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Investigating Students' and Teachers' Perceptions of Using the iPad in an Italian English as a Foreign Language Classroom

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ABSTRACT

Recent research indicates that mobile technologies can support second language learning. However, studies focused on the use of the iPad and teaching in schools is still scarce. This study reports on an action research project that investigated the use of the iPad in the English as a foreign language (EFL) context in an Italian school. The study sought to investigate learners' and teachers' perceptions of mobile learning through the use of the iPad. The data was collected through a survey (N=41), classroom observations (N=4), interviews (N=20), and recorded teacher meetings (N=5). Results show a positive impact on student motivation and on the approach to second language learning tasks. We found that within the duration of the study students and teachers became increasingly independent in the use of the iPad for English language learning and teaching. This study provides educators with hints on how to start integrating mobile devices to perform specific language learning/teaching tasks.

KEYWORDS

Communicative Language Teaching, Mobile Technologies, Mobile-Assisted Language Learning (MALL), Secondary Education, Task-Based Language Teaching

INTRODUCTION

Mobile devices, such as the iPad, are increasing in popularity and many schools are adopting them as an educational technology (Keene, 2012; Richmond, 2011). Over the last ten years mobile technologies, and the iPad in particular, have rapidly attracted new users, providing new affordances in and outside the classroom. This has influenced educational practices and, most importantly, it is creating new contexts for learning (Pachler, Bachmair & Cook, 2010). Educators still need to understand how mobile technologies can be effectively used in the language classroom to support various kinds of learning and thus the integration of such technologies has been more gradual (Kukulska-Hulme & Shield, 2008). Therefore, there is a clear need to investigate students' and teachers' perceptions and effective methods for exploiting mobile technologies for language learning.

Educational technology enthusiasts frequently claim that technology use in schools can transform teaching and learning (Murray & Olcese, 2011). Nevertheless, the reality of how technology is used in authentic learning situations is quite often less innovative than imagined (see, for example, Cuban et al., 2001). Against this backdrop, this study aimed at investigating the use of the iPad in an English as a Foreign Language (EFL) classroom from the teacher's and the learner's perspectives in a secondary school in Italy. The iPad had been chosen among other tablets, as it was distributed

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massively to lower and upper secondary schools in the north of Italy as a result of a ‘technology for schools’ project funded by Regione Lombardia in 2014.

Before proceeding, it is essential to clarify what Mobile Assisted Language Learning (MALL) is and why it is important for this study. Taylor (2006) has defined mobile learning as “learning mediated by mobile devices, or mobility of learners (regardless of their devices), or mobility of content or resources in the sense that it can be accessed from anywhere” (cited in Traxler, 2009, p. 10). Following Godwin-Jones (2011), this study considers devices such as iPods, new smartphones and iPads that have enhanced hardware and Operating System capacities as mobile technologies. Computer Assisted Language Learning (CALL) research has started to explore the potentialities of these technologies for MALL to support second language learning and teaching (Traxler, 2013).

Despite the fact that perceptions of MALL have been investigated quite widely in the latest research, studies in EFL secondary school contexts are still scarce, in particular in Italy. Hence, the need for studies like the current one is warranted. This study aimed to address the following research questions:

- What are students’ and teachers’ perceptions of the effectiveness of the iPad for learning EFL listening, speaking and writing skills?
- Can specific attitudes and uses of the iPad in the secondary English Language classroom be detected?

Below we provide a brief overview of Communicative Language Teaching and Task-Based Language Teaching, a version of which was followed in the school where the current study was conducted. This is followed by a review of key studies within MALL and the use of iPads. We then describe our research methodology, present key findings and discuss them for any implications for MALL.

LITERATURE REVIEW

Communicative Language Teaching and Task-Based Language Teaching

For the last three decades, researchers of second language acquisition have recognized that the modality of learners’ engagement in communicative classroom activities is important for their development (Kahn, 2012). In reading and assessing second language activities in the classroom, we considered the recent changes in language teaching methodologies and their impact on the classroom teaching and learning contexts including the role of teachers and learners.

Language learning and teaching has experienced a series of important changes over the last forty years, mostly due to the need to find effective methods (Power & Shrestha, 2009). There was a clear move from a traditional teacher-centred method such as grammar-translation to more student-centred methods such as Communicative Language Teaching (CLT) and Task-Based Language Teaching (TBLT).

In the context of Italy and elsewhere, the broad approaches to language learning can be associated with what we know as Communicative Language Teaching (CLT) and its expanded version called Task-Based Language Teaching (TBLT) in their various forms (for a review of these approaches, see Littlewood, 2014). Both these approaches view language learning and teaching as a social practice. In such language classrooms, the teacher encourages learners to engage in dialogue with both the teacher and each other, and to think by asking questions of each other, thus making language learning student-centred.

In 2000, the Italian Ministry of Education implemented a major foreign language education reform programme called Progetto Lingue 2000, whose main aim was to provide courses in two foreign languages from primary to high school levels to develop learners’ communicative competence

as defined by the Council of Europe Framework of Reference for Languages (2001). In the Progetto Lingue 2000 impact study, students were taught in small homogeneous groups, following CLT principles and using up-to-date technologies. The emphasis of the study was on introducing a communicative approach to learn languages as an alternative to the standard notional-functional method. Hawkey (2006) presented part of the impact study findings on teacher and learner perceptions in the communicative classroom. Results, based on qualitative and quantitative data sets, showed how teachers' perceptions of some classroom language learning activities differ substantially from the perceptions of their students. The most important gaps were found on the perception of the importance of pair work and grammar exercises; out of 13 classroom activities students ranked grammar exercises as 5 while teachers as 11. On the other hand for teachers pair work had a strong prominence (rank 2/13) and less for students (rank 8/13). In the official Ministry specifications of the PL2000 the development of 'communicative competence in reading, written and oral interaction and production' was the key direction. Perhaps the teachers involved in the study felt they had to implement a strong communicative approach so they under-estimated the importance of grammar, or the students over-estimated the importance of grammar because of the traditional notional-functional approach popular in Italy till this project (Hawkey, 2006). Other than Hawkey's study, we are not aware of any research that examined the use of CLT or TBLT and mobile technologies in secondary school in Italy, thus necessitating further research.

Mobile Assisted Language Learning: Attitudes and Perceptions

The literature on mobile technologies for language learning reports a number of case studies that examine various aspects of mobile language learning (Hsu, 2013; Viberg & Grönlund, 2012; Vurdien, 2017). In their review of mobile learning, Viberg and Grönlund (2012) observe that the dominating research focus is on the attitudes of learners towards technologies, their intention to use them, and the various actual uses of mobile technology integrated in their second and foreign language learning. All of these studies have supported the idea that mobile technology can enhance learners' second and foreign language acquisition focusing both on specific skills such as reading and listening, and also on motivation and collaborative language learning aspects (see for example Lin, 2014).

On the basis of research with 45 university students from eight different countries and regions, Hsu (2013) found that learners with different cultural backgrounds had varying attitudes towards the use of mobile phones regarding MALL. However, it was not possible to establish the main reasons due to their different experiences and expectations. Many students doubted whether they could practice all language skills in a mobile learning environment. This might have been due to the lack of real opportunities for them to practice those skills using mobile devices.

Another study examined the attitudes of 345 university students towards mobile learning in Sweden and China (Viberg & Gronlund, 2013). The researchers found that students had particularly positive attitudes toward the opportunity to personalize their learning, the chance to have an authentic learning experience, and the opportunity to exchange information and collaborate with other students, teachers etc.

There are some studies focusing on the learners' perceptions of the use of the iPad in the language classroom. Of particular relevance is Gabarre et al. (2014) who explored how iPads can be used in the language classroom to promote active learning opportunities as in Lys (2013) and Chen (2013). They implemented a qualitative research design in the form of a case study in order to have more detailed insights and understandings of the processes. The study involved one French learner in a Malaysian university. It shows that the learner felt comfortable using the iPad in the classroom; she mentioned many ways to use it for educational purposes (YouTube videos, dictionary, immediate search for accurate information on a topic etc.). Interestingly, she also showed negative attitudes toward the use of the mobile device for writing activities. Whereas all of these studies express positive perceptions regarding the integration of the iPad in language learning, the results cannot be considered conclusive. They are mostly based on data taken from university students rather than secondary school students, or small-scale studies (e.g. one student).

iPad in English Language Learning

Mobile devices such as iPads provide educators with various working configurations and enable learners to perform a wide variety of tasks: creating a presentation, recording the voice, listening to a specific text many times, etc. (Gabarre et al., 2014). The iPad in the classroom, for example, allows learners to record themselves and to listen to an audio at any point of the language lesson.

Although the iPad seemed highly promising for language learning, there were also many issues surrounding one-to-one learning implementation. The difficulty in finding appropriate apps, for example, is unique to iPads and teachers might not have sufficient time to manage app selections and resolve device problems (Chou, Block, & Jesness, 2012).

There are some studies focusing on the use of the iPad in the EFL secondary classroom (e.g., Lin, 2014; Simpson, Walsh, & Rowsell, 2013). Lin (2014), for example, investigated the effects of using iPads in an Extensive Reading Program on adolescent English learners' online activities, reading ability and users' perceptions. Although the study is specifically focused only on reading skills, it is relevant for this study because it investigates the use and perceptions of mobile technology with adolescents. In order to survey participants' perceptions on the usefulness of the device, a technology acceptance model (TAM) questionnaire was delivered to students. Two classes and an English teacher were selected in a senior high school in Taiwan; the study lasted ten weeks; one class was assigned to the mobile group reading on iPads and the other, the PC group, reading on PCs. The students in the mobile group perceived reading with the mobile device useful and easy to use compared to other devices. The results showed how the mobile group outperformed the PC group in online activities and reading achievement, and provided empirical evidence for mobile integration in extensive reading programs in secondary EFL education.

Another methodologically relevant study is by Pellerin (2014) which examined how the use of mobile technologies (iPods and tablets) in language classrooms contributes to the redesign of task-based approaches for young language learners. The research provides evidence of how mobile technologies allow young language learners to create their own learning environment and meaningful language tasks with the support of the teacher. She deployed a qualitative interpretative research design (Richards, 2003), and used collaborative action research (Burns, 2003). The study involved 16 primary teachers from Grade 1 to Grade 4. The findings provide evidence that the use of tablets contributes to the creation of authentic and meaningful language tasks; because of the multimodal nature of the touch screen devices, learners were engaged and they developed greater autonomy (Pellerin, 2014).

To sum up, although there has been some recent research on the use of mobile touch screen devices such as iPads in the context of language learning (e.g., Lys, 2013), such research still focuses mainly on adult learners in English as second language contexts. In addition, these studies have been more concerned with vocabulary learning activities (e.g., Stockwell, 2010) and grammar exercises. Additionally, a recent review of research (Haßler, Major, & Hennessy, 2016) on the use of mobile devices for achieving learning outcomes in schools could not draw any firm conclusions. Therefore, further research is needed in order to contribute to our knowledge base regarding secondary school students' and teachers' perceptions about mobile devices which influence how they use them for language learning and teaching in secondary schools.

MALL in Italy

In the last few years, the Italian Education System has experienced a significant increase of mobile technologies in schools, and further and higher education, particularly in secondary schools. However, as far as we are aware, research on the use of the iPad in secondary school English language classroom in Italy has not been reported and thus this paper addresses this gap in the literature. Although Italy was one of the country partners of MOTILL (Mobile Technologies in Lifelong Learning), a project funded by the European Commission aimed at collecting, organizing and analysing pedagogical approaches that exploit mobile technologies for LLL (Life Long Learning) "in order to identify and spread good practices in this field (The Motill booklet, 2013), there is hardly any study reporting

MALL practices in Italy. The project states the importance of each national context with respect to the use of mobile technologies for LLL. For example, Italy shows high diffusion of mobile devices but insufficient participation in learning activities. The MOTILL study found that the use of mobile technologies increased the level of engagement of the learners, enabled students to manage and direct their own learning and it responded to their learning needs (such as collaboration). Given the limited research evidence on the use of mobile devices for language learning and teaching in Italian secondary schools, there is a clear need for more research.

THEORETICAL BACKGROUND

This study is informed by a sociocultural theoretical background. The communicative and the task-based approaches have been strongly influenced by sociocultural principles. In a sociocultural classroom, where Vygotskian ideas are applied, the teacher encourages learners to engage in dialogue with both the teacher and each other, and to think by asking questions of each other (Brooks & Brooks, 1999). Moreover, collaboration is seen as the most effective means by which sociocultural learning can be established (Lantolf & Appel, 1994; Woollard, 2010). In a student-centred language classroom context, mobile technologies can play a key strategic role, moving from simply presentation devices of a teacher-centred context to a more collaborative function, where learners are asked to use and identify cognitive strategies that facilitate their learning (e.g., cooperative, non-linguistic, problem solving strategies etc.). Furthermore, tasks themselves mediate action and interaction, and the way they are designed and presented could also influence how learners orient themselves (Lantolf & Appel, 1994).

THE STUDY

This study took place in a private high school in Milan, Italy in which the school administration recently decided to implement a classroom set iPad project in two of its high school classes. As a secondary school EFL teacher, the first author had been collaborating with this school for a few years, particularly on curriculum design and teacher development projects. The action research approach was an obvious choice in this study as it traditionally focuses on “issues of immediate concern to particular social groups or communities” and is conducted “by and with members of the actual community” (Burns, 2003, p. 24). The issue of immediate interest in this study was the use of mobile devices (i.e., iPads) as an instructional tool for English as a foreign language learners. The action research cycle proposed by Kemmis and McTaggart (1988) was employed to frame and design the project (see Figure 1), supported by concepts of CLT/TBLT approaches to language learning and teaching.

Context of Study

The administration and the English language teachers of the high school involved in this study became interested in mobile technologies and made a decision to provide trial iPads to students as part of an action research project. The project was also designed to increase their own knowledge as part of their professional development.

The high school in which the study took place is a part of a private comprehensive school in Milan that serves over 1200 students in years K1-12. The English department includes all the English teachers of the school and operates under the Head of the department, who was also actively involved in the project. Since the school received fifty iPads as a donation, not all the classes could participate in the project. The head of the English department chose the classes, and also the students and the teachers involved in the project at the beginning of the school year, following these criteria: English language at B1 of the Common European Framework of Reference (CEFR), and equal distribution of male and female students.

The school decided to implement a classroom set iPad pilot program in two high school classes for the next school year beginning September 2014. The idea was to introduce the new devices as a

trial project, based on the results the school would then decide to implement the mobile technology for the rest of the classes. In a classroom set situation the school provided each student with an iPad, but they were not allowed to bring them home. The rest of the students in the school, at the time of this study, had access to Information and Communications Technology (ICT) only through the use of computer labs and one desktop computer connected to an Interactive White Board in each classroom. This made the use of ICT in their studies very limited.

METHODOLOGY

In this section, we will describe the methodology used to answer the research questions listed earlier. Action research has been chosen over other valid methods (e.g. ethnographic study) because of its focus on ‘issues of immediate concern to particular social groups or communities’ (Burns, 1999, p. 24). The immediate concern in this case was the introduction of a one-to-one iPad project in a secondary school, and the subsequent need to understand the use of mobile devices as an instructional tool for EFL students.

Action Research

This study followed a mixed method design approach in the form of action research and qualitative data analysis. Before proceeding, it is essential to clarify what is meant by action research.

Burns (2003) describes action research through its relation to the ideas of ‘reflective practice’ and ‘the teacher as researcher’:

Action research involves taking a self-reflective, critical, and systematic approach to exploring your own teaching contexts. So, in AR, a teacher becomes an ‘investigator’ or ‘explorer’ of his or her personal teaching context, while at the same time being one of the participants in it. (p. 4)

According to Kemmis and McTaggart (1988), action research typically involves four broad steps in a cycle of research (Figure 1): planning, action, observation and reflection. How these steps were followed in the study is explained below.

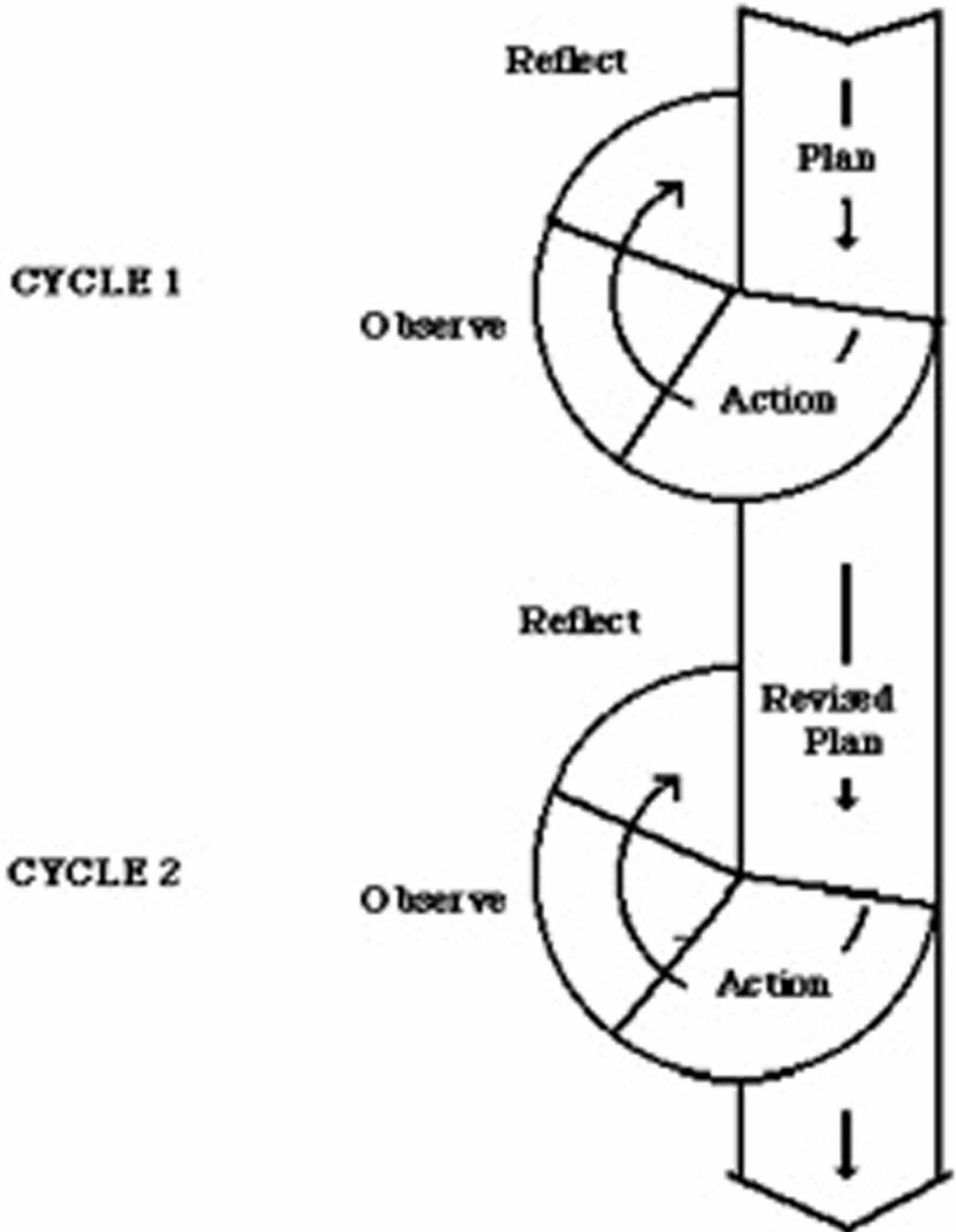
The first author of this paper had the role of the researcher during the entire project. She was involved from the beginning of the implementation: she also supported teachers during planning and analysis, and she helped them reflect during the last phase of the cycle but, unlike most action research projects, she never had the role of the teacher. How this action research cycle was applied in this study is described under Data Collection below.

Participants

Teachers. Two EFL teachers participated in this study. The first author (researcher) worked with them as a researcher. Teacher A was the Head of the English Department. They both had at least seven years’ classroom experience, additional Post-Graduate Certificate and, Master of Education degrees. Teacher A was CELTA qualified and teacher B had a PhD on English Cultural Studies. They were teaching both General English and English Literature. At the beginning of the project, the teachers were asked about their level of expertise with the iPad. Teacher A was already familiar with the device; Teacher B needed about two weeks to get familiar with the basic functions of the iPad. This was not an issue for the planning of the project and it did not interfere with the research at anytime.

Students. Two classes were selected by the Head of the English department to participate in the project. All the students were informed about the research design, future actions and objectives. All the students’ parents or guardians had been informed with a letter; they all (parents and students) accepted to be part of the study by signing up a consent form. There were 43 students involved: 16 girls, and 27 boys. All these students completed an initial survey online. Four students in each class (two boys and two girls) were selected by their EFL teacher regardless of their level of English for a face to face interview with the researcher.

Figure 1. Action research cycle . Source: Kemmis and McTaggart 1988, p. 14.



At the time of this study, all of the students were 16 years old. Each student received a numbered iPad at the beginning of the school year. Since the school followed a classroom set iPad program, students were not allowed to bring the device home. At the end of the day they were asked to leave their iPads in the classroom closet where iPads were automatically recharged.

Data Collection

The following tools were employed for collecting the data to answer the research questions:

1. Regular recorded meetings with teachers (five)
2. Two face-to-face interviews with teachers (two) and students (eight) (at the beginning and at the end of the study);
3. An online survey (41)
4. Classroom observation (four lessons)

Teachers' meetings. The first author and the two EFL teachers used the action research cycle mentioned earlier. At the planning phase, the teachers involved in the study had regular meetings to identify the main issues and develop a plan of action and a set of possible tasks to integrate the mobile device into their teaching.

It was decided that before the teachers could implement the iPads in their teaching, they needed some planning time and professional development to learn how to use the devices themselves and incorporate them into their lessons. The first author worked with the two teachers and developed a project timetable.

At the beginning of the academic year (September), a planning session with the teachers took place, where the researcher and the teachers negotiated roles and responsibilities and the timeframe itself. Parents were informed through a letter sent home about the project and all parents signed consent forms for their child's participation, including permission to video record, photograph, and interview. During the first month, the teachers and the researcher had weekly two-hour meetings. Teachers used these meetings to discuss challenges they encountered and solve problems, as well as share their successes with iPad integration in their classrooms. Each teacher undertook the responsibility of researching apps that would be useful to teach English.

Lesson observation. As a second step of the action research cycle (Action phase), the teachers started to include some deliberate interventions into their teaching situation following an agreed timetable. In October, the teachers involved in this study, for example, introduced the iPads to the students in their lessons. Most students did not require any training on the device itself, as they had experience using iPads in their homes. The interventions were 'critically informed' as teachers questioned their assumptions about the current situation and planned new and alternative ways of doing things. The teachers planned the lessons, intending to observe different students using the iPad, performing specific language tasks.

Students were asked to perform listening, speaking and writing tasks. Tasks were designed following the standard TBLT approach. For example students listened to an authentic text, focused on key words, located specific information etc. Teachers often allowed them to listen to the text as many times as they wanted since the device allowed them to work at their own pace. They were also asked to perform speaking tasks such as voice recording or dubbing.

Starting from October, the researcher observed four lessons focusing on different skills. Observation can be fascinating, but also time-consuming. In order not to lose the focus, the researcher prepared an observation structure to follow when taking notes during the lessons. She also took pictures and video recorded some key meaningful activities during the lessons.

In particular, the observations looked at:

- **The Setting:** Space, objects (e.g. iPad, notebook etc.)
- **People:** Number of students, role of the teacher, interactions (with people and with technology), Visible feelings showed by participants, relationships.
- **Behaviours:** What teachers did, what students did, ways to deal with issues.
- **Tasks:** Was the task designed for the iPad? Was it adapted? Was it a standard language task?

This was also part of the third phase: Observation. During this phase the teachers and the researcher observed systematically the effects of the action and document the context, actions and opinions of those involved. The first author of this study completed detailed observation tables in order to be able to have a picture of what was happening in the classroom.

The project team focused on targeting apps to perform specific language tasks and focus on specific skills. The teachers chose the apps based on the lesson planned, then they created or adapted new tasks that incorporated the iPad. Table 1 provides a description of the apps selected.

During the reflection phase, teachers reflected on, evaluated and described the effects of the action (the use of the iPad to perform language tasks) in order to understand classroom dynamics (how they use the device and why) and to investigate the issue they have explored more clearly. At the end of the reflection phase teachers decided to share the results of the research with others as part of a bigger project on their ongoing professional development.

The survey. The survey served two aims: firstly, it gave an idea of students' general perceptions and expectations of the iPad (mobile device) for learning English; secondly, the results indicated students' needs and thus were useful to teachers to start reflecting and planning the subsequent lessons (see Appendix).

Following Dornyei (2010), a questionnaire using attitudinal questions was prepared, intending to observe what students think about the use of the iPad for language learning. The questionnaire is a broad category that includes attitudes, opinions, beliefs, interests, and values.

We chose to conduct a survey with all students because of its efficiency in terms of time and effort. Since the project covered a short period of time, the online survey gave the chance to collect a quite large amount of data from all the students involved in the research. The survey was also easy to conduct both for the teachers and for the young students. The survey was delivered using a free online tool called SurveyMonkey; the questionnaire was composed of ten multiple-choice questions. Students received an individual email containing the link to the survey and they had two days to complete it since they were going to receive the iPads the week after. All surveys were completed anonymously.

Table 1. Apps selected and the linked skills

Skill	App
Collaborate e.g., discuss, share and decide which picture best represents your message.	Google Drive Messages Evernote
Annotate e.g., listen to the author and take notes on the key passages from the book.	Notability TinyPdf
Watch and Listen e.g., watch the talk and find the answers to the questions.	YouTube Vimeo TEDTalk
Present e.g., based on the movie you watched, prepare a short presentation to convince your classmate to watch it.	HaikuDeck
Organise ideas e.g., listen to the interview on William Shakespeare and prepare a map on the key facts.	MindMapping
Search e.g., find and select information on the Globe Theatre in London.	Google
Vocabulary e.g. use online dictionaries to help you with collocations.	Dictionaries (MacMillan, MirriamWebster) WordReference

Interviews. We conducted structured interviews with both teachers and students. A convenient sample of eight students, balanced in gender (4 boys, 4 girls) and English proficiency of CEFR B1-B2, was selected by the teachers in order to have a sample which could represent the main characteristics of the class. In order to design and structure the interviews, we used the model (Figure 2) by Richards (2003). The interviews were conducted in English and audio recorded.

The questions were the same for both teachers and students. They were constructed in order to allow the researchers to answer research questions. The interview questions included the following:

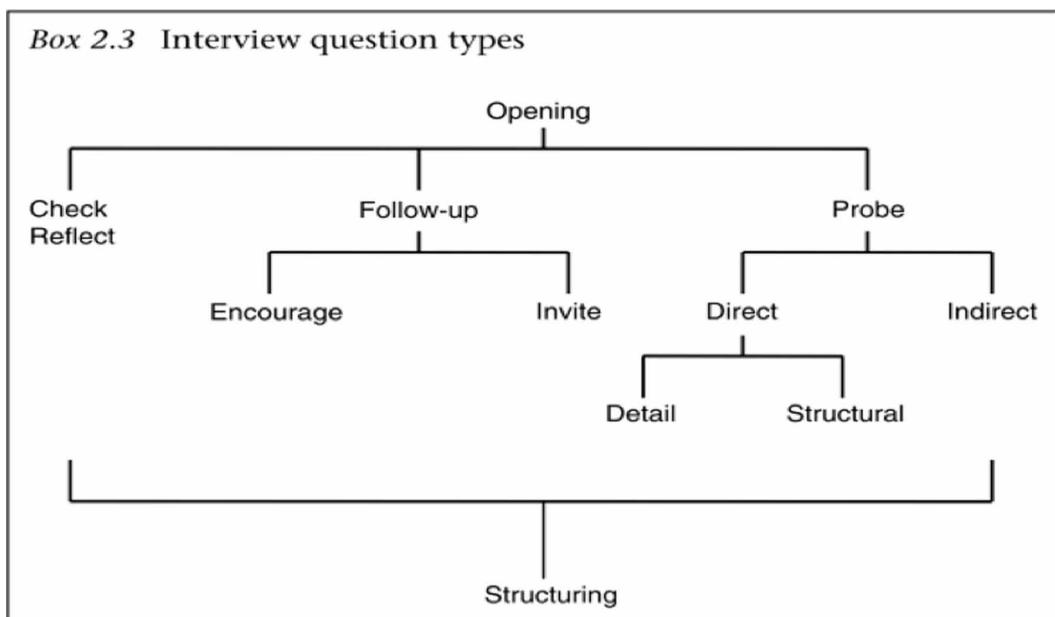
- How do you use your smartphone/tablet in your free time?
- Do you think the iPad is a useful tool to learn English? Why?
- Do you know any apps for learning English? Have you ever used any of them?
- Can you mention 5 things you can do with your iPad to learn English?
- What would you like to do with your iPad during English lessons?
- Is there anything you don't like about the use of the iPad?

The interview questions were structured in the way to offer a comprehensive picture of the subjects' experiences with the iPad.

Data Analysis

The data (except the survey) was analysed using an inductive content analysis approach (Elo & Kyngas, 2008). Inductive content analysis is a systematic research method, which provides objective means to describe phenomena by analysing content via creating content-related categories (Elo & Kyngas, 2008). Inductive content analysis is used when there is a lack of knowledge about researched phenomenon, or when knowledge about researched phenomenon is rather fragmented (Elo & Kyngas, 2008). We started to conduct the open coding of the teachers and the students interviews, and the classroom observation notes, photos and videos. Open coding is a process of organizing data, during which researchers make notes and headings in the text (Elo & Kyngas, 2008). In accordance with Graneheim

Figure 2. Interview question types (Source: Richards, 2003, p. 57)



and Lundman (2004), a coding unit consisted of words, sentences, or paragraphs ‘containing aspects related to each other through their content and context’ (2004, p. 106); all the coding unit selected had been analysed using a qualitative data analysis software called NVivo. The evidence collected during classroom observation (e.g. pictures, video recording, tables etc.) served also as data in this research study. The survey data was statistically analysed using descriptive statistics.

FINDINGS AND DISCUSSION

Students’ and Teachers’ Perceptions of the Effectiveness of the iPad for Learning EFL

The first question in the study explored students’ and teachers’ perceptions of the iPad for listening, speaking and writing activities. The survey conducted at the beginning of the project served as general indication for the future planning. Data from the questionnaire, in particular, showed students’ and teachers’ expectations towards the use of the iPad in the EFL classroom. Most of the students were enthusiastic about the use of the iPads for learning English, more than 80% of them were expecting to create materials and presentations with the device (e.g. create presentations on a specific topic to support their speaking, create short videos, publish reviews on the school website, create an e-magazine, etc.). Regarding the four skills, 70% of the students were confident that the iPad could help them with improving their listening skills. Figure 3 below shows results for student expectations of the iPad.

Moreover, the analysis of the initial survey shows that both teachers and students have positive attitudes towards the use of the iPad for listening tasks, thus confirming findings from previous studies (e.g., Burston, 2015). In his review of MALL implementation studies, for example, Burston (2015), reports a general improvement in listening skills measured with pre-test and post test methodology. There are some concerns regarding the use of the iPad to improve speaking and writing skills (see Table 2 below).

Students themselves acknowledged the impact of iPads on their listening, speaking and writing skills. They also felt more independent in their school work inside and outside the classroom. In the face-to-face interview TN reported:

“Yes, I think iPads are very useful because I can listen to my voice, I can record it, and then I can listen to it. It’s also useful in writing because it can automatically correct me when I write.”

Students are expecting to become better English learners thanks to the use of the iPad, in particular they would like to work on listening and speaking activities. CG summed it up:

“I think it’s a good idea to talk with Evernote, because in the afternoon the teacher can listen to your voice and correct you if there are any mistakes. I would really love to work more on listening and speaking activities.”

These results are in agreement with other studies, which found significant differences in student performance when students were exposed to listening, speaking and writing tasks performed on mobile devices (Lin, 2014; Lys, 2013).

Use of the iPad as a Tool by Teachers and Students for Teaching and Learning English Language Skills

With regards to the second question about the use of the iPad of teachers and students, the findings suggest that both teacher and students became increasingly independent and they used the device productively.

The ‘iPad implementation’ theme derived from interview and classroom observation data consisted of several categories (‘engagement’, ‘independence’, ‘motivation’, ‘creativity’). Teachers reported improvement in student work; they were also enthusiastic about students’ increased engagement with assignments. Teacher A summed it up:

Figure 3. Students' expectations of the use of the iPad in the English classroom

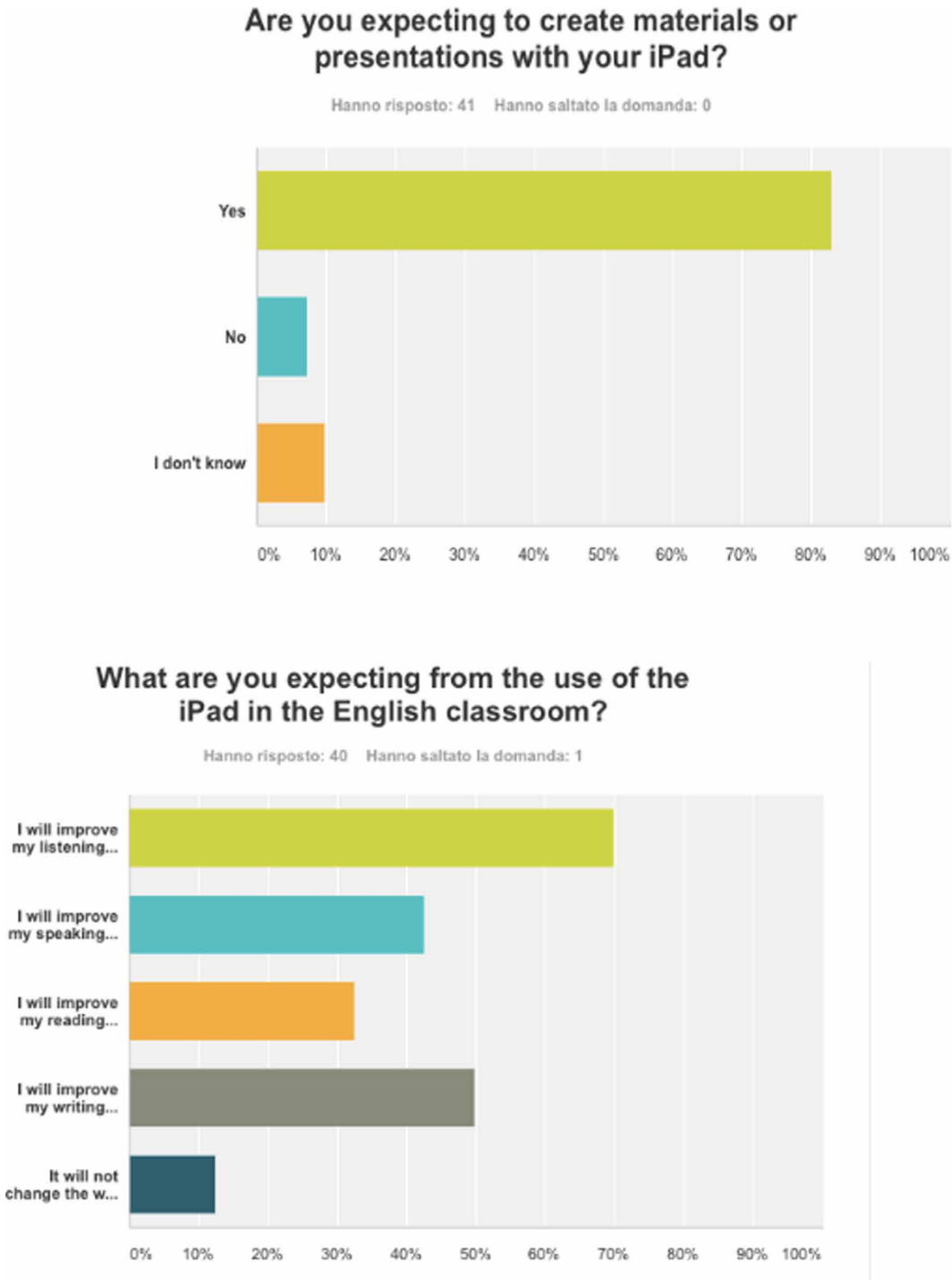


Table 2. Survey results on teachers and students perceptions of the use of the iPad for listening, writing and speaking skills

Ipads is useful to...	A lot	Yes	Maybe	Not at all
improve speaking	20%	41%	32%	7%
improve listening	44%	46%	10%	0.00%
improve writing	24%	51%	10%	15%

“I encourage students to be creative and use all the apps that can make us improve any skill. For instance, I asked them to work with Haiku Deck to prepare a presentation on “Spending a year abroad” and they were thrilled... They are working on The Origins of England and they are enjoying it.”

Moreover, students mentioned several times the wide range of uses offered by the tablet, as shown in the student interview data. It offered students opportunities for not only learning one skill like listening but also other language skills such as writing and speaking in a variety of ways as S mentioned: “Like watching videos, listen to the right pronunciation of a word, or maybe write something with the other students. It’s important and simpler for sharing...”

Under the ‘positive aspects’ theme, students’ uses and attitudes towards technology were frequently mentioned as evidenced from the following extract of teacher A’s interview at the end of the project:

“Certainly. You can easily access YouTube videos, TedTalks, thus improving listening skills and widening your vocabulary. Students can record their voices and speeches and the teacher, me, can quietly tune in and check their oral production. This especially works with weak students. Students seem to be enjoying this way of working and the more we try new things the more they seem to be willing to give more.”

Classroom observation data also showed many positive uses of the device. For example, students and teachers easily used the mirroring function of the iPad, which projects one screen to the main screen, to show the class part of their personal work. As evidence, in the lesson about the Globe Theatre, during the reflection phase, the teacher projected students’ notes on the IWB (see Figure 4 below).

The ‘Effective tasks’ theme in the data included categories like ‘skills’, ‘task types’, and ‘challenges’. Among the most popular task types, both teachers and students mentioned mainly collaborative or personalization tasks, as reported in the teacher B’s interview extract below. This finding is in line with Viberg and Gronlund’s (2013) study.

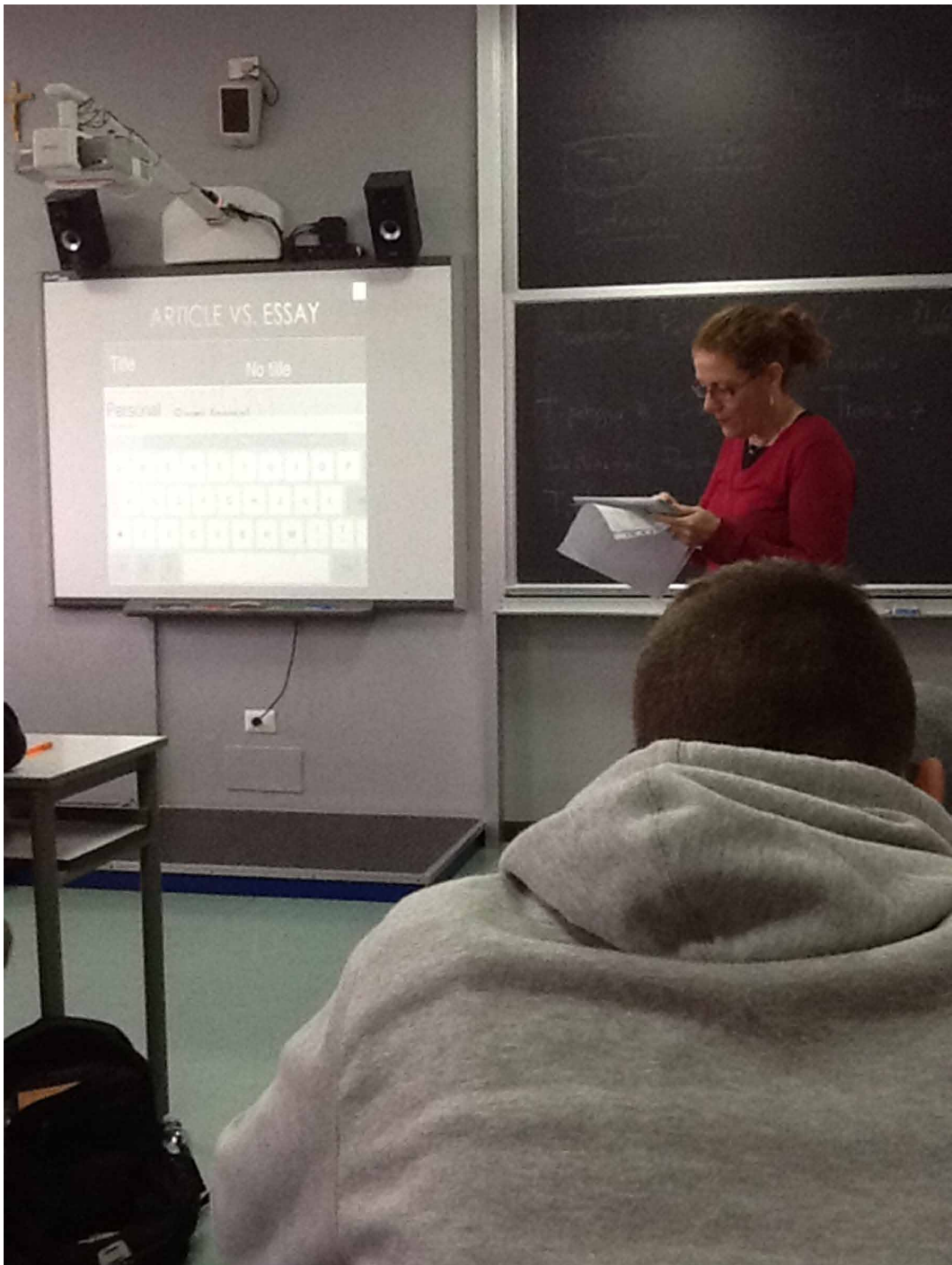
“... we had collaborative tasks, we use the bubbles, we had long term discussions, always recorded on Evernote and then checked by me or the mother tongue teacher, giving comments. We also asked students to record their voices on the spot, but then we asked them to go back to the recording, listen to the recording again and then record a second purified sort of speaking task which is something effective I would say.”

Students were also quite good at moving from one app to the other while recording their voice (for example, to look at pictures), and at selecting only parts of the recordings to be part of the summary in their own presentation. This ability to manage iPad apps for a language learning purpose suggests students’ growing independence and autonomy in the use of the mobile device as reported in Pellerin (2014).

The data showed quite clearly the impact of the medium on the motivation of the students related to the independence from time and space. iPads allowed them not to limit their learning to the boundaries of the standard school day, and this was reflected in their performances and interviews. The possibility enabled by the iPad to shift from synchronous to asynchronous oral interaction was often mentioned as an affordance of the iPad. This finding is not dissimilar to Lin (2014).

For example, under the broad category of ‘motivation’ there were several references by students to the easy and asynchronous access to authentic audio resources:

Figure 4. Teacher while mirroring her work on the screen



“Of course we can watch, videos or listen to interviews and all of the audio and video things that cannot be done at school.” (M. – Student)

Figure 5. Student while selecting part of a video recording



“You can read text on the iPad, you can record your voice during your reading and improve your pronunciation. You can watch videos and movies. You can listen to the voice of the teacher and other things that have been recorded before.” (L. – Student)

The teachers mentioned many ways they were using the iPad along with the apps (listed in Table 1 earlier) they were using, thus indicating their growing confidence in the use of the mobile device for language teaching. Teacher A summed this up by saying that iPads were employed to

“Activate previous knowledge, voice recording and voice-over to improve pronunciation, textual visual analysis of literary texts, regular assessment through canvas and the written assignment systems, boost vocab in context through corpora. And cooperative learning...”

Teachers also listed a few ideas they would be happy to try in the following months. Teacher B, for example, said:

“I am planning to create our own literature book through book creator and in the future I will give ad hoc exercises and homework to my students according to their language skills.”

These results are in agreement with other studies focusing on the actual uses of the mobile device (e.g., iPad) as an instructional tool for teachers and learners in which it was found to be engaging and motivating for both (e.g., Cumming et al., 2014).

In order for learners to take full advantage of learning the English language in the classroom with an iPad, the teachers introduced to their students a number of apps for different language learning purposes as listed in Table 1. Classroom observation notes show that apps that appear useful for digital literacy purposes are those that allow learners to type or write on top of printed text or other backgrounds, to record audio for a response, to add pictures from the photo library, to insert symbols and stamps and to graphically organize notes and answers.

However, the data from classroom observation and the interviews showed several challenges related to the initial use of the device. In particular, teachers and students mentioned some difficulties with the use of the keyboard, and therefore they reported writing on the iPad as time consuming:

“I am already quite used to the Apple keyboard, but I noticed that my friends that don’t have an Apple device at home. At the beginning it’s gonna take some time to get used to the Apple keyboard, also writing on a keyboard instead of writing with pen and paper. It’s a different way...” (Teacher A)

“iPad and technology in general take you a lot of time and you are more slow to write and do things” (TN, student)

“... I think that taking notes on the iPad is more slowly and I would like to continue to take notes on the paper because when the teachers speak it’s more difficult to write on the iPad, but it’s still more neat than a folder of paper.” (A, student)

Further responses from the interviews reveal a trend for students to engage in activities that let them personalize the product through a combination of different modes such as layout, animation, sounds, video, recordings, and images. This naturally requires confidence in using the mobile devices functions like ‘cut and paste’, selecting pictures from the web, embedding video links to a presentation etc. Although the interview data may not demonstrate students’ and teachers’ ability to use the iPad effectively, the mention of the words like ‘video’, ‘app’, ‘task’, and ‘record’, the most frequent words used by students and teachers in the interviews (see Table 3), suggest their growing knowledge about the tool which plays a role in using it for language learning.

Over time we observed an increased confidence of students and teachers in using the iPad touch-responsive interface to reach their individual goals. Moreover, all the participants recognized improvements in time management and task organization confirming that well-planned digital literacy-oriented mobile tasks contribute to independent language learning.

LIMITATIONS OF THE STUDY

This study has had a number of limitations that must be noted. They are mainly related to the context of the research and to the data collection and analysis. The sample of students and teachers was relatively small and the context was quite specialized, which reflects the nature of action research: contextual, localized, and small-scale (Burns, 2009). In particular, this study took place in the context of a private high school in Milan. This means many of the students involved may have already had

Table 3. Most frequent words used in the interviews

Word	Count	Similar Words
iPad	145	iPads
writing	83	write, writes
speaking	81	speak, speaks
task	60	tasks
record	45	recordings, records
Video	41	videos

the iPad or a similar device at home; therefore, they were quite familiar with it, and probably came from affluent families which could afford this type of devices. It is crucial to consider that a study carried out in a public state school, in a different area of the city or the country could have different impact and present different challenges. Future research should include large scale participants and over a longer period of time.

In terms of data collection and reliability, it would have been beneficial to have a control group to perform similar tasks without the iPad. This could have helped to have a clear picture of what the impact of the device could be within the same class.

CONCLUSION

This exploratory study has shown that teachers perceived improvement in student work. According to them, this was the case with collaborative tasks and speaking and listening skills. They were also enthusiastic about students' increased engagement with assignments as mentioned in the interviews. The results also revealed that students felt more independent in their school work inside and outside the classroom due to their access to the iPad.

Students themselves acknowledged the impact of iPads on their learning. As evidence of this, among the positive aspects of using the iPad in the classroom, students also mentioned some apps that can facilitate collaboration by enabling users to simultaneously share screens and manipulate drawings, written responses, and more (e.g. Evernote, Google drive). Students and teachers both perceived the importance of carefully designing language tasks based on the technology needed, supporting the results in Pellerin (2014). These findings also confirm Hutchinson et al.'s (2012) claim that the use of the iPad supports students' literacy learning and creativity in the new digital environment. In general, students expected to become better English language learners, thanks to the use of the iPad. In particular, they seemed to perceive the enabling role that iPad could play in improving listening and speaking skills in English.

The experience of this study indicates that, in order to have a successful implementation of mobile devices in education, institutions are required to provide teachers with a minimum of basic professional development for the management of mobile devices and participants (learners, teachers, families etc.) with an appropriate policy of use where rules and regulations are clearly stated and signed by the people involved.

There are a number of directions that future studies in this area can take. Considering that mobile devices should and can support language learning, and the large distribution of these devices among teenagers, it would be beneficial to have more studies investigating the implementation of mobile devices at secondary school levels in a CLT/ TBLT context.

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APPENDIX

Table 4. Student survey questions

D1: Have you ever used an iPad before having it at school?
No
D2: How did your parents react to the fact that you were going to use the iPad at school?
Quite good
D3: Do you think the iPad is a useful tool to learn English?
Only for some aspects
D4: Do you think the iPad will be useful to take notes and do writing tasks?
Yes
D5: Do you think the iPad will be useful to do listening tasks in class?
Maybe
D6: Do you think the iPad will be useful to do reading tasks in class?
Maybe
D7: Do you think the iPad will be useful to do speaking tasks in class?
Not at all
D8: Do you think your English teachers are well prepared to teach with the iPad?
Quite prepared
D9: Are you expecting to create materials or presentations with your iPad?
Yes
D10: What are you expecting from the use of the iPad in the English classroom?
I will improve my writing skills

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