Interactive whiteboards in EFL from the Teachers’ and students’ perspective

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Recent disseminated research findings have shown that ELT can be enhanced by effective uses of new technologies; the present paper examines the current use of Interactive Whiteboards (IWBs) in English Language Teaching (ELT) and learning of children aged nine to sixteen years old in Southwestern Greece. The small-scale study concentrates on both teachers’ and children’s perceptions regarding the use of the technology in question. The data referred to in the current paper derives from five teachers’ interviews. The teachers who participated had not undertaken any form of training on the use of IWBs. There were 55 students who completed questionnaires and evaluation forms. The study revealed that there were pedagogical limitations in the effective application and use of the software. Due to lack of professional training on its use, and reluctance of moving away from a teacher-centred approach practitioners were familiar with, IWBs were not used to their full potential. The teachers’ main setback was that they had difficulty managing and combining the use of technology and pedagogy in order to create an environment where students could actively participate and interact in the classroom. The present research suggests that with appropriate teacher training, feedback and time for professional development, YL teachers will be more equipped to apply the benefits and interactive nature of the IWB in the language classroom.

Key words: Interactive Whiteboards, Young Learners, socio-constructive approach, new technologies, L2 development

1. Background

In recent years there has been much research on the use of Interactive Whiteboards (IWBs) in the language classroom, including the effects they have had on language teaching, professional development, and students’ L2 development. Ministries of Education around the world have invested a great amount of capital recognising the significance of technology and its potential to influence major changes in education; therefore, action has been taken to supplement schools with the needed equipment (EACEA, 2009; Ramanair & UyuSagat, 2007).
The global interest of IWBs is justified as they have tampered with the concept of the classroom and have replaced a number of its aids, such as the chalkboard, the whiteboard, the overhead projector, the CD player and the computer (Hall & Higgins, 2005). Even though steps have been taken to include IWBs in language education, the evidence on whether they enhance students’ attainment is vague (Hockly, 2013). Within the last decade, there has been much debate on whether the digital board is used efficiently in language learning (Yáñez & Coyle, 2011). Cutrim Schmid and Whyte (2012) have argued that new technologies in the language classroom is a complicated factor, where teachers are under pressure to use new equipment and software, such as IWBs, and to do so within a constructivist framework, considered to be ideal for language teaching and technology and emphasises the role of language and culture in cognitive development. Constructivist and social constructivist learning are evident in the use of IWBs, which allow for the learning environment to flourish as students are provided with opportunities to interact and learn in a student-centred environment. Constructivism supports that learning is an active process in the sense that, with the teacher's help, learners select and transform information, and make decisions (Chrenka, 2001).

One could argue that this pressure of integrating technology in class could be one of the reasons language teachers are reluctant to adopt technology in their practice (Papadima-Sophocleous, Kakoulli-Constantinou & Giannikas, 2015). In order to investigate the matter, data from students and their teachers is essential as educational technology has not only changed the role of the language teacher, but the learners’ as well (Delatolas-Saveris, 2015). Furthermore, Young Learners’ (YLs) insights as ‘digital natives’, a term defined by Prensky (2001), is more than valuable in such research studies, yet YLs have been a neglected source in the literature.

The present small-scale contribution concentrates on the teachers’ and the learners’ perspective of the integration of IWBs and the effects they have on language teaching and learning. More specifically, the study focuses on the use of IWBs in EFL for YLs in a Greek private language school setting. The teachers of the specific context use IWBs, however, they do not receive any professional training, which creates pedagogical limitations in the effective application and use of the software. The Greek setting and reality can be a situation from which other contexts around the world can take useful lessons from, as professional development has been overlooked in various settings when it comes to technology in the language classroom (Kessler, 2018; Kessler & Hubbard, 2017), and specifically with IWBs. The current research aspires to shed light on the current situation in Greece and similar contexts, whilst also encourage further large-scale research in the field of educational technology and language teacher education.

1.1. The Use of IWBs in Language Learning

IWBs are used as a multimedia platform where teachers can employ a wide range of ICT tools, such as audio files, digital videos, PPT slides, and websites, in combination with the facility of highlighting, dragging, dropping and concealing linguistic units (Cutrim Schmid, 2007). Although it may look like an ordinary whiteboard, the IWB is a large, touch-sensitive, interactive display system that links the whiteboard to a digital projector and a computer (BECTA, 2003; Miller and Grover, 2007). Teachers and students can operate the digital board with the use of a keyboard or a special pen from different positions in the classroom (Armstrong et al., 2005). IWBs made an appearance in English Language Teaching (ELT) in the early 2000s and tended to follow a top-down implementation model (Dudenessy & Hockly, 2012). The introduction of IWBs into language classrooms in many contexts was to attend to a perceived need to keep up to date and to be known as having the latest equipment, and were seen as the latest ‘must have’ teaching device (Hockly, 2013). Nonetheless, IWBs offer a range of possibilities that can benefit both teachers and learners and are considered powerful tools that encompass various learning styles (Alhumsi & Shabdin, 2016). More specifically, the digital boards support multimedia and multisensory qualities which give teachers access to materials or pre-
prepared lessons quickly and efficiently from a range of sources, and move between visual and/or oral input and language practice with ease. Software created for IWBs includes interactive texts and activities, colorful graphics and sound effects that engage and hold the YLs’ attention. Children can watch stories on the IWB while listening to the characters speaking in the L2; they can visualize, join in with songs, physically touch and move objects on the screen, play interactive games or work with written texts, all of which strengthen their L2 development (Coyle, Yañez & Verdú, 2010).

Teachers need a reasonable level of expertise to exploit full potential of the digital board, but also sufficient technical competency to face difficulties that may occur. According to Duran and Cruz (2011), IWBs are considered to have many positive effects on language learners and teachers. They provide teachers with the opportunity to utilise a wider range of ICT and web-resources, while students become more attentive and engaged as they find the dynamic of lessons more interesting and stimulating (Olofon, Swallow & Neumann, 2016). Furthermore, Şengül and Türel (2017) have found that teachers ought to use IWBs as students benefit when learning their main language skills. These results have resulted to a preference towards whole-class teaching (Glover & Miller, 2001), and presenting a variety of display (Robison, 2000). Nonetheless, disadvantages have been identified regarding the use of IWBs in language learning and teaching, and they have been noticed to be practical or logistical. According to Glover and Miller (2001), two other very important issues that may be barriers to using IWBs are 1) the cost of the IWB, which can be expensive for a school or an institution to purchase, compared to other presentation and/or display technologies and 2) the preparation process, which takes longer in the initial stage and reaching a technically accomplished level can prove to be timely. Another disadvantage was noted in DeSilva, Chigona and Adendorff’s (2016) observations, which have shown that IWBs were used mainly as presentation tools, defeating the purpose of its integration in the lesson and the interactive element of the digital board (Armstrong et al., 2005). The use of IWBs’ interactive functions requires effective corresponding instructional design in order to bring about a high level of learning content and student engagement. Interaction in language teaching could mean a number of things. On the one hand, according to Birmingham, Davies & Greffenhagen (2002), it could be the interaction between pupils and teachers, or pupils and pupils. On the other hand, Buckley (2000) has argued that it is the interplay of digital information as elements in the learning process. Beauchamp and Kennewell (2010), emphasise the role of the teacher and how they integrate the IWB to encourage interactivity in its pedagogical sense. From this perspective, making language pedagogy interactive would mean the teacher and students using particular IWB features such as drop and drag, or moving between multiple screens during lesson time (Moss et al., 2007). In a number of studies, it has been observed that IWBs are not necessarily used interactively and have been recorded to reinforce teacher-centred approaches (Levy, 2002; Kennewell, 2004). Levy (2002) argued regarding the quality and depth of classroom interaction with more social constructivist views of education and learning. As far as the digital board is concerned, it enables the visual information to be more easily shared, thereby ‘drawing the class together’ and embracing interactivity. In this case, the digital board proves to be ineffective and could have limited impact on teaching and learning if practitioners fail to apply a new approach to language pedagogy interactivity requires (Glover & Miller, 2001; Luo & Yang, 2015). Therefore, the interactive element of the IWB is considered key to effective learning and teaching (Armstrong et al., 2005).

Evidence has shown that effective pedagogical method involves well thought-out lesson planning and curriculum design (Koh & Chai, 2016), with stepped conceptual learning, and a cognitive review, all of which offer opportunities for a use of variety of IWB techniques. Researchers have strongly argued the positive effects of the digital board when appropriately integrated into the language classroom; the true successful integration of IWBs depends on how they have been used by teachers in a learning context (Türel & Johnson, 2012). This has been a noted issue; the need for and lack of
sufficient professional development (Al-Rabaani, 2018) in order to use IWBs efficiently is a key element to YL ELT in the digital age.

1.2. IWBs in the YLs’ Classroom

Studies have shown that YLs show appreciation towards IWBs in the language classroom. The majority of children have been observed to enjoy the tactile element and the versatility of the activities the IWB displays. This is thought to be one of its major advantages, since the different learning styles that may be found in the language classroom can be better accommodated when teachers draw on a variety of resources to suit different students’ needs and abilities (Mercer, Hennessy & Warwick, 2010; Cutrim Schmid & Whyte, 2012). This use of technology and the way in which information is presented, via colourful, interactive and fun activities, is seen by YLs as intriguing and motivating (Weimer, 2001; Smith, Hardman & Higgins, 2006). The visual aspect of the IWB is considered the primary reason for active and effective YLs’ engagement in the language learning process (Beeland, 2002). Smith, Hardman and Higgins (2006) have argued that YLs’ interest in learning is enhanced due to the element of visual surprise brought to the lesson. Yanetz & Coyle’s (2011) study showed that due to the above benefits of the IWB, the majority of children who took part in their research were eager to use the digital board extensively.

From the teachers’ perspective, an overview of the literature has indicated several instructional benefits IWBs offer, apart from better classroom management (Beauchamp, 2004) and contextualisation (Levy, 2002; Murcia, 2008); consideration of student needs with different learning styles (Beeland, 2002), there is enhanced interaction with the board or peers (Beeland, 2002; Elaziz, 2008). Nonetheless, Glover & Miller (2001) report that several YL teachers in their study failed to appreciate the fact that interactivity requires a new approach to pedagogy. In a later study, Miller and Glover (2007) found that faster progression from an instructional to an interactive teaching approach could be attempted through ongoing professional development. In research conducted by Gray, Hagger-Vaughan, Pilkinson and Tomkins (2005), teachers commented that the IWB supported them in encouraging learners to practise and recyle language recently presented in class. They claimed that students were more focused on vocabulary and spelling, and even though they wrote less, IWBs helped the learners improve their writing’. Furthermore, the study reported that the IWB offered practitioners a variety of accessible ways of drawing their students’ attention to grammatical features and patterns. Additionally, the study showed that the students believed that the use of IWBs had a positive effect on their memorisation skills and writing development.

Although relevant studies provide the literature with findings suggesting that student language learning, motivation and engagement may be increased by the use of IWBs. Betcher and Lee (2009, p.8) comment that “what makes the difference is the teacher who understands how to tap into the potential of this new technology to create engaging, interesting, interactive lessons that capture the attention and imagination of the students in pedagogically sound, creative ways”.

2. Methods

The present study was triggered by the introduction of IWBs to Greek state schools in 2011 where the Greek Ministry of Education, with the support of MLS (Making Life Simple), a company of educational technology, supplied and installed over 3,000 IWBs to Greek schools across the country (http://www.skai.gr/news/technology/article/169271/diadrastikoi-pinakes-sta-ellinika-sholeia/-). This initiative gave an incentive to private language school owners to supply their teachers with IWBs in order to become competitive in the language teaching market. The participating teachers were self-taught and their motivation led them into making an effort to guide their peers when integrating the IWB in their classes.
In light of this interesting development, the present small-scale study focused on language teachers who used IWBs and YLs, aged 9-16, who attended private language lessons after mainstream school. More specifically, parallel to their public school EFL education, many YLLs attend classes at private language schools, which offer English language tuition in the afternoons as a supplement to the lessons that take place in public schools in the mornings. They are dispersed across the country and provide remedial work for school subject courses. The YLS who participated in the current investigation had been studying English from two to eight years. The research goals of the study were:

- To determine the extent to which teachers adopted socio-constructivist approaches with the use of IWBs
- To examine the impact of teachers’ efforts on students’ involvement
- To present teachers’ and students’ perspectives on the use and purpose of IWBs in the language classroom

For the needs of the current small-scale exploratory study, data was gathered through 1) semi-structured interviews with five language teachers, 2) questionnaires completed by 50 students, and 3) students’ evaluation forms. The semi-structured interviews with the five language teachers provided opportunities to probe deeper and explore the interviewee’s opinions. The interviews were carried out in English, as was preferred by the teachers. Conversations were audio-recorded and word-processed, and critical incidents were identified (Dörnyei, 2007). Detailed notes were made during the interviews, marking illuminating responses for the transcriptions of tape recordings, which were used for cross-referencing to the verbatim audio-recorded conversation. The students’ questionnaires aimed to provide insights on how the YLs viewed the use of IWBs, in which cases it was used and how it affected their lessons. The questionnaires were written in the students’ L1 (Greek) and consisted of three sections: 1) demographic information of the students, 2) the students’ exposure and familiarity of IWBs and 3) students’ personal opinion of IWBs. The questionnaires were distributed at the start of the school year. Finally, the students’ evaluation forms were distributed in order to investigate the students’ perspective into more depth. The evaluation forms were distributed at the end of the school year, after the questionnaires’ data analysis was conducted. The evaluation forms were designed according to the interview and questionnaire findings, and gave the researcher the opportunity to cross-check the outcomes that derived from the aforementioned data collection tools.

ATLAS.ti 7©2013 (Scientific Software Development GmbH, Berlin) was used to analyse and code the recordings (see Appendix C for a coded sample). The analytical process, based on principles of grounded theory (Strauss, 1987; Glaser, 1992; Charmaz, 2006), was iterative and abductive (Dörnyei, 2007) and the data analysis involved a number of readings of the data entries and progressive refining of emerging categories. The procedure was carried out as follows (inspired by Giannikas, 2013):

- An initial reading of the transcribed interviews was conducted. This process allowed themes to emerge.
- The texts were re-read and thoughts were annotated in the margin. The text was examined closely to facilitate a micro-analysis of data.

The questionnaires and evaluation forms were distributed on a hard copy, which, according to the students, was preferred. The data were transferred on a spreadsheet and calculated on Excel, where tables and charts were created based on data results.
The following section presents the results of the study, where points will be made with regard to the teachers’ use and perception of the IWB in the language classroom, illustrated by tables, charts and extracts from the data. The extracts are presented in their original form, as transcribed after data collection.

3. Results

The results will be framed using the teachers and the students’ perspective as recorded via the data collection tools.

3.1. The Teachers’ Perspective

A main source of data was obtained from the semi-structured interviews in order to gain more insight on their perspective of the use of IWBs in the teachers’ context. The purpose of the interviews was to collect information and describe the meaning of IWB-use in the specific context, and take a glimpse into the teachers’ classroom reality. The first section of the interviews draws attention to the teachers’ backgrounds, the frequency of which IWBs are used in the interviewees’ classes, and how long teachers have been using them. The teachers’ background was investigated and is initially presented in Table 1:

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Age/Sex</th>
<th>Years of Teaching</th>
<th>Level of Media Literacy</th>
<th>Use of Technology in Personal Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher 1</td>
<td>30-35/F</td>
<td>10</td>
<td>Intermediate</td>
<td>Frequent user of technology, social media and YouTube</td>
</tr>
<tr>
<td>Teacher 2</td>
<td>30-35/M</td>
<td>8</td>
<td>Advanced</td>
<td>Frequent user of PCs, smartphones and tablets. He uses the Internet daily but does not have a presence on Social Media</td>
</tr>
<tr>
<td>Teacher 3</td>
<td>60-65/M</td>
<td>23</td>
<td>Basic</td>
<td>Uses his laptop for work only/not a frequent technology-user in his personal life. He is not active in Social Media, although uses the Internet for information.</td>
</tr>
<tr>
<td>Teacher 4</td>
<td>60-65/F</td>
<td>25</td>
<td>Intermediate</td>
<td>Does not use technology much in her personal life, she owns a tablet and enjoys reading the news online. She is not active on Social Media but may use YouTube occasionally.</td>
</tr>
<tr>
<td>Teacher 5</td>
<td>30-35/F</td>
<td>6</td>
<td>Intermediate</td>
<td>She is an active technology-user in her personal life and uses Social Media frequently.</td>
</tr>
</tbody>
</table>

Table 1: Teachers’ Backgrounds
The information regarding the Teachers’ Background as technology-users offers insight to the use of IWBs in the sense that it explains the reason why some of the participating teachers were hesitant or uncomfortable taking the risk to maximise its use. Figure 1 indicates how long each teacher has been using an IWB:

![Graph showing years of IWB use](image)

*Figure 1: Time the teachers have been using IWBs*

The years of IWB-use are interconnected with teaching experience, and how long IWBs were in use at the private language school where the study took place. Teacher 4 began to use the IWB first, despite the fact that she did not use technology as frequently as her peers in her personal life, and was older than the other participants. Nonetheless, she had the most teaching experience (25 years). Teacher 4 did not undertake any official IWB training; she was self-taught and trained and guided her colleagues on how to use IWBs from a technological perspective. Teacher 3 had 23 years of teaching experience; however, he used the IWB for the same amount of years as Teacher 1 and 2 who had been teaching for 10 and eight years respectively.

The second figure shows how frequently IWBs were used per week:

![Graph showing frequency of IWB use per week](image)

*Figure 2: How many times do you use IWBs per week?*

Figure 2 brought about interesting insight, as not all teachers use IWBs daily. Only Teachers 2 and 4 use their IWBs 4-5 times a week, a phenomenon which draws great interest since there is a 30 year age difference between the two teachers and Teacher 2 is more experienced in using technology in his personal life than Teacher 4 is. Teachers 1 and 5 are also quite active in their use of technology in
their personal life; however their use of the IWB is not as high as expected. Teacher 3, who uses technology less in his private life, uses IWBs less than his peers. Finally, the third figure shows the amount of time IWBs are used within the lesson:

![Figure 3: How long do you use IWBs in each lesson?](image)

This final chart shows that Teacher 5 may use her IWB more frequently than Teacher 3 (see Figure 2), but they both use it for the same amount of class time. Teacher 1 uses her IWB for just over 20 minutes, while Teachers 2 and 4 use it for the same amount of time (approximately 55 minutes). Figures 1, 2 and 3 illustrate the effort teachers make to integrate IWBs in their lesson, but at the same time, they show the reluctance in indulging into IWBs as the majority uses them for a short amount of time during the lesson. The second section of the interviews focused on the pedagogical aspect of using IWBs. The teachers were asked about activities they used the IWBs for. Table 2 displays the teachers’ responses:

<table>
<thead>
<tr>
<th>Teacher</th>
<th>When teaching via coursebook</th>
<th>When playing games</th>
<th>When teaching grammar</th>
<th>When teaching vocabulary</th>
<th>When doing stories</th>
<th>When doing listening tasks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher 1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Teacher 2</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Teacher 3</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Teacher 4</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Teacher 5</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

*Table 2: What activities do you apply on an IWB?*

Teachers stated that in-class tasks derive from their coursebook, where the IWB was used with pre-packaged material. The activities were led by the coursebook and teachers used the IWB as a high tech whiteboard since the same coursebook-led approaches were used with chalkboards and whiteboards. This has been an issue in many contexts, according to Hockly (2013), and, in the specific
study, the result is that the lesson takes a teacher-fronted approach, missing the ‘interactive’ element.

When asked what they liked most about teaching with IWBs, the teachers replied:

Teacher 1: ‘It increases students’ interest. Students’ attention is automatically on the lesson. I like to see my students engaged and not bored’
Teacher 2: ‘It’s fun and the students enjoy it, plus I can explain the lesson better’
Teacher 3: ‘It makes learning more fun for students and it makes teaching easier’
Teacher 4: ‘Students can actively participate in the lesson—all the text/answers are on the board clearly stated. Oral exercises become fun since help is provided in written form and students can follow a pattern when they talk. Vocabulary becomes fun and listening can be explained by providing the text and the related vocabulary’
Teacher 5: ‘The fact that students are focused on the lesson’

This evidence shows that even though teachers have not received any training in the field of technology in language education, and more specifically on the use of IWBs, they enjoy using them in their practice, and are aware that their students benefit from them. The fact that the teachers have integrated this digital tool in their lessons has made them realise that they have enriched their teaching, have made it more exciting and that IWBs have a positive impact on students’ motivation. However, as Thomas and Cutrim Scmid (2010) have argued, simply introducing technology in the language classroom does not assure an enhanced learning environment. The most important factors of successfully integrating and progressing can be identified in the role of the teacher and their knowledge of the technology. Although the teachers have made positive statements regarding IWBs, the following justifies Thomas and Cutrim Scmid’s argument. When asked what teachers disliked about IWBs they claimed:

Teacher 1: ‘I don’t like the fact that the students can’t touch and interact with the board’
Teacher 2: ‘I like everything about the IWB’
Teacher 3: ‘It requires more teaching time’
Teacher 4: ‘There is nothing I dislike about it’
Teacher 5: ‘The fact that children cannot use it as much as I do’

The fact that Teachers 1 and 5 feel that the IWB is not interactive enough and cannot be used as much by the children indicates that although they may be technology-aware of how to put an IWB into use, they lack the pedagogical knowledge of its potential. The element of the socio-constructivist approach is lost in such cases. The benefits of active learning strategies are neglected and students are deprived of the opportunity for more social interaction in their learning. The IWB is used as a simple whiteboard and the teacher applies teacher-centred approaches, which creates limitations. Teacher 3 mentions that the use of IWBs suggests more teaching time on his part. This is due to the fact that teachers use the coursebook with the IWB exclusively. IWBs have rich libraries which can support and store a great number of teaching materials. This results in less teaching time and effort from the teacher, however, if the lessons are coursebook-led there is no reason to use the IWB library, which could result in additional preparation time.

3.2. The Students’ Perspective- The Questionnaires

The students’ questionnaires served the purpose of collecting data regarding what the IWBs were used for in the classroom. This section will focus on the use of games and grammar/vocabulary instruction. One of these elements of teaching is considered interactive and (games) and the other has a long tradition in language teaching and supported in teacher-centred environments
(grammar/vocabulary teaching), i.e. applied with the Grammar Translation method. There will be a comparison of the two, followed by a sample of students’ preferences in order to draw final conclusions on the extent to which teachers have adopted socio-constructivist approaches with the use of IWBs and finally establish the impact of teachers’ efforts on students’ motivation/involvement of IWBs in the specific context. Therefore, YLs were asked how often they played games on the IWB in class. The following chart represents students’ responses on the use of games:

![Chart 1: How often do you play games on the IWB?](image)

In Chart 1, the students stated that 48% played games on the IWB once every two weeks, 30% played 2-3 times a week, 11% played every day and 11% never played games on the IWB. The percentages in general are low, considering the fact that games are an activity frequently used with YLs to support an interactive lesson and encourage language learners to work together and learn from each other, as well as the teacher. The IWB is ideal to increase the application of games in the language classroom and support a student-centred environment due to its vivid colors and sound system (Weimer, 2001; Smith, Hardman & Higgins, 2006). The combination of games and IWBs would be ideal as their features would stimulate language learning with children and encourage increased attention and motivation. However, the majority of students played games in the classroom once every two weeks, which is not frequent for the specific age group in a setting where there are specifications for it.

In comparison, Chart 2 indicates the exposure of grammar/vocabulary teaching with the use of IWBs:

![Chart 2: How often do you do grammar/vocabulary on the IWB?](image)
According to the students’ responses, the majority of teachers use the IWB to teach grammar and vocabulary (58%) every day, 32% of YLs stated that their teachers never use the IWB and 11% use it 2-3 times a week for grammar/vocabulary. If one compares these figures to the ones retrieved from Chart 1, it is evident that there is a greater emphasis on grammar/vocabulary and YLs are more exposed to traditional activities, even with the use of an IWB, which is considered a more contemporary and interactive tool.

Based on the findings, the socio-constructivist approach is not supported in this context. The majority of teachers transfer their teacher-fronted approaches to the IWB-use and the notion of collaboration and assisted learning are missed. The intention of including new technologies in the language classroom is to provide YLs with cognitive tools for L2 development. If the language lessons continue to be teacher-fronted, students will be deprived of valuable interactive and efficient language learning. The study has shown that the focus has not shifted from the teacher to the student, as is the case in a socio-constructivist classroom. The IWB is used in the classroom to replace the whiteboard and/or chalkboard; however, it has not changed the sense of a passive traditional setting of learning. Had the teachers used a socio-constructivist approach, they would cooperate with their students in order to create a stronger dynamic in the classroom and help students explore and expand their knowledge of the L2. The IWB could bring this dynamic to life if its interactive element was encouraged. According to the data, teachers preferred traditional activities with the students, even with the presence of the IWB, which eliminated collaboration among students that could have been mediated and structured by the teacher.

3.3. The Students’ Perspective–Evaluations

Digital boards offer a number of possibilities that learners find appealing. Children enjoy the multimedia aspect, more specifically, the visual aspect, the audio and the fact that they can touch the screen (Hall & Higgins, 2005). Nonetheless, the IWB alone will not guarantee to keep YLs motivated and enthusiastic about their L2 learning. The lack of pedagogical IWB knowledge and interactivity, mentioned previously, creates a desire and need for these missing elements among students. Table 3 represents the students’ evaluations of how the presence of the IWB affects their learning and how YLs feel about the way the digital tool is applied in their classes.

The YLs’ responses to the evaluation form offered immense insight on how they viewed various aspects of the IWB and how it was used in their classes from their perspective. By focusing on the most important outcomes, one can see that the children showed awareness of the fact that they were learning more with the help of the digital board, and that the majority found it easier to concentrate when the lesson was supported by an IWB. According to 70.2% of YLs, they preferred to have their language lessons with the presence of an IWB, even though 70% believe they are difficult to use, which is justified due to the lack of practice and student-centred approaches, as mentioned earlier. Learners do not become as familiar with the IWB as they should, and do not thoroughly experience all it has to offer. Furthermore, YLs also expressed a dislike when it came to going to the front of the class and working on the IWB. As seen in the previous section, teachers have held on to a teacher-fronted approach, even with the presence of an interactive tool. The board is still seen as a traditional tool used to display information to a number of students. In such settings, when students are asked to work on the board, it is for them to be examined. They are exposed to their teacher and peers while they complete a task. If students are not given the ‘interactive advantage’ of the IWB they will continue to see certain elements of it as intimidating. This argument can be supported by the fact that 42.1% of the YLs believe that their teachers teach just the same with or without an IWB. The interpretation of this is that the board may have changed form; however, the teaching approach has remained the same.
Table 3: Students’ Evaluation of IWBs in the Language Classroom

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Strongly Agree%</th>
<th>Agree%</th>
<th>Neutral%</th>
<th>Disagree%</th>
<th>Strongly Disagree%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I learn more when the teacher uses IWBs</td>
<td>42.5</td>
<td>36</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>I dislike going up to the front to use the IWB</td>
<td>17</td>
<td>8.5</td>
<td>2.1</td>
<td>27.6</td>
<td>40.6</td>
</tr>
<tr>
<td>It is easier to understand the work when my teacher uses the IWB</td>
<td>42.5</td>
<td>42.5</td>
<td>8.5</td>
<td>2.1</td>
<td>0</td>
</tr>
<tr>
<td>I think students behave better in lessons with IWBs</td>
<td>23.4</td>
<td>40.4</td>
<td>12.7</td>
<td>12.7</td>
<td>4.2</td>
</tr>
<tr>
<td>I think IWBs make the teacher’s drawings and diagrams easier to see</td>
<td>31.9</td>
<td>19.1</td>
<td>40.4</td>
<td>0</td>
<td>2.1</td>
</tr>
<tr>
<td>Teachers teach just the same with or without an IWB</td>
<td>8.5</td>
<td>12.7</td>
<td>8.5</td>
<td>21.1</td>
<td>42.1</td>
</tr>
<tr>
<td>I prefer lessons which are taught with an IWB</td>
<td>70.2</td>
<td>15</td>
<td>4.2</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>I would work harder if my teacher used the IWB more often</td>
<td>21.2</td>
<td>17</td>
<td>15</td>
<td>10.6</td>
<td>30</td>
</tr>
<tr>
<td>IWBs often break down and this wastes time</td>
<td>10.6</td>
<td>4.2</td>
<td>0</td>
<td>13</td>
<td>66</td>
</tr>
<tr>
<td>I think IWBs are difficult to use</td>
<td>4.2</td>
<td>0</td>
<td>6.3</td>
<td>13</td>
<td>70</td>
</tr>
<tr>
<td>We get to join in lessons more when my teacher used an IWB</td>
<td>40.4</td>
<td>28</td>
<td>8.5</td>
<td>4.2</td>
<td>4.2</td>
</tr>
<tr>
<td>I concentrate better in class when an IWB is used</td>
<td>34</td>
<td>36</td>
<td>15</td>
<td>6.3</td>
<td>2.1</td>
</tr>
</tbody>
</table>

3.4. Discussion

The present study has explored the effect of implementing IWBs in the YLs’ classroom, in a context where teachers are not exposed to any training on how to integrate and successfully apply the digital board in their classes. Although findings from the present small-scale study cannot be generalised to other situations, it sheds light on the complexity of applying the IWB in the language classroom when there has been minimum training, if any.

In the current context the teachers and students brought a history of experiences to the classroom, which relate to their understanding of learning and use of technology. When introduced with new technology practitioners are most likely to make sense of it in terms of their previous experiences of
older technologies. The present study shows that participant teachers used digital whiteboards as an extension of the non-digital whiteboard (Kent & Facer, 2004) and though IWBs are meant to give an interactive element to the lesson, and have the potential to go beyond a simple presentation tool (Cutrim Schmid, 2016), teachers continued to use a teacher-centred approach. The experiences of the participating teachers echo findings of other studies (BECTA, 2003) which have focused on the importance of in-service support and teacher training. Without this, it is unlikely that language teachers will become aware of or able to exploit the potential of integrating IWBs.

The data showed that some teachers used the IWBs more than others. The frequency and the duration of IWB use proved to be important indicators for the acceptance of the new technology. Expectedly, teachers who frequently used IWBs were more likely to have a higher level of IWB competency, and, therefore, more positive perceptions towards its use, as seen in Moss et al. (2007). These findings confirm the importance of teachers’ individual efforts to achieve higher-level IWB skills. Hall and Higgins (2005) argue that teachers need continuous training in order to improve and maintain their newly developed skills. Furthermore, the fact that teachers had no technical support worked to their disadvantage. Technical support is an essential component in any ICT infrastructure (Ronnkvist, 2000; OECD, 2001) and yet it appears to be in a state of underdevelopment at the present time in many contexts including the Greek setting (OfSTED, 2004), which makes the situation all the more challenging.

IWB issues identified by students in the current research could be considered short-term rather than long-term irreversible difficulties. The findings here suggest imbalance, and a sense of IWB-use that is still at its initial developmental stage. Teachers are reluctant to embrace the IWB, explore all its features, and allow their lesson to become more interactive because of it. Data gathered from students’ questionnaires, gave much needed insight into what ‘works’ for them in relation to IWBs and could critique their teachers’ use of the digital board. Similar research has shown that this important information students have been contributing to language teachers has been ignored since they are under pressure to fulfil other responsibilities (Demetriadis et al., 2003; Tearle & Dillon, 2003; Wood, 2001). Giving the opportunity to the students to voice their opinion is a step towards improving the situation in the current and similar contexts.

4. Conclusions

There are considerable advantages to using an IWB in the language classroom; high on the list are that it is engaging, motivating for students and encourages interaction (Hockly, 2013). In the current study, due to lack of professional training on its use, and reluctance of moving away from a teacher-centred approach familiar to the participating teachers, IWBs were not used to their full potential. The results of the study indicate that the presence of the digital board alone does not guarantee an improved pedagogical approach or successful language learning. The teachers’ main setback in the study was that they had difficulty managing and combining the use of technology and pedagogy, and create an environment where students could actively participate and interact in the classroom. The present research suggests that with appropriate teacher training, feedback and time for professional development, YL teachers will be more equipped to motivate their students in their commitment to learn and increase their confidence as L2 learners and users.

One of the major issues regarding Computer Assisted Language Learning (CALL) research, which has been highlighted in the literature, is a failure to consider the classroom context (Egbert et al., 2009). The findings discussed in this paper provide interesting insights into the impact of the use of multimedia materials in language teaching and learning processes, as perceived by the research participants. However, more large-scale studies need to be conducted so that the potential of IWB-use is enhanced and conceptualised.
References


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