dates, fees, tutorials.		
4. Usage of office tools	Mobile devices are smaller computers. They will allow students to access their learning materials in different formats such as Word, PDF, Powerpoint, Excel They can download, edit and store information. Furthermore, they can access dictionaries, encyclopedias, novels		
5. Use of mobile Internet	The possibility to access the World Wide Web through cell phones will allow the students to make treasure hunts, webquests, access wikis, blogs, look for information of web browsers in order to solve doubts		
6. Participation in Social Networking Sites	These virtual platforms are quite widespread, especially among teenagers. Twitter, Facebook or Tuenti foster interaction, collaboration and creativity. Thanks to these sites, students can create content and not only be passive receptors of information.		
7. Use of Apps	These applications became popular a couple of years ago. Both Apple and Android allow downloading several educational apps from which users can learn about different areas or fields. Among the most popular apps we can find games, which favor curiosity, experimentation and motivation or GPS (Global Positioning System), particularly relevant to carry out activities dealing with augmented reality or situated learning.		

Table 1. Functionalities of mobile devices for developing the language skills

Johnson et al. (2011: 5) echoes that «resistance to the use of mobiles in the classroom continues to impede their adoption in many schools, but a growing number of institutions are finding ways to take advantage of a technology that nearly all students, faculty and staff carry». A great majority of teachers and parents still consider mobile devices as distractions and think that there is no place for them in the school. It is still assumed that these technologies might make the work of teachers more difficult, foster inappropriate behaviors and might not be adequate for disabled students (Camacho and Lara 2011). In other words, as Brazuelo Grund & Gallego Gil (2011) ascertain, three are the barriers that make difficult the integration of mobile devices in the schools. Firstly, educational authorities have legislated against the use of these devices in the classroom. Secondly, students are not aware of cell phones as an educational tool. Thirdly, teachers do not know how mobile devices can be used in the teaching process and consider them as a boisterous 'weapon' that has no place in the classroom. Cyberbullying, sexting or addiction are some of the reasons resistance to portable technology is still commonplace.

Using mobile devices requires a shift in the current educational environment, not only because of these new technologies but also because «the learning process is evolving to a new one, which is autonomous, anytime and anywhere» (Camacho and Lara 2011: 58).

In this paper we show several lessons integrating the use of mobile phones for learning activities. It is addressed to the upper levels of Secondary Education or Baccalaureate, because restrictions on mobile phone use tend to recede in the case of older learners.

VI. A short lesson plan implementing the use of mobile devices

As previously stated, this lesson plan has been designed for students of Second Year of Non Compulsory Secondary Education. Mobile devices will be used in order to develop certain activities. Other technologies such as computers and web-based activities are at the centre of this lesson plan as well.

A detailed list of objectives and contents following official documents are shown in Appendix I (Table 3). The lesson plan is called «TXT ME THROUGH TWIT-TER! G2G!». In brief, students are expected to learn about reported speech, how to express opinions, understand and write short sms messages and learn English net acronyms. However, this lesson plan also requires the use of social networks such as *Twitter* or *Tuenti* and mobile devices, both inside and outside of the classroom. In order to show the progression, five sessions have been developed and are shown in abridged tables below. Materials for carrying out the different activities can be found in appendixes. On grounds of space, evaluation will not be included. Table 2. Abridged summary of lesson plan in five sessions

Session 1	1.	Warm-up. Students will be given a piece of paper with different abbreviations and net acronyms (Appendix 2). Students will have to guess what these letters stand for. Their contributions will be written on the blackboard and they will be asked certain questions. (Whole Class –WC-; 10')
	2.	Reading. Students read the text (see Appendix 3) and answer comprehension questions. (Individual –I-; 15')
	3.	Vocabulary. Students have to match net acronyms with their translation in real English (see Appendix 4). (Pair Work –PW-; 10')
	4.	Vocabulary. Students have to give a meaning to several <i>smileys</i> (Appendix 5). (I; 5')
	5.	Writing. Students have to write a sms, whatsapp or e-mail using the conventions they have just learnt. Previously, the teacher might have already created a group of the class in the WhatsApp application so that everybody can send their texts. (I; 10')
Session 2	1.	Warm-up. Reading. The Guardian Text Poetry Contest. Students receive through sms, whatsapp or e-mail three different poems in texting language. They have to decode them and create one (see Appendix 6). (PW; 10')
	2.	Discussion. Students have to record a conversation between them sharing their views on certain topics such as the use of mobile phones nowadays and whether they think texting is good or bad for the language. They have to use certain expressions to introduce their comments. They will listen to it later and with the help of the teacher they will check their pronunciation. (PW; 15')
	3.	Grammar. Reported speech. Students look at different sentences and try to discover the transformation they suffer. (PW; 5')
	4.	Grammar. The teacher explains reported statements. (WC; 10')
	5.	Grammar. Students rewrite several sentences into reported speech. (I; 10')
	1.	Warm-up. Pronunciation. Silent Syllables. Students will be asked to download into their mobile devices a digital dictionary. They have to look up different words and listen to their pronunciation carefully. (I; 5')
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	4.	Listening. Students have to listen carefully to a video in which David Crystal talks about texting and its consequences for the English Language ¹ . (WC; 10')
Session 3		
Session 3	3.	about texting and its consequences for the English Language ¹ . (WC; 10') While-listening and Reading. Students have to choose the correct answer between the different options provided. The video can be played again while students com-
Session 3	3. 4.	about texting and its consequences for the English Language ¹ . (WC; 10') While-listening and Reading. Students have to choose the correct answer between the different options provided. The video can be played again while students com- plete the exercise. Later, it will be corrected orally by the whole class. (I; 5')
Session 3	3. 4. 5.	about texting and its consequences for the English Language ¹ . (WC; 10') While-listening and Reading. Students have to choose the correct answer between the different options provided. The video can be played again while students com- plete the exercise. Later, it will be corrected orally by the whole class. (I; 5') Post-listening and Reading. Students answer questions about the video. (PW; 10') Grammar. Reported speech. Students will be offered a series of sentences. They have
Session 3	 3. 4. 5. 6. 	about texting and its consequences for the English Language ¹ . (WC; 10') While-listening and Reading. Students have to choose the correct answer between the different options provided. The video can be played again while students com- plete the exercise. Later, it will be corrected orally by the whole class. (I; 5') Post-listening and Reading. Students answer questions about the video. (PW; 10') Grammar. Reported speech. Students will be offered a series of sentences. They have to guess the transformation of the sentences. (PW; 5') Grammar. The teacher explains reported commands, questions and suggestions.

^{1.} David Crystal in It's Only a Theory. http://www.youtube.com/watch?v=v7WSzxQ0nX4 (N.A.).

	1.	Warm-up. Speaking and Vocabulary. Students have to fill in a mind map (Appendix 7) giving contributions on the possible uses of Twitter in the classroom. Classroom discussion will follow. (PW; 10')
Session 4	2.	Jigsaw Reading and Speaking. The class is divided into several groups. Each group is in charge of reading one of the rules for using Twitter (see Appendix 8). Later, other groups will be formed so that everyone understands all the rules of Twitter. Once it has been done, each rule will be explained briefly by one member of the group. (GW; 30')
	3.	Listening. Students have to listen to certain videos to be able to create a Twitter account and tweet ² . (WC, I; 10')
Session 5	1. Final task: Students have to create a knowledge pill, that is, a video of 1 minute of plaining one of the rules of using Twitter ³ . Later, they will upload it to their Twit accounts so that the rest of the classmates can watch them. (GW; 55')	

Each of the sessions (see Table 2), except the final one, begins with a warmup activity intended to motivate students, bring forward their background knowledge and check how much they know about the different topics introduced. All the sessions deal with the issue of mobile devices. Session one deals with net acronyms, abbreviations and smileys (Appendix II). After a brief warm up, it introduces a reading with the subsequent comprehension activities (Appendix III). Then, vocabulary exercises connected to the topic of the reading are carried out (Appendix IV, V), and finally a very short writing using the conventions/vocabulary learnt is completed. Session 2 starts with a warm up dealing with sending short sms messages (Appendix VI). Then, a discussion on the use of mobile devices is recorded and revised. The following activities deal with reported speech. Discovering the rules, listening to the teacher's explanation and carrying out some practice activities. Session 3 is introduced with the use of a digital dictionary which students have downloaded in their mobile devices. After listening to the pronunciation of several words, they must identify silent syllables. The second activity is a listening by David Crystal discussing the use of texting. Several comprehension activities, including multiple choice and comprehension questions, are then carried out. The following activities reinforce reported speech, first inductively, then teacher-directed, then oriented towards practice and production. Session 4 is introduced with a mind map students should complete (Appendix VII). It deals with Twitter and its possible uses in the classroom. The session continues with a

^{2. &}lt;http://www.youtube.com/watch?v=3o9FmlgfZXU>, <http://www.youtube.com/watch?v=uhjaJ1123BA>.

^{3.} Twitter in Simple English. <http://www.youtube.com/watch?v=3o9FmlgfZXU> (Retrieved 2nd November).

Jigsaw reading dealing with the same topic (Appendix VIII), the use of Twitter. Then, several videos on how to create a Twitter account are watched using their mobile devices. Session five involves creating a short video in groups explaining one of the rules of this social network and uploading it in their Twitter accounts to be shared by the whole classroom.

As illustrated above, this lesson plan shown constitutes an attempt to illustrate the pedagogical use of mobile phones/devices in the classroom. However, it represents an example or unstructured guide, in the sense that different teachers, classroom contexts and learners will in the end determine both the selection and organization of contents and activities. Our aim in showing this sequence has been to exemplify how m-learning can be actually developed for a Baccalaureate classroom.

VIII. Conclusions

Despite the fact that educational policies have improved the equipment and infrastructures in schools, the subsequent educational changes arising from those policies have not yet been implemented in an extensive way. Namely, integration of IST tools (information and communication technologies) should not «simply reproduce what they [teachers] did previously without these tools» (Cortina-Pérez et al., 2014: 234): a methodological shift is required. In fact, there is still a long way to cover in order to achieve the implementation of mobile learning and mobile devices within second language classrooms. Part of the problem may be due to generational differences between digital natives (students) and digital immigrants (teachers), being the later those that are in charge of the 'development of the digital competence of the former' (Cortina-Pérez et al. 2014: 233).

Although educational practice should not be determined by technology, the ubiquity of mobile learning has inevitably changed learning (and teaching?) styles. Moreover, given the use that younger generations make of mobile devices, educators need to do something more than «just watch it [mobile learning] happen» (Kukulska-Hulme, 2009:158). In the era of digital natives it is essential to try to use whenever possible these tools with the purposes of adapting to the students' new ways of approaching the world and process information, making them feel integrated, motivated and working collaboratively. Mobile devices may foster cooperation, autonomous and informal learning and increase critical thinking. In particular, regarding second language learning, they can be used to help learners develop the skills, both receptively and productively, and reinforce other linguistic aspects, such as vocabulary, grammar and pronunciation.

The school and the teachers involved need to consider effective ways of using these new technologies and overcome problems related to their cost, availability, restricted School Board Policies and discipline issues such as sexting, cyberbullying, addiction, technophobia or overload of information and cheating, because advantages surpass possible drawbacks.

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Appendix I

Didactic Objectives	Stage Objectives	Foreign Language Objectives	Contents
To use mobile devices in the classroom in order to develop certain activities related to the topics treated in the lessons	b, d, f, g, h, k (LOE 2/2006) (RD 1467/07) a, b (D 416/08)	0bjectives	 Listening, speaking and interacting Listening and understanding Extracting the gist and some specific information from debates and brainstorming dealing with the texting language and the use of Twitter. Being able to understand interpersonal exchanges regarding the use of mobile phones nowadays and the way languages evolve. Being able to understand a video regarding texting and the English language. Speaking and interacting Planning oral contributions to make a discussion and offer an opinion on the role of mobile devices nowadays, and the possible uses of Twitter in the classroom.
To familiarise with the language of texting and be able to reproduce it To extract general and specific information from a written and audiovisual text			 Reading and writing Understanding written texts Skimming and scanning different reading texts and text-types Reading different types of texts related to net acronyms, abbreviations and Twitter, making use of the appropriate reading strategies and appreciating the reading practice as a means to obtain information, extend one's knowledge and find some fun. Producing written texts Being able to reproduce text messages using the traits and conventions studied.
To interact orally with other classmates, sharing views regarding the use and effects of mobile phones nowadays To be able to identify and use			 Linguistic awareness and reflection upon the language Linguistic Knowledge Functions: Expressing an opinion Grammar: Reported Speech Vocabulary: Texting language: net acronyms, abbreviations, emoticons and smileys Phonetics: Silent Syllables Reflection upon one's learning Recognising linguistic varieties: differences between formal and informal language; oral and written modes, etc.
To be able to express an opinion			 Taking profit of the different learning opportunities they may encounter in and outside the classroom, making use of the new technologies of the information and communication particularly mobile devices.
To use properly social networking sites To develop cooperative strategies to reach a common goal: the knowledge pill			 Sociocultural aspects and intercultural awareness Using the kind of linguistic variety which fits the situational context, the interlocutors, the communicative intention, the channel, etc. Becoming interested in establishing communicative exchanges and gaining cultural knowledge of those countries where the foreign language is spoken.

Appendix II

Warm-Up



Figure 1. Net acronyms and smileys.

- 1. What do these letters stand for? Try and Guess what they mean
- 2. Have you ever encountered these words? If so, where?
- 3. Do you have an idea of what they are?
- 4. Do you know what net acronyms/emoticons/smileys are?
- 5. Do you know what «slang» language is?

Appendix III

Read the following text⁴ individually. Then, answer the questions:

IN AN ONLINE CHAT ROOM KEEP IT SHORT AND SWEET

U may have noticed some odd phrases slipping into ur kids' e-mails. Like when the mention that ur life sux, then quickly add JK, for just kidding. U know they really luv u, even though u r an annoying POS (parent over shoulder) with a total SOHF (sense of humor failure) who doesn't have a clue what u r saying b/cuz u seem to be writing in code. FWIW (for what it's worth), a new idiom has been born. Across the land, every night, teenagers are yakking online in chat rooms with friends and Net acquaintances.

It's fast: Try talking to six people at once. It's brief: three or four words per exchange. It takes wit, concentration and nimble fingers. And it requires tremendous linguistic economy. There's neither time nor space for exposition.

The solution is to abbreviate, contract and condense. Why consume precious keystrokes telling six friends you have to go smack your little brother when BRB (be right back) will do? Want to enter and ongoing conversation? Just type PMFJI (pardon me for jumping in).

Interested in whom you're talking to? Type A/S/L, the nearly universal request to know your correspondent's age, sex and location.

If something cracks you up, say you're OFT (on the floor) or LOL (laughing out loud), or combine the two: ROTFL (rolling on the floor laughing).

And when your POS finally makes you get back to your geometry, it's a snap to type GTG (got to go) or TTYL (talk to you later). C?

Don't think this new lingo is limited to teens. Plenty of adults talk the talk or type the type, all day at work.

The new argot is the result of computer services that allow users to compile «buddy lists» of friends and family, and construct an exclusive chat network that can be accessed at any time. America Online's Instant Messenger system is the biggest. It has estimated 75 million users sending more than 700 million real-time messages a day and has given the verb, IMing, to the phenomenon.

But the language is also used in the more public chat venues, where the talk scrolls by like endless movie credits.

While many adults argue that they regularly use the argot for business and pleasure and that a lot of the terms have been rattling around the Net for years, it seems best suited to the rapid-fire lifestyle of youth.

^{4.} Knox County School. 2013. http://knoxschools.org/modules/groups/homepagefiles/cms/443879/File/policy%20manual/j/JCBEA.pdf>.

«They want to write as fast as possible, and they want to get their ideas across as quickly as they can», says Jane Mount, co-founder of Manhattan-based Bolt, one of the country's leading Net sited for teens.

Capital letters get left in the dust, except when expressing emotion. «It takes more time to hold down 'shift' and use capitals», Mount says. «Punctuation is going, too».

Many scholars see it as an old phenomenon that can be traced back to rsvp, byod, tyi, and even the hallowed complimentary close in 19th century letters, yr mst ob svt (your most obedient servant).

«It's natural», says Robert Kraut, professor of social psychology and human-computer interaction at Pittsburgh's Carnegie Mellon University.

Plus, it carries a certain hip exclusivity and can serve as effective code against a prying POS. Donna Jo Napoli, chairman of the linguistics department at Swarthmore College, outside Philadelphia, says, «It shows how up you are, how cool you are: Do you know the latest that people are doing? You feel kind of proud of yourself when you recognize it».

There's already at least one dictionary for netacronyms, Tribal Voice, a Californian company with its own instant messaging company system and 6 million users, started it last October with 800 entries. You can find it, and add to it, at www.chatdictionary.com. At last count, it was nearly 1,400 entries and growing.

Well, G2G, C-U-L8R.

Appendix IV

How's your English text lingo? Match the text message on the left with its 'translation' in real English on the right:

Table 4. List of net acronyms and mismatched meanings

	0
1) C-U-L8R M8	a) as far as I know
2) B4	b) love you with all my heart
3) AFAIK	c) boring
4) W8 4 ME, I'M L8, SOZ	d) text me back
5) KIT	e) have a nice day
6) RUOK?	f) see you later mate
7) LUWAMH	g) keep in touch
8) HAND	h) easy
9) Zzzzzzzzzzzzzzz	i) are you ok?
10) KOTL	j) wait for me, I'm late, sorry
11) TMB	k) see you tonight or tomorrow
12) 0 ME	l) by the way
13) EZ	m) before
14) BTW	n) ring me
15) C U 2NITE O 2MORO	o) kiss on the lips
16) FWIW	p) for your information
17) IMO	q) hope this help
18) G2G/GTG	r) got to go
19) TTYL	s) for what it's worth
20) HTH	t) in my opinion
21) FYI	u) laugh out loud
22) LOL	v) talk to you later

GLORIA LUQUE-AGULLÓ / NATIVIDAD MARTOS-VALLEJO

Appendix V

Give a meaning to the following smileys:

Smiley	Meaning
;-)	
:-0	
٨	
:_*	
(()):**	
^ 5	
%~)	

Table 5. Symbols for smileys and their meaning

Appendix VI

The Guardian Text Poetry Contest (sent via mobile phone):

Message 1

Jus left th clinic bstrong cheri arm ok no panic need u promis me 2 keep kissin me left breast cos baby nxt week me right'll b missin

Message 2

I felt my picture on th ground wher u walk so that somday if th sun was jst right & the rain didn't wash me awa u might c me out of th corner of yr I & pic me up

Message 3

Move Bed, u have seen some action, doors, some slam. Landlord, u may remove every chip, suff, stain: who knows what reflections old mirrors project in the dark

Melissa Terras

- Are you able to decipher it?
- Would you be able to create one? Try!

It's high time we used our smartphones! Use them for the sake of this activity. Any other use of mobile devices will be punished.

Appendix VII

Please, fill in the following mind map with the uses you can think of for using Twitter:



Figure 2. Mind map of ideas about twitter.

Appendix VIII

Jigsaw Reading: Twitter Etiquette: the rules⁵

From making yourself a Twitter chameleon to keeping it short and sweet, brush up on your Twitter etiquette with these social media dos and don'ts.

Make yourself a Twitter chameleon, says Katy Cowan. When I first signed up to Twitter I was one of those people who thought: what's the big deal? But within days of working it all out, it became very apparent that Twitter was a very powerful force in its own right. It gives us the ability to chat and tweet to thousands of other people, whether that's to talk about the weather or use it for more meaningful exchanges.

Astonishingly, it does all of the above in just 140 characters per tweet. I'm not sure even Twitter's creators could have anticipated its success. What's even more fascinating is that humans have developed an entire culture and a set of values for the platform. There's a whole new society in the Twittersphere and with that comes all the usual behaviour. Some would argue there's a class system, bringing with it a snobbery among certain users.

So if you're new to Twitter, or you'd like to brush up on your tweeting skills, we suggest the following Twitter etiquette rules. These unwritten guidelines will help you to avoid making any faux-pas and ensure your «Twitter-quette» is spot on.

• Don't just lurk

So you've signed up for an account, you haven't yet tweeted anything but you're hoping people will follow. If you don't have anything interesting to say, how can you expect people to notice you? Start getting active on Twitter and engage with people.

Short and sweet

Twitter allows you to post tweets that are no more than 140 characters long. It aims to keep things simple. Try to keep your tweets that way – be clear and concise. Equally, don't overuse the @ reply function. Get your message across without waffling.

• Watch what you tweet

Everyone can see what you tweet, including your boss, work colleagues, family and friends. Be careful about what you post or you could lose friends, fall out with your family and maybe lose your job.

^{5.} *The Guardian*. Twitter Etiquette: The Rules. http://www.guardian.co.uk/culture-professionals-blog/2011/dec/15/twitter-rules-etiquette (Retrieved 2nd March 2013).

• Don't go overboard

If you're tweeting all the time, people will get turned off and stop following you. You wouldn't constantly talk at a party or social occasion, not giving anyone else a chance to have their say, so why do it on Twitter? Try to listen to what others are saying as well and go for quality rather than quantity.

• Follow me. Follow you

Don't go mad and follow everyone you possibly can. Try to keep a balance between the number of followers you have. If you follow 1,000 people but only have 50 followers, people might think you're a spambot and will probably avoid you like the plague.

• Accept the good, the bad and the ugly

Twitter is a public social network, so it's inevitable that people will say whatever they like, whenever they like. Accept that not everyone will like you or your tweets and you will receive some negativity from time to time. You can't control Twitter in this respect, just like you can't control people.

• Spring cleaning can be good

Every now and again, go through the people you follow and review whether they are useful or interesting to you. It does not harm to stop following people – they won't take it personally.

• Don't be selfish

Tweeting constantly about yourself and your business is just going to alienate your followers. If anything, it looks like spam and can come across as selfish. Tweet about others you like and use the retweet (RT) function liberally to re-post their articles and reports. Help others to grow their businesses and raise their profiles. Twitter supports the new business world of sharing and collaboration, so keep that in mind when tweeting.

· Be generous

Use opportunities like #FollowFriday (#FF) to be generous to your followers and those you are keen to connect with. It's an effective way of suggesting interesting Twitter users to others while gaining you brownie points in the twittersphere.

• Don't drink and tweet

Twitter is so easily accessible, it's no wonder many of us have tweeted when under the influence of alcohol. Not a great idea. Particularly as you're tweeting to the world and your tweets could be embarrassing.

• Keep certain things private

DMs or direct messages are perfect to retain a little discretion on Twitter. They're great for those more personal tweets, ones that you'd rather the entire world didn't see.

• What's rude in real life is rude on Twitter

Passive-aggressiveness has no place in the real world and the same applies on Twitter. Rude, sarcastic or underhanded tweets should be avoided at all costs. If you've got a problem with someone, don't whinge about it on Twitter. If someone has a problem with you, block them and move on with your life.

• Ignore the snobbery

This fascinating sub-culture has its own society and class system, meaning there are some real snobs lurking out there. Accept that some people will stop following you if they think your tweets aren't good enough. Ignore the snobbery – it's nothing to take personally.

· Being vague is wise

If you're going to a party, it's best not to tweet about its time, location and dress code. Equally, be careful about revealing your location too often on Twitter. Twitter is public, which means everyone can see. We're not saying the implications could be sinister – we're just saying to be careful what you tweet.

• Celebrities are not your friends

Never address celebrities you are following as though they're your personal friend. You might think Simon Pegg or Nick Frost are your best buddies because you started following their careers in the early days of Spaced many moons ago. That doesn't mean they'll know or care about you. Don't be deluded (the same applies with Bill Bailey or Stephen Fry).

· Symbols, smiles and kisses

Not everyone will appreciate a kiss or smiley face at the end of each tweet, while others would expect no less. Think of the context and the person you are tweeting to. Make yourself a Twitter chameleon and adopt your tweets accordingly.

• Corporate stuff and nonsense

Leave you suit and tie at home. Twitter emulates the new business world – one that is completely transforming before our eyes thanks to the net generation, a generation of people who have grown up with the internet and demand transparency, fun and openness in everything they do. If you try to be all corporate and professional in the traditional sense –especially in your down time– you'll just come across as stuffy, dull and old-fashioned. Show your personality, have fun and engage. Keep things professional only in the sense of respecting others and following these etiquette rules.