Interactive Whiteboards

English teachers’ integration of the IWB in English Language Teaching

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Abstract

The interactive whiteboard is a fairly recent technical device, which has become an increasingly important teaching aid. The interactive whiteboard is supposed to have a positive impact on English Language Teaching, due to its interactivity and the unlimited opportunities it creates for language teaching. However, findings still show that the interactive whiteboard is used more as a traditional whiteboard to write and show information on rather than as an interactive teaching and learning device. This study seeks to investigate English language teachers’ integration of the IWB in ELT. A qualitative approach was used to collect data for this study. Four English Language Teachers at a lower secondary school in southern Sweden were interviewed. The result from this study shows similarities to previous research. The decisive factors for the participants’ incorporation of the IWB in ELT, such as attitude, knowledge and time, were comparable to previous studies. The result also implies that the participants saw the interactive whiteboard as a useful tool in English Language Teaching and as a regular part of their teaching. Nevertheless, there was a desire among the teachers to learn more about the interactive whiteboard and its possibilities and also to develop their skills in order to improve their teaching and the pupils’ language proficiency. Although the teachers in the study used the interactive whiteboard frequently and interactively, the result shows that the most frequent usage was to display information non-interactively.

Keywords: Interactive whiteboard, Information and communication technology, English Language Teaching, Qualitative method.
# Table of Contents

1. Introduction .................................................................................................................. 4  
   1.1 Aim and research question ....................................................................................... 5  

2. Theoretical Background ............................................................................................... 6  
   2.1 Information and Communication Technology in English Language Teaching ........... 6  
   2.2 Computer Assisted Language Learning .................................................................... 8  
   2.3 Introduction to the Interactive whiteboard ............................................................. 10  
   2.4 Interactive Whiteboards in education ....................................................................... 11  
   2.5 Interactive Whiteboards in English Language Teaching .......................................... 14  

3. Method and Material .................................................................................................... 17  
   3.1 Material .................................................................................................................. 18  
   3.2 Problems and limitations ....................................................................................... 18  

4. Results ............................................................................................................................ 20  
   4.1 The Participants’ Perception of their Technological Abilities and their Integration of ICT in ELT .................................................................................................................. 20  
   4.2 The Participants’ Perception of their Abilities of using the IWB and their Integration of it in ELT .................................................................................................................. 22  
   4.3 The Beneficial Aspects of using the IWB in ELT ....................................................... 24  
   4.4 Factors that affect the Participants’ integration of IWB in ELT ................................. 26  
   4.5 Summary ................................................................................................................ 30  

5. Discussion ....................................................................................................................... 31  
   5.1 Teachers’ attitudes towards using Interactive Whiteboards in English Language Teaching .................................................................................................................. 31  
   5.2 Time and training; two important factors .................................................................. 33  
   5.3 Benefits with the Interactive Whiteboard .................................................................. 34  

6. Conclusion ....................................................................................................................... 37  

7. References ...................................................................................................................... 39  

8. Appendix ....................................................................................................................... 43
1. Introduction

The Interactive Whiteboard first appeared in schools two decades ago with the belief and hope that the technology would become the most innovative and revolutionary tool in the educational workspace. It was supposed to replace the blackboard, which had had a substantial impact on teaching for the last 200 years (Betcher and Lee, 2010). The large touch-sensitive interactive screen is a fully interactive tool that unites many other digital technologies as a convenient means of delivering a range of Information and communication technological aids in the classroom. In English Language Teaching, the Interactive whiteboard has opened up for many possibilities in teaching, creating potentially unlimited opportunities for communicative and interactive classroom activities. The prime benefit with the interactive whiteboard is that it supports interactivity and communication, which is an important part of language learning. English has become a universal language and developed a necessity for people to have good English communication skills (Lundahl, 2012), which makes communication and interactivity an essential part in language learning. Another advantage with the interactive whiteboard is that it supports all modes of teacher interaction with learners. It can be used in whole-class-, small group- and personalized-teaching (Betcher and Lee ibid). Additionally, it supports many different learning-styles, such as: kinesthetic, visual, audio, active, and verbal-social (Glover et al., 2005). However, despite these many positive functions, possibilities and benefits, there is still a lack of evidence as to whether the interactive whiteboard has any effect on the pupils’ achievements or not (Hockly, 2013).

For the interactive whiteboard to create any improvement in the pupils’ language proficiencies it has to be used regularly and interactively, it has to become a natural part of teaching. Betcher and Lee (op cit) contend that teachers’ attitudes towards the interactive whiteboard have a great impact on whether the interactive whiteboard will have a successful effect on teaching and learning or not (Betcher, Lee, ibid). They claim that, to improve teaching and learning, putting an interactive whiteboard in the classroom is not enough. In order to be of greatest benefit to the learner, the interactive whiteboard has to become a part of the everyday teaching and learning process and teachers need to gain confidence in using it effectively. Training and a change of pedagogy from transmission to interaction are crucial.
for a successful use of the technology. Consequently, the pressure seems to be on teachers to incorporate the interactive whiteboard into their pedagogical and technological frameworks. Moreover, despite the interactive whiteboard’s many interactive functions and benefits for teaching, teachers do not use it to its full capacity; instead it has become a substitute for the traditional whiteboard.

1.1 Aim and research question

Through observations and from conversations with teachers it seems that the interactive whiteboard is most frequently used to write on or to show information to the pupils. Even though teachers know that there are many functions available on the board and it could supply them with many options for a varied and interesting lesson, they do not utilise the functionalities and possibilities.

Therefore, the aim of this study is to investigate English language teachers’ integration of the IWB in ELT. The research questions for this essay will be:

• What purpose does the Interactive whiteboard have in the EFL classroom?

• Which factors determine English language teachers’ usage of the interactive whiteboard in ELT?
2. Theoretical Background

In this section there are five sub-headings. Initially, in 2.1 the use of Information and Communication Technology (henceforth ICT) in English Language Teaching (henceforth ELT) will be discussed. In 2.2 there will be an introduction to Computer Assisted Language Learning (henceforth CALL) and 2.3 will give a definition of the Interactive Whiteboard (henceforth IWB). Furthermore, 2.4 will focus on the IWB in education in general, and 2.5 will analyse the use of IWB in ELT.

2.1 Information and Communication Technology in English Language Teaching

The development of technology in society has had a direct impact on ELT in school. The increasing availability of the Internet and the development of the Web have created great opportunities for many teachers, including English language specialists. The growth of technology and global access to Internet have made it possible for teachers to teach ICT-based lessons (Dudeney, Hockly, 2012), which has been highly prioritized in education in most European countries during the last decade (Balanskat, Blamire, and Kefala, 2006).

The literature is most often positive about the use of ICT, but findings are mainly insufficient or incomplete regarding the effect it has on pupils’ attainments (Condie et al, 2007). However, studies show that ICT has had a positive effect on pupils’ enjoyment and motivation to learn and it has increased pupils’ independence and motivation with regards to working autonomously. Additionally, the use of ICT in the education has improved pupils’ behaviours as well as their self-esteem (Becta, 2003). Furthermore, according to United Kingdom’s National Centre for Languages, literature indicates that ICT creates many advantages in the modern foreign language classroom. The access to a vast range of resources and various possibilities such as writing activities encourage pupils to develop new language skills (CILT, 2005). As a result of technological advances, ELT has gone through a great change the past 25 years and moved towards a wider range of exercises more in tune with the needs of the learner. ELT has moved from limited gap-filling and word processing exercises towards an infinite range of learning exercises (Dudeney and Hockly, op cit). Furthermore, Facer and Owen (2005) also claim that ICT creates real-life situations, which encourage the pupils to learn. Opportunities to converse with native speakers in other countries and
practising language in context, helps to motivate pupils and facilitate their acquisition and development of all the four language skills – reading, writing, speaking and listening. Taylor et al. (2005) also contend that ICT encourages pupils to produce longer, more structured and accurate texts in a foreign language. Moreover, regarding language teaching, Levy (2009) claims that pupils’ grammar, vocabulary and pronunciation skills are more likely to be improved through the use of technology (Levy, ibid). Reasons for this could, according to Nomass (2013), be the availability to electronic dictionaries, which have functions that are not provided in book dictionaries. Electronic dictionaries place the chosen word in a context by giving examples of sentences with the word in it. Electronic dictionaries also have the facility to replay the words to the pupils in order for him or her to learn the pronunciation. Also, modern computer-programs can generate voice signals and decode human sound. Practicing with these kind of programs can improve the pupils’ speaking capability and strengthen their vocabulary and pronunciation abilities as well (Nomass, ibid). Additionally, another study by Sime and Priestley (2005) indicates that ICT has made pupils more deeply engaged in learning activities over a longer period of times and took greater pride in their accomplishments (Sime, Priestley, ibid). Nevertheless, the evidence comes from small scale-studies and the results are not necessarily generalizable to wider contexts (Condie, et al, ibid).

In addition, a study by the Office for Standards in Education (2005) suggests that ICT is beneficial for pupils with special and additional educational needs. ICT supports their learning in several ways. The use of ICT appeared to show an improvement in the observed pupils’ attitudes, concentration span and motivations and it also showed that ICT helped them to overcome learning barriers and increased their self-esteem. Likewise, ICT encourages pupils with special needs to engage in group-tasks and collaborate with pupils in mainstream education (Ofsted, 2005). Nevertheless, Cox et al. (2003) claim that the teacher is the major resource if the technology is to have any effect on the pupils’ learning. The teacher’s methods and pedagogical approaches when using ICT have an impact on learning outcomes. The ranges of technologies which teachers use, the frequency of the use and how well prepared the teachers are for the lessons are factors that are significant to the improvement of pupils’ attainments (Cox et al, ibid). When ICT is used effectively there is evidence of positive influence on attainment (Cox et al, ibid). Not only has ICT generated a more varied expansion of learning possibilities for the pupils, but it has also made it possible for teachers and learners to exchange knowledge and ideas with other teachers and learners around the world. The Internet has made it conceivable for all teachers to attend larger global development
courses and conversations, which many teachers were prevented from before, due to cost and time. Since the establishment and development of Internet, social groups, websites and forums have been created to help teachers and learners of English to network, teachers can take part in discussions, exchange knowledge and experiences and ask and answer each other questions. Today there is a continually growing collection of these groups covering all parts of teaching. Moreover, currently there are also groups conceived as communities of practice on the Internet that help teachers introduce and integrate technology into their teaching in a successful way (Dudeney and Hockly, 2012:536). Dudeney and Hockly (ibid:538) also bring up the technology shift from web 1.0 to Web 2.0 to be revolutionary for language teaching. The Web has been transformed from being “a static, expert-produced resource” to “a more creative, consumer-driven space” (Dudeney and Hockly, ibid: 538). This change not only allowed IT professionals to build the essential infrastructure of the Web, but has also allowed non-computer specialists like teachers, with no programming or graphic design skills to be creative and produce resources with other methods. This change has largely been brought about by the rise of personal blogs and collaborative wiki spaces, but also the rise of more creative exercises in the classroom such as podcasts, online multimedia posters, and the possibility to create animated cartoons. Alongside the establishment of Web 2.0, other manageable tools for people with limited technological skills, such as the IWB, were introduced in ELT (Dudeney and Hockly, ibid: 538).

2.2 Computer Assisted Language Learning

Computers have become a major part in our everyday lives and there is a present need to integrate them more fully into ELT (Hubbard, 2009). The term used for the field of teaching language with technology is called Computer Assisted Language Learning (Healy, 1999). Glenn Stockwell (2014) defines CALL as the process where technology facilitates the language learning, whilst Beatty (2003) defines CALL as “any process in which a learner uses a computer and, as a result, improves his or her language” (2003: 7). The definitions open up for interpretations and critical assessment. Hubbard (op cit) claims that Beatty’s definition of CALL does not solely include the canonical desktop and laptop devices that are labelled computers. According to Levy and Hubbard (2005) this definition suggests that CALL also involves any other technological devices with a computer embedded in them, such as: mp3 players, mobile phones, tablets, electronic whiteboards and DVD-players etcetera and also the networks connecting them (Levy and Hubbard, 2005). This seems to agree with Stockwell’s (op cit) definition where the word technology is used instead of computers.
Furthermore, Hubbard (op cit) also raises another question – *What is meant by improve in Beatty’s definition?* He argues that this question can be answered with respect from a few different perspectives and claims that the term ‘improve’ that Beatty (op cit) uses is not referred to as ‘direct learning improvement’, it is rather referred to as ‘the improvement of learning conditions’ (Hubbard, 2009:2). This can be compared to Stockwell’s (op cit) definition, where he uses the term *facilitates* instead of *improve* when referring to the effect CALL has on learning. Some of the learning improvements CALL favours are, according to Hubbard (op cit:2),

- **Learning effectiveness** – the learners can preserve language knowledge for a longer time and they make deeper associations and learn more of what they need.
- **Learning efficiency** – learners pick up language skills quicker and with less effort.
- **Access** – the learners have entrance to a wider range of material that otherwise would be impossible to get.
- **Convenience** – the learners can study with equal effectiveness across a wider range of time and places
- **Motivation** – the learners engage more in activities and enjoy the learning process more.
- **Institutional efficiency** – less teacher time and expensive material are required from the learners.

Stockwell (op cit) continues to question how technology can be adopted in language teaching to obtain this, since technological devices are rapidly developing and continually changing in access, size and power (Stockwell, op cit). This constant development and change requires new knowledge for teachers and learners and creates needs for renewed skills for the teachers to stay apace (Hubbard, 2009).

CALL has gone through three distinct phases during the years, *behaviouristic CALL, communicative CALL* and *integrative CALL*. The first CALL phase is referred to as ‘behaviouristic CALL’, which was conceived in the 1950s and implemented in the 1960s and ’70s. This period was based on the behaviouristic theories of learning. It focused on repetitive language drills and automatic feedback. The interaction was mainly between the learners and content. The computer delivered instructions to the pupil who followed instructions and received instant feedback (Warschauer, 1996). The ‘behaviouristic CALL’ might sound unsophisticated and Bax (2003:534) call this period ‘restricted’, due to its hardware
The exercises during this era were decontextualized exercises, simple games, text reconstruction and word processors. However, according to Warschauer (1996), there were positive aspects with drill-based CALL. It was beneficial for pupils’ learning process to repeat exercises and practice the same material several times and the computer was ideal for carrying out repeated drills, since the machine does not get bored with presenting the same material to the pupils repeated times. Furthermore, the computer can provide the pupils with immediate non-judgmental feedback and individualized material for the pupils and it allows them to proceed in their own pace (Warschauer, ibid). Furthermore, due to the technological development a new era arose, which Warschauer (ibid) refers to as ‘communicative CALL’ while Bax (ibid) describes it as ‘open’ (Bax, op cit: 534). This phase opened up for more interaction. Proponents of the first phase believed that the drill and practice program did not allow enough authentic communication (Warschauer, op cit). The technology guided the pupils to language discovery and focused more on language production instead of language recognition. The exercises allowed for critical thinking and involved situated language practice (Dudeney and Hockley, 2012). Moreover, the third phase is referred to as the ‘integrative CALL’ and is based on two technological developments – multimedia computers and Internet. Multimedia computers allow a variety of media, such as text, graphic, sound and animation to be accessed on one single machine, this generated a more authentic learning environment since listening could now be combined with seeing. The variety of multimedia learning opportunities also made it more natural and easier to integrate and combine all the four language skills in one single activity (Warschauer, op cit). Bax (op cit) argues that language teaching has not yet fully achieved this, but it is a goal that should be aimed for (Bax, ibid: 534).

Additionally, since the computer has become a major part of our everyday lives the question is no longer whether technology should be integrated into teaching or not, the question is how to integrate it in a way that improves the pupils’ learning. There are several promising ideas of how to use CALL in teaching, but there are no complete answers on how to use it most effectively to support language learning (Hubbard, op cit).

2.3 Introduction to the Interactive whiteboard
The IWB is one of the devices included in the CALL field. It is a large touch-sensitive interactive screen, which is connected to a digital projector and a computer, which makes it possible to display the computer’s desktop onto the IWB’s screen (Becta, op cit). The IWB was primarily developed for office use, but was later introduced as a teaching tool in the
classroom and it has now become a common device in the education (Greiffenhagen, 2002). The IWB is the first electronic tool designed primarily for teaching, which distinguishes it from other technological tools used in the classrooms, such as computers and tablets, which are mainly intended for learning purposes (Betcher and Lee, op cit).

There are many pedagogical affordances with the IWB. The teacher can overwrite, underline, highlight or circle text written on the IWB. The written texts can also be saved and used again and they are easy to read, because of the IWB’s capacity to magnify and zoom in and out. Written text on the board can also be changed into typed text (Al-Saleem, 2012:131).

Furthermore, according to Betcher and Lee (op cit) the IWB makes it possible for teachers to bring the wide range of resources from the web into the classroom in a convenient way. It makes it possible to show anything displayed on the computer to the whole class at the same time. Betcher and Lee (ibid) also argue that the IWB favours all sort of teaching such as whole-class-, small group- and personalized-teaching (Betcher, Lee, ibid). Glover et al., (op cit) claim that the IWB also supports different learning-styles such as kinesthetic, visual, audio, active, and verbal-social (Glover et al., ibid). Ellis (1997) claims that there is not one distinct way for a person to learn and develop a second language. Different learners in various situations acquire a language in different ways (Ellis, ibid: 4). Therefore, a device, which supports all learning-styles and connects all language skills, is assumed to be beneficial for language learning. However, there have not been any research studies confirming if the IWB has improved students’ achievements or enriched the present methods used in language teaching (Dudeney and Hockly, op cit). Furthermore, Betcher and Lee (op cit) argue that the revolution is just in its first phase and success will come in pace with the teacher’s patience and knowledge in mastering the tool (Betcher and Lee, ibid).

2.4 Interactive Whiteboards in education
The IWB was first introduced into schools in early 2000. It has become necessary for schools to keep up with the global development of technology and the IWB was supposed to be the new innovative technology that would create a better whole-class learning (Twiner, 2010). The diverse possibilities with the IWB were also supposed to provide opportunities for a more varied content in the education, which was suggested to create more stimulating learning and teaching experiences (Levy, 2002). Also, because of the IWB’s potential to show anything displayed on the computer to the whole class at the same time, the IWB allowed teachers to teach ICT-based lessons to the whole class at the same time (Al-Saleem, ibid:131).
Consequently, this created a concern among researchers and educators that the IWB would reinforce a transmission model of education and enhance a teacher-centred teaching-style where the pupils are passive receivers (Dudeney, 2006). However, Betcher and Lee (op cit) claim that the researchers adopting this position have based their evidence on teachers who are not using the IWB correctly.

Almost two decades from the IWB’s first appearance in the classroom and despite the many benefits with the IWB, it is still uncertain whether the IWB is a justified investment or not in terms of improving language proficiency levels. There is a lack in the evidence whether the IWB has had any effect on the pupils’ achievements. Determinant factors like how teachers use the IWB, the classroom context, the material used, the attitude and the confidence and training the teacher has, as well as the pupils’ motivation, attitudes and expectations may be some of the factors behind the lack of evidence (Hockly, op cit). Furthermore, teachers’ pedagogical methods in using the IWB also have an impact on the outcomes. Studies have highlighted the significance of continual professional development and training for teachers, mixed with exploration of effective pedagogical practice as significant factors for the effective use of the IWB (Miller and Glover, 2010). To put an IWB in a classroom is not enough to improve the teaching and learning experience. As with any other teaching device, the teacher has to be creative with the IWB. The tool does not make a bad teacher good, but it can make a good teacher better, if it is used correctly (Betcher, Lee, op cit). In an article written by Bax (2006), the IWB and its advantages and disadvantages are discussed (Bax, ibid). When analysing the fact that the IWB has had little or no impact at all on exam results (Nightingale, 2006) Bax (2006) asks the question: have pens had a noticeably impact on exam results? – (Bax, ibid).

Furthermore, he states that whenever a new technology appears in education, some people seem to believe or suggest that the tool will ‘magically’ do the work on its own. However, this is not always the case, as a new teaching aid requires a great deal of commitment from the teacher (Bax, ibid). For the IWB to be effective in the classroom it has to, become a part of the everyday teaching according to Betcher and Lee (op cit). The tool has to be integrated into all lessons by all teachers, in order for teachers and pupils to gain confidence in using it. Only when teachers use the IWB as naturally as pen and paper it will be a successful tool (Betcher and Lee, ibid). Bax (2003) uses the word ‘normalisation’ to define the state where technology is fully integrated in the language teaching and has become as natural as textbooks
and pens (Bax, ibid). Consequently, the teachers’ role is of importance; their attitudes towards the IWB have a major impact on whether the IWB will have a beneficial effect on teaching and learning or not (Betcher, Lee, op cit).

Although there are many opportunities with an IWB, some teachers see the IWB as nothing more than an expensive screen (Betcher, Lee, ibid). According to Betcher and Lee (ibid), teachers can be divided into three categories concerning the incorporation of new technology into the classroom. The first group is made up of teachers who are very enthusiastic over any new technology. They have a positive attitude towards the tool and see all the benefits of its use. The enthusiasm makes them eager to learn and they are capable of acquiring a basic set of skills fairly quickly, which makes it easier for them to learn the more advanced and involved functions later. They see it as an additional stimulating means to teach their pupils. The second group concludes the teachers who are interested and have a positive attitude towards the new technology. However, they are a bit circumspect with regards to the technology. They can see possibilities with the new technology and how it would be advantageous to integrate the tool into the classroom, but they do not trust themselves fully to manage the new technology in a way that leads to an increase in the pupils’ motivation and learning. The third group contains teachers who only see the obstructions instead of the possibilities. They see the new technology as a waste of money that could be used for the purchase of multiple textbooks instead and the time it will take to learn the new tool will interfere with valuable teaching time (Betcher and Lee, ibid). Teachers’ varied views on new technology can impede the acceptance of the new tools in the classroom. The optimal situation would be if all teachers saw the potential benefits of the new technological aids and directly integrated them in their everyday teaching, as with pencil and paper. Unfortunately, this is not the case (Betcher and Lee, ibid).

With this in mind, it is therefore of great importance that the head teacher and school board provide some sort of training for teachers to get everybody on board. Additionally, it is up to the head teacher and school board to stress the value in using the new technology and to convey the expectations they have on the teachers to make the most of the new technology (Betcher, Lee, ibid). Nevertheless, it is also crucial for teachers to invest time in developing skills and expertise in using the IWB’s functions to gain confidence. They should explore the IWB’s full range of functionalities and co-operate and share resources and knowledge with co-workers (BECTA, ibid). A study by Reedy (2008) with data collected from a secondary
comprehensive school in London, where IWBs had been placed in all classrooms, clearly shows evidence of the significance of practical training. The teachers had not been provided with much training, nor did they receive any support from the school board, which affected their usage of the IWBs negatively (Reedy, ibid).

The IWB’s predominant role in most of the participants’ classrooms in this study was to present information through PowerPoint presentations to the pupils. The pupils were passively receiving information that the teachers conveyed through the IWBs (Reedy, ibid). The participants’ lack of knowledge prevented them from using the IWB as interactively as they wanted and to its full capacity. It was therefore most frequently used non-interactively (Reedy, ibid).

2.5 Interactive Whiteboards in English Language Teaching
In the early 2000s ELT practitioners increasingly adopted the IWB and it was soon seen as an essential tool in the ELT classroom. However, this was primarily the result of pressure from the IWB manufacturers and the ELT publishers, rather than from teachers or pupils. Nevertheless, there has been an on-going debate whether the IWB is good or bad in the ELT classroom (Hockly, op cit). According to Hockly (ibid) the significant advantages with an IWB are that it motivates and engages pupils more in the learning process and classroom activities. Furthermore, according to Koenraad (2008:7) the IWB can also, compared to other ICT devices, create more opportunities for interactions and discussions in the classroom (Koenraad, 2008:7), which are vital parts in language learning (Swain, 1995), making the IWB the ultimate tool in ELT. Furthermore, the IWB unites all other technologies in one and it is a fully interactive tool that can bring together, text, images, audio, video and unlimited collections of resources from the Webb (Betcher and Lee, op cit). This interactivity has a positive effect on the pupils’ involvement and increases their motivation to learn English, which is, according to BECTA (op cit), claimed to be the primary benefit with the IWB. Additionally, Pennington (1996) claims that this benefit distinguishes the IWB from the computer in a positive way. The computer has been criticised for promoting segregation from others and supporting anti-social forms of behaviour, while the IWB brings people together and encourages communication. The interactivity extends the pupils’ communication skills, involving speaking and listening, which are two of the four language skills (Pennington, ibid). Harmer (2008:53-54) emphasises the importance of communication in language learning. He discusses the ‘focus on form’ instead of ‘focus on forms’ as a more effective way of learning.
a language. This suggests that the pupils learn better if they engage in communicative language exercises that are meaning-based rather than focusing on every form one by one. When there is a focus on form the learning will occur more spontaneously (Harmer, ibid). With this said the interactivity and communication opportunities the IWB generates should be beneficial and improve pupils’ language learning.

Moreover, Glover et al. (op cit) also state that, to retain the pupils’ motivation and enthusiasm, interaction is an important factor that needs to be a part of the course of study. The interaction has to occur between teachers and pupils, pupils and pupils and teachers and teachers (Glover et al, ibid). However, IWBs are not always used interactively; teachers sometimes have a tendency to use the IWB as a substitute for the traditional whiteboard. These teachers do not realise that a change in their methods and pedagogy is required to develop interactivity out of the IWB (Armstrong et al, 2005). Moreover, research findings show that foreign language teachers around the world are still in the initial stage of understanding and integrating the IWB technology into their classroom practice, to support the language learning processes (Orr, 2008). Studies such as Cutrim Schmid (2008) show that the simplified access to multimedia resources has created a ‘show- and-tell’ teaching style, which results in lessons revolving around the IWB instead of the pupils (Cutrim Schmid, ibid). It is suggested that the reason for this is the IWB’s relatively new role in the ELT classroom. Also, a second factor might be that up until recently there has been a lack of high quality, subject-specific training on how to use this technological device in the language teaching (Cutrim Schmid, 2011). Moreover, the absence of sufficient training is something that the IWB critic Gavin Dudeney brings up as one of the reasons to why he does not believe that the IWB will succeed in ELT. He also claims that the lack of available ELT content is another factor as to why the IWB will not succeed in the ELT classroom– he argues that the relatively small amount of purpose-made available material is of poor quality (Dudeney, 2006). Furthermore, other people seemed to agree with Dudeney’s second and third point; they state that the major challenge for teachers to use the IWB successfully is due to the lack of suitable material and supported training (Dudeney, 2006). Consequently, this led to the establishment of the European Union-founded project – Interactive Technologies in Language Teaching (henceforth iTILT). The iTILT developers claimed that training and support was needed for language teachers to integrate the IWB in the communicative language teaching. The iTILT founders contend that:
In order to integrate technology successfully into their daily practice, teachers need adequate training and support in how to use the tool communicatively, to be aware of strategies and procedures for designing effective IWB materials, and to have the opportunity to reflect on their own practice. iTILT provides teachers and teacher educators with a platform to do this through its project website which includes training materials and teaching practice.

iTILT[www]

The iTILT project started 2011 and is a resource website for language teachers, focusing on the use of IWB in the communicative language classroom. The website has over 200 examples of how the IWB can be used in the language classroom, including videos of class activities and comments from teachers to help language teachers to receive confidence in using the IWB. The material is free of charge and available for everyone (iTILT, 2011). This website is an excellent source of training material for language teachers, providing both inspiration and concrete suggestion for the incorporation of IWBs in language teaching. However, it is up to the teacher to take on board the examples of good practice shown in the videos. The IWB is not the primary resource of successful teaching; the teacher is (Miller et al, 2004).
3. Method and Material

For this study, qualitative interviews were used to collect data. The aim with the study was to find out what affect English language teachers’ way of using the IWB in ELT. Background information and the teachers’ attitudes were therefore of importance for the study, which made a qualitative method most appropriate. According to Bryman (2008), qualitative interviews result in more depth in the material compared to if the interviewer uses questionnaires or other quantitative methods. Furthermore, the interviewer can receive more trustworthy responses if using interviews, since the candidates do not have to choose between specific alternatives. The interview questions allow the interviewee to answer and formulate the answer freely and spontaneously. The interviewer can also reformulate the question to the interviewee if he or she does not understand the question the first time (Bryman, ibid). Moreover, Bryman (ibid) also suggests that in a qualitative method not only the answer is of interest, but how the interviewee answers the question can also be of significance to the study (Bryman, ibid).

For this study, a semi-structured interview-guide was used. According to Bryman (ibid) a semi-structured interview guide is a schedule of specific themes, which the interviewer will proceed from by asking additional or follow-up questions depending on the interviewee’s answer. Bryman (ibid) argues that a semi-structured interview-guide gives the interviewer and the interviewee a greater freedom and flexibility in the questions and answers.

Furthermore, the interviews were all recorded on an iPhone, which was convenient since it is small and easy to bring to the interviews. After the interview the iPhone could be connected to the computer and the recorded interviews could be replayed as many times as needed. The recording on the iPhone was clear and it was easy to rewind and forward. Bryman (ibid) claims that it is of great value to record a qualitative study, since the recorder catches all the details in the interviewee’s answers. When only taking notes it is easy to miss out on valuable expressions and word choices that the candidate might use, which could be of interest for the study (Bryman, ibid). Moreover, notes were also taken during the interviews, because it is always good to have a back up in case the recorder should malfunction. Furthermore, the interviews were completed in a quiet room without distractions or interrupting noises. Context is, according to Bryman (ibid), another important factor when using qualitative interviews as
a method. It is significant that the interviewee feels comfortable during the interview and does not have to worry about possible disruptions or that someone else than the interviewer can hear their answers (Bryman, ibid). In total, four English teachers participated in this study and the interviews lasted between 23-33 minutes. The intention was to have longer interviews – between 45-60 minutes – but due to the participants’ stressful schedules and limited time for the interviews they had to be shortened.

3.1 Material

The participants in this study were all English language teachers at a lower secondary school in southern Sweden, who teaches English as a foreign language. The assortment of participants was due to the aim of the study – the sample of teachers was chosen to reflect English language teachers and their ways of using IWBs in ELT. Bryman (ibid) calls this selection a target-based method, which means that the researcher selects participants who are of relevance to the aim of the study (Bryman, ibid). However, a conscious decision was made to unsystematically select the individual English teachers for the study. Since, email was sent to all the English teachers at the chosen school and the teachers who answered that they would like to participated was selected. This disorganized selection resulted in a similarity among the participants. The contributors were all female teachers and in their late 30s.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Age</th>
<th>Numbers of years in profession</th>
<th>Second subject</th>
<th>Periods of time the participants have been using the IWB in ELT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>39</td>
<td>15</td>
<td>Swedish</td>
<td>4 years</td>
</tr>
<tr>
<td>2</td>
<td>39</td>
<td>14</td>
<td>Physical education</td>
<td>8 years</td>
</tr>
<tr>
<td>3</td>
<td>36</td>
<td>10</td>
<td>Swedish, French</td>
<td>6-7 years</td>
</tr>
<tr>
<td>4</td>
<td>39</td>
<td>13,5</td>
<td>Swedish, German</td>
<td>6 months</td>
</tr>
</tbody>
</table>

3.2 Problems and limitations

A problem that occurred before the interviews was the difficulty to find English teachers with the time to participate in the interviews. First of all, in the initial writing state of this project all schools were on Christmas break, which made it hard to get in contact with relevant participants for the study. Moreover, after the break, several of the teachers at the school that was contacted, were busy with parental consultation meetings, which made it difficult for
them to find space in their schedule for interviews. Additionally, when the English teachers who could and wanted to participate in the interviews had answered, another problem appeared. The teachers were unable to commit themselves to the intended 45-60 minutes long interviews; in practice, they were all limited to 20-30 minutes. This created a source for concern, since Bryman (ibid) argues that interviews that are too short are unusable for research, affecting the credibility of the result (Bryman, ibid). Another factor that is assumed to influence the credibility of the study is the fact that all participants in this study happened to be female and in their late 30s, which means that the result only concludes answers and evidence from one target group. Finally, an assumption is that the majority of language teachers at lower secondary schools are female. However, on the basis of external validity, due to the vague sample of participants it is hard to be representative in terms of matching the sample to the population and make any generalizations.
4. Results

In this section the results from the study will be introduced. Under each interview question some quotations will be presented and there will be a short summary of the interview responses provided in Swedish and also translated into English. The results are divided up into four subcategories: The Participants’ Perception of their Technological Abilities and their Integration of ICT in ELT, The Participants’ Perception of their Abilities of using the IWB and their Integration of it in ELT, The Beneficial Aspects of using the IWB in ELT and lastly, Factors that affect the Participants’ integration of IWB in ELT.

4.1 The Participants’ Perception of their Technological Abilities and their Integration of ICT in ELT

To arrive at an idea of what the participants’ attitudes were and what level of knowledge they had regarding technology, the participants were initially asked some general questions about their use of ICT in ELT.

Interview Question 1: What is your attitude towards the use of ICT in ELT?

The attitudes towards the use of ICT in ELT were very positive among all participants. ICT tools were seen as good motivational aids, which made the learning more stimulating and exciting for the pupils. ICT was seen as a vital component in the teaching, because of technology’s major part in society today. One answer also suggests that ICT facilitated the assessment and feedback to the pupils. The convenience to record dialogues and group discussions and the possibility for the teacher and pupils to listen to the recordings repeatedly seemed to have an effect on the pupils’ improvement and it simplified a more equal assessment.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>“Jag ser positivt på det, det är en tillgång och hjälpmedel. Framför allt när det handlar om att motivera”.</td>
<td>“I have a positive attitude towards it, it is a resource and aid. Primarily when it comes to motivating the pupils”.</td>
</tr>
<tr>
<td>T4</td>
<td>“Jag tycker att det bidrar att det kan hjälpa till väldigt mycket för en rättvis bedömning och för att utveckla elevernas kunskaper och ge dem feedback på ett bättre sätt”.</td>
<td>“I think it contributes and can facilitate a fair assessment and develop the pupils’ proficiencies and give them feedback in a better way”.</td>
</tr>
</tbody>
</table>
Although the participants had positive attitudes towards using ICT in ELT, one participant implied that there were some negative aspects with it.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
</table>
| T2      | “Samtidigt så stöter det ofta på problem, där dem ska använda sina datorer, just med det tekniska där man inte kommer ut på nätet man har inte datorn laddad, man har inte den med sig”. | “At the same time it runs into problems when they use their computers. Technical things such as when they cannot access the internet or they haven’t charged their computers or they don’t bring them to school”.

Moreover, the same participant also emphasized the importance of using traditional, non-digital educational materials. A combination of teaching with ICT and other teaching aids such as printed course books and learner dictionaries etcetera was preferred to create a variation in the ELT classroom and to meet the needs of all people.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
</table>
| T2      | “Jag tycker inte att man ska ta bort skrivandet för hand och inte läromedel i bokform heller. Det är bra om man kan jobba med en mix, det varierar undervisningen om man både kan använda böcker och teknologin”. | “I believe that we shouldn’t eliminate the manually writing and teaching aids, such as books. A mix is good, it varies the teaching if you can use both books and technology”.

Over all, the attitude towards using ICT in ELT was positive. The participants seemed to see the benefits with it rather than the disadvantages, even though, some negative aspects were mentioned in the answers.

**Interview Question 2: Do you use ICT a lot in ELT?**

Although the participant shared the same attitude towards the use of ICT the answers showed that the application of ICT in ELT varied among the participants.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>Jag använder det inte jätte mycket.</td>
<td>“I don’t use it a lot”.</td>
</tr>
</tbody>
</table>
| T4      | Jag utvecklar det hela tiden, hittar nya hjälpmedel och jobbar aktivt med det | “I develop it all the time, I find new tools and work actively with it”.

Despite this, the desire to learn more was equal among the participants.

**Interview Question 3: How do you rate your knowledge of using technological aids in ELT?**

The answers to this question were pretty similar among the participants. They all seemed to
be on the same level regarding the knowledge of using ICT in ELT, which was intermediate.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2</td>
<td>“Jag tycker nog dem ligger på en grundläggande nivå bara fortfarande. Tyvärr”.</td>
<td>“I believe that they are on a basic level, unfortunately”.</td>
</tr>
<tr>
<td>T3</td>
<td>“Jag har en del kunskaper, men jag skulle vilja utveckla dem mer. De är inte tillräckliga, men hyfsade just nu”.</td>
<td>“I have some skills, but I would like to develop them. They are not sufficient, but reasonable right now”.</td>
</tr>
</tbody>
</table>

Although the participants saw themselves as possessing a reasonable level of ICT skills and could apply their abilities in the teaching, they were not satisfied. Some answers indicated that there was a desire to learn more about technological aids in general and to develop the technological skills they possessed in order to improve their use of technology in the EFL classroom.

4.2 The Participants’ Perception of their Abilities of using the IWB and their Integration of it in ELT

In this section the responses regarding the participants’ integration of the IWB in ELT will be presented

*Interview Question 4: For how long have you used an IWB in ELT?*

Three of the teachers had used the IWB for quite some time. Moreover, one of the teachers was a novice at using an IWB, since she was newly employed at this school; her previous school had not invested in IWB technology.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Period of time the participants have been using an IWB in ELT</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>4 years</td>
</tr>
<tr>
<td>T2</td>
<td>8 years</td>
</tr>
<tr>
<td>T3</td>
<td>6-7 years</td>
</tr>
<tr>
<td>T4</td>
<td>6 months</td>
</tr>
</tbody>
</table>

There was a large spread in the responses regarding the period of time the participants had been using an IWB in ELT. Despite this, the participants’ attitudes towards the IWB were comparable.
**Interview Question 5: How often do you use the IWB in ELT?**

The responses show that all four participants used the IWB everyday in ELT.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3</td>
<td>“Jag använder den på nått sätt varje dag, jag har den alltid till min planering”.</td>
<td>“I use it in some way everyday, I always use it for my planning”.</td>
</tr>
<tr>
<td>T4</td>
<td>“Varje lektion, jag har alltid start block så eleverna ska se vad vi ska göra varje lektion”.</td>
<td>“Every lesson, I always have a start block to show the pupils the lesson plan”.</td>
</tr>
</tbody>
</table>

However, the IWB was, for some reason, more frequently used to show information (the lesson plan) on then used interactively.

**Interview Question 6: How confident are you in using the IWB?**

The participants stated that they were pretty confident and comfortable in using the IWB. However, their current state of confidence was the knowledge of mastering the technology – they knew how to manage the IWB such as which buttons to push etcetera and how to display resources from the web or computer on it.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T4</td>
<td>Känner mig ganska bekväm, men skulle vilja kunna fler funktioner.</td>
<td>I feel pretty confident with it, but I would like to know more functions</td>
</tr>
<tr>
<td>T1</td>
<td>“Jag vet att det finns piffiga övningar och så som man skulle kunna använda sig av mer”</td>
<td>“I know that there are snappy exercises and such that I could use more”</td>
</tr>
</tbody>
</table>

Despite the participants’ confidence in using the IWB and their awareness of the different functions on the IWB, they did not use the IWB interactively as regularly as they would like. The responses show that the participants would like to expand their knowledge and confidence in how to use the IWB in various ways with amusing and engaging interactive functions and exercises. Nevertheless, the participants’ answers below demonstrate that the participants did use the IWB for more interactive exercises as well.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2</td>
<td>“Jag försöker få in övningar och sådant på den det finns ju olika grejer till språk och man kan skapa egna övningar så man kan till exempel göra grammatik på ett roligt sätt”.</td>
<td>“I try to do exercises and such on it, there are various language sites where you can create your own exercises and practice grammar for example in a fun way”</td>
</tr>
<tr>
<td>T4</td>
<td>“Inte så vi kanske använder smartboardens funktioner på det sättet utan mer att det blir interaktivt med hjälp av Kahoot, då de svarar på frågor”</td>
<td>“We might not use the IWBs functions, but we use it interactively with help from Kahoot instead, where they answer questions through their phones or”</td>
</tr>
</tbody>
</table>
Additionally, the answers seem to imply that the teachers try to integrate more interactive educational activities into their classroom practice, through the IWB. However, the participants still seem to be at the stage where the IWB was mainly a tool for making the information and explanations more clearly available to the pupils. Also, the responses show that the IWB was often used as to play audio and video sources such as sound files and YouTube clips.

**Interview Question 7: Within which areas (The four language skills) do you most often use the IWB?**

The participants’ answers to this question differed from each other. It seemed to be very individual which area the participants used the IWB most regularly in. Some answers also indicated that they used it equally in all language areas.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>“Ungefär lika. Läsförståelse, men det kan va även att man har bilder, och de ska berätta vad de ser på bilden. Så, tala, läsa och skriva”.</td>
<td>“Pretty much the same. Reading comprehension, but it can also be that I have images, and they have to say what they see on the picture. So, speaking, reading and listening”.</td>
</tr>
<tr>
<td>T2</td>
<td>“Hörförståelse, det är det väldigt ofta. Det kan ju va nyhetsprogram man lyssnar på eller andra inspelade samtal eller så. Skrivande - man kan hitta väldigt bra webbsiter med grammatiska övningar. Ibland så gör vi kanske en övning tillsammans först och sen får alla prova på sin egen dator”.</td>
<td>“Very often listening comprehension. It can be news program they have to listen to or other recorded conversations. Writing – there are very good websites with grammatical exercises. Sometimes we might do an exercise together and then later everybody will try on their own computer”.</td>
</tr>
</tbody>
</table>

The responses show that the IWB can be used within all four language areas (writing, listening, reading and speaking) and the participants stated that they used it almost equally within all four areas.

**4.3 The Beneficial Aspects of using the IWB in ELT**

This second part will focus specifically on the benefits with the IWB and how it affects the classroom teaching.

**Interview Question 8: Within which area is the IWB most beneficial for the teacher and the pupils?**
The answers express that the IWB can be beneficial for teachers and students within all language areas. However, once again the answers suggest that the visual impact, which the IWB creates and how it encourages the pupils to participate in activities are the advantages. The answers also seem to suggest that the IWB has a positive effect and facilitates whole-class activities.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
</table>
| T1      | “Läsa då, när de ska hänga med i någon text eller så. Det kan vara texter eller övningar med luckor, att man ska gå fram och skriva gör att alla deltar.” | “Reading, when everybody has to follow a text. It can be texts or exercises with blanks, when they have to go up to the IWB and write makes everybody involved”.
| T2      | “Egentligen borde det nästan va skriva då, då får de verkligen på pränt då - Aha så kan man göra och det ordet kan man använda istället…utveckla meningarna på det sättet… Istället för att jag ska gå runt till var och en och deras text” | “It should be writing, because then they really get it on print. – Aha you can do like that and you can use that word instead…Develop sentences in that way, instead of me going around to everyone and their individual text”.
| T3      | “Jag tycker det är när det gäller alla förmågor egentligen. Olika övningar för att träna olika dialoger”. | “I actually believe that it applies to all skills. Different exercises to practice various dialogues”.
| T2      | “Nu är ju inte Grammatik ett sådant område men det skulle jag vilja säga. För då får dem ju verkligen se hur det ska vara och man kan skriva, flytta och ändra. Man kan prata om grammatiska regler på ett tydligt sätt så dem ser det visuellt. För det ingår ju sen i både tal och skrift”. | “Grammar is not one of the language areas, but I would like to say that. Because then they really get to see how it should be and you can write, move and adjust. You can talk about grammatical rules in a clear way so they can see it visually. Because that is included in both speaking and writing”.

Due to the possibility to make something visual in a distinct way, the IWB was suggested to be helpful in grammar teaching, which suggests that the IWB can be used to practice all four language-skills.

*Interview Question 9: What effect has the IBW had on the pupils’ understanding and progress and your English teaching?*

A number of different effects that IWB has had on teaching were mentioned, and the effects mentioned by the teachers were all positive.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
</table>
| T1      | “Jag tror att eleverna har blivit mer, de deltar mera, på nått sätt som en” | “I think that the pupils have become more participating, in some way, something like
The different websites such as, *Answer garden* and *Kahoot*, with interactive exercises that the teacher can use in ELT have had a positive effect on the pupils’ participation, motivation and engagement. However, graphical and visual representation seemed to be the biggest advantage with the IWB. The possibility and convenience of bringing web resources into the classroom in front of the whole class at the same time while supporting all learning-styles were aspects that had affected language teaching in a positive way.

If there was any improvement and progress in the pupils’ language proficiency was hard for the teachers to answer. However, there was no doubt that the teachers believed that the IWB was something beneficial and positive in the ELT classroom and for all pupils. The answers show that the participants believe that the IWB contributes to a more interesting and enjoyable lesson content, which motivates the pupils to learn. Lastly, the way it made everything clearer in a visual way was the main benefit.

**4.4 Factors that affect the Participants’ integration of IWB in ELT**

According to the responses there seem to be a few different factors that affected the
participants’ integration of the IWB in ELT, both regarding frequency and interactivity, positively and negatively. The participants’ attitudes towards the IWB seem to be a significant factor that affected their usage of it in ELT.

**Interview Question 10: What was your attitude towards the IWB before you began to use it and what is your attitude towards the IWB today?**

The answers indicate that there was a positive attitude among the teachers towards the use of IWB in their classroom. The participants expressed excitement and curiosity, mentioning that they thought that it would be a helpful tool in ELT and that it could benefit the pupils’ learning process.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>“Positiv, vi önskade väldigt gärna att få en IWB för det är ett sådant bra bild-stöd för att lära sig språk”</td>
<td>“Positive, we wished for an IWB, because it is a very good image support when learning a language”.</td>
</tr>
<tr>
<td>T4</td>
<td>“Jätte nyfiken och intresserad och hade velat ha en sådan mycket tidigare”</td>
<td>“Very curious and interested, would’ve liked to have one much earlier”</td>
</tr>
</tbody>
</table>

The teachers’ attitudes towards the IWB were still today very positive. The IWB had become a natural part of ELT and it was seen as a helpful tool in ELT for both teachers and pupils. The teachers had realized how beneficial an IWB could be for the teaching and how many possibilities it could create.

<table>
<thead>
<tr>
<th>Teacher</th>
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</tr>
</thead>
<tbody>
<tr>
<td>T2</td>
<td>“Fortfarande mycket positiv, mer nu än när jag startade med den. Det beror ju på att jag kan mer och att det finns mer möjligheter än jag först trodde”</td>
<td>“Still very positive, more now than when I first began to use it. That’s because I know all the possibilities with it now”</td>
</tr>
<tr>
<td>T4</td>
<td>“Väljligt positiv och vill fortsätta använda den och utveckla användandet av den i kombination med andra hjälpmedel”</td>
<td>“Very positive. I want to continue using it and develop the usage of it in combination with other aids”</td>
</tr>
</tbody>
</table>

However, the answers show that a desire to develop classroom practice and their knowledge of the IWB’s different functionalities still existed among the teachers.

Another factor that affected the participants’ integration and usage of the IWB was training.

**Interview Question 11. Were you provided with any Training before the IWB was placed in your classroom and how has it affected your usage of the IWB in ELT?”**
The responses indicated that all the participants were provided with IWB training, something that they all saw as important and useful. The training provided was a starting point that they could proceed from. They claimed that without the training in the beginning their attitudes would have been less positive in the initial stage towards using the IWB.

<table>
<thead>
<tr>
<th>Teacher</th>
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</tr>
</thead>
<tbody>
<tr>
<td>T4</td>
<td>Ja en kort kurs. Det var en start på alltihopa helt enkelt Gick igenom grunderna.</td>
<td>“Yes, a short class. It was simply a start to it all. We learned the basics”.</td>
</tr>
</tbody>
</table>

The participants were thankful for the training that they had received from the school, but some of the participants were not satisfied with it. Some answers implied that the participants would prefer additional subject-specific training. Furthermore, longer courses instead of a few hours were also requested.

| T3 | “fortbildning behövs ännu lite mer, som inte är bara grundläggande utan som jag kan använda mig mer av i språkundervisningen” | “more in-service training is needed…language-specific training and not only the basics” |

However, some answers suggested that a general non-subject-specific training was enough and it is the individual teacher’s responsibility to proceed from the provided training. Moreover, the responses indicated that the continual investment in the teachers’ own development is an important factor in the learning and developing process. The answers indicate that it is the teacher’s responsibility to maintain his or her skills and develop and improve them.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Teachers’ responses in Swedish</th>
<th>Responses translated into English</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>“Jag tror det räcker, jag får bara gå till mig själv att jag inte har ansträngt mig mer”</td>
<td>“I believe it is enough, I just have myself to blame for not putting more effort into it”</td>
</tr>
<tr>
<td>T4</td>
<td>“Det är upp till en själv nu, men jag skulle vilja ha mer tid för att utforska tavlan på funktioner. Skulle vilja ha en heldag till att testa, men det kan jag bara drömma om”</td>
<td>“It is up to oneself now, but I would like to have more time to explore the IWB’s functions. I would like to have a whole day to try it out, but that’s something I can only dream of”.</td>
</tr>
</tbody>
</table>

The result also implies that more general training provided might not be the answer to
increased confidence in and usage of the IWB. Additionally, the answers suggest that more time for individual self-training and exploration would be preferred instead. However, the training the participants had received was decisive for their integration of the IWB in ELT.

**Interview Question 12: What prevents you from using the IWB more interactively in ELT?**

As mentioned earlier the participants most frequently used the IWB to show information on and there was a desire among the participants to use the IWB more interactively in their teaching, but time and knowledge prevented them from it.

<table>
<thead>
<tr>
<th>Teacher</th>
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</tr>
</thead>
<tbody>
<tr>
<td>T1</td>
<td>“Tidsbrist, det e klart att jag skulle kunna leta upp övningar, men de tar rätt lång tid”</td>
<td>“Lack of time. I could of course try to find exercises, but it takes a lot of time”</td>
</tr>
<tr>
<td>T2</td>
<td>“Okunskap. det handlar ju också om att jag måste sätta mig in mer i olika webbsiter som är användbara i Engelskan och ta mig tid att faktiskt laborera med de olika funktionerna”.</td>
<td>“Ignorance. I need to find out more about different websites that are useful for English and take the time to actually experiment with the different functions”</td>
</tr>
<tr>
<td>T3</td>
<td>“Tid! Det handlar om prioriteringar. Skulle vilja att tid skapas så jag kan sätta mig in mer i det”</td>
<td>“Time. It’s about priorities. I would like to have more time to familiarize myself with it”</td>
</tr>
<tr>
<td>T4</td>
<td>“Jag har inte lärt mig alla funktioner på den ån för jag har inte haft tid att sitta och testa allting”.</td>
<td>“I haven’t learned all the functions on it because I haven’t had time to sit down and try everything”</td>
</tr>
</tbody>
</table>

Moreover, lack of knowledge and time were factors that prevented the participants from using the IWB as much and interactively as they would have ideally preferred. They did not have the time to find new, stimulating and appropriate exercises for ELT. However, the answers also seem to suggest that it all comes down to prioritization. The teachers have to allot time to explore the practical functionalities of the IWB and various sites on the Internet to expand their knowledge and increase their interactive usage of the IWB in ELT.

Although, the responses above show that time and knowledge prevent the participants from using the IWB as interactively as they would prefer, the responses also indicate that the participants’ utilization of the IWB has progressed and moved towards a more interactive and advanced level of usage. Accordingly, there have been some changes in the participants’ ways of using the IWB in ELT now compared to in the beginning.
Consequently, training, time and more regular usage of the IWB have had an impact on the participants’ usage of the IWB. Furthermore, not only has time and change influenced the way the participants use the IWB, but it has also increased the frequency of application of the IWB in their lessons. Lastly, the participants’ attitudes and the positive effect the IWB seems to have on the pupils’ motivation are other factor that seemed to encourage the participants to use the IWB in ELT.

4.3 Summary
The participants in this study were all very positive towards the use of ICT and IWBs in ELT, which affected their integration of it. The participants had all been provided with one or more training sessions that had given them basic knowledge to proceed from, which they all claimed to be fundamental. The participants saw the possibilities with the IWB, which probably affected their use of it in ELT. The recurring advantage that was mentioned in the answers was the clarity the IWB created and the way it supported all learning-styles. Additionally, the possibility and convenience to bring various exercises and resources into the classroom was another advantage that was declared. The participants used the IWB frequently as a tool in ELT. However, it was most often used to show the lesson plan or other information, such as power point presentations to the pupils. There was a desire to use it more interactively, but the time to develop their skills and expand their resources did not exist. Nevertheless, it was also claimed to be a question of prioritization. There was a wish for more provided training from some, but more time for individual self-training was preferred since they claimed themselves to be most responsible for mastering the IWB in an efficient way.
5. Discussion

In this section the results will be discussed in relation to previous research. The discussion is divided into three sub-headings. Subheading 5.1 will focus on Teachers’ attitudes towards using IWBs in ELT, 5.2 will discuss Time and training; two important factors, and finally, 5.3 will discuss the benefits of the IWB.

5.1 Teachers’ attitudes towards using Interactive Whiteboards in English Language Teaching

The participants in this study were all very positive towards the IWB and the integration and usage of it in ELT, from the initial state up until now. All the participants used the IWB frequently as an educational aid in ELT. The participants saw many advantages and possibilities with the IWB and believed that it created a better and more varied English learning experience. Furthermore, the responses show that the participants saw the IWB as a useful tool that could help to improve the pupils’ proficiencies within all four language skills. The participants also stated that the integration of the IWB in ELT seemed to have a positive effect on pupils’ motivation and engagement in various classroom activities, which probably effected the participants attitudes towards the IWB in a positive way. Furthermore, the participants did not believe that the integration of the IWB was merely beneficial for the learners; the responses clearly showed that the IWB was seen as a helpful tool for the teachers as well.

The participants’ attitudes towards the new technology were decisive for the integration of it in the EFL classroom. The participants were curious and excited to start using the IWB from the first day and still today there was an eagerness among all of the participants to learn more about how to incorporate the IWB in ELT and to expand their knowledge regarding the functions and possibilities with it. Attitude is a factor which has been mentioned as a determinant factor whether the technological tool will be actively used in teaching and if it will be successful or not (Betcher and Lee, ibid). A positive attitude towards a new technological device increases the motivation to use the tool and pushes the process of integrating it in teaching. In this case, results from previous studies seem to agree with the result in this study. Betcher and Lee (ibid) claim that there are three different categories, which they divide teachers into regarding their various attitudes towards new technology. These three different attitudes are significant for the incorporation of the IWB in teaching
(Betcher and Lee, ibid). The participants in this study would probably be placed somewhere between the first and the second category, since the responses indicate that the participants were very positive towards the IWB and they wanted to integrate it in ELT, but the results also showed that the participants’ progress of development did not quite agree with Betcher and Lee’s (ibid) definition of teachers in category one. They claim that the teachers’ enthusiasm in the first category makes them learn the basic functions fairly quickly which leads to an easy and rapid adoption of more advanced functions later (Betcher and Lee, ibid). When analysing the responses it is obvious that the participants wanted to explore the IWB more and expand their knowledge, however, it was not their first prioritisation. The responses showed that the participants incorporated the IWB in their teaching relatively fast after it had first been placed in the classrooms and the participants stated that their usage of the IWB had a positive effect on the pupils’ engagement and learning. However, despite this and the fact that most of the participants had used the IWB for some years, the responses indicate that the participants were still at the intermediate level of knowledge of how to integrate the IWB, and most frequently used it as a displayer of information. The participants had much to learn and explore regarding the more advanced functions of the IWB. Betcher and Lee (ibid) claim that a slow process of learning to use new technology to its full capacity delays the achievement of success in the classroom.

What the participants’ positive attitudes towards technology and the IWB were due to are unclear. However, the responses tell us that the participants’ attitudes towards integrating the IWB in ELT would probably be less positive if the school had not provided the teachers with training in the beginning and during the years of how to get started. Even though the answers show that some of the participants would have preferred more subject-specific training, the responses also show that the general training was positive for the participants’ attitude and initial integration of the IWB. The provision of training is an aspect that Betcher and Lee (ibid) emphasize as important for the positive effect of an IWB. This implies that training provision from the school is essential in order to get everybody on board and to generate a more positive starting point for the teachers’ integration of the IWB and other technological teaching devices (Betcher and Lee, ibid). A study by Reedy (2008) is evident for this statement. The results in Reedy’s (ibid) study clearly showed that the lack of provided training and support from the school of how to integrate and use new technology in teaching generated negative attitudes among the teachers. This resulted in an irregular, if any, integration of new technology in teaching. When and if the teachers at this school
incorporated the new technology, such as the IWB, they did not use it for its purposes. The consequence was that the IWB was mainly used as a displayer of PowerPoint presentations and other information. Moreover, the results in both studies show that the training provided for teachers and teachers’ attitudes are crucial for the consequences of the integration of new technology.

5.2 Time and training; two important factors
In the result it becomes clear that the participants’ in this study had positive attitudes towards the IWB. The results also indicate that the teachers’ incorporations of the IWB in ELT have developed and improved during the years they have used the IWB. The participants stated that they used the IWB more frequently now and they also used it more interactively compared to in the beginning when they solely used it to display information or to write on. Despite this, the participants were still on an intermediate level of knowledge and were most frequently using the IWB for other things then its purposes. Something prevented the participants from using the IWB as regularly and interactively as wanted. The responses express a necessity for development and improvement of the participants’ knowledge of how to use the IWB more effectively and for its purposes. The main factors that prevented the participants from this were, time and training. The participants’ answers state that more time for training was preferred to improve the interactive usage of the IWB. The responses imply that the participants would like to expand their knowledge of how to use the functions on the IWB in general and to find more material that could be useful to practice some specific language skills, and time for training was something that the participants saw as crucial for the development of technological skills. Today, the absence of time to explore functionalities and learning activities through trial and error, on the IWB, prohibited the participants from expanding their knowledge and usage of the IWB. The responses indicate that there was a need for more individual time in the participants’ schedule for self-training. Time to try different functions on the board and also to find websites on Internet in order to expand the teachers’ interactive activity resources was needed, to adapt the IWB for use in ELT. In a research by BECTA (2003) it is suggested that, for a teacher to maximize the IWB’s impact on teaching and learning in the classroom they should invest time in practicing the IWB’s functions to gain confidence in using them, they should explore the IWB’s full variety of abilities (BECTA, ibid). Also, Miller and Glover (2010) emphasise the significance of continual professional development and training for teachers, mixed with exploration of effective pedagogical practice as significant factors for the effective use of the IWB (Miller
and Glover, ibid). This showed the importance of adequate time for training and can be compared to the participants’ responses in this study. However, the responses express the impossibility of this, since time for individual self-training and exploration did not exist in the participants’ busy teaching schedules. Nevertheless, the participants’ responses also imply that it depended on prioritization. It was every teacher’s individual responsibility to spend time on developing their knowledge and resources of interactive learning activities. Furthermore, the responses express the fact that the participants in this study were not eager enough to spend more of their now very limited lesson-free time to search for new suitable material and to learn new functions on the IWB. As mentioned above according to Betcher and Lee (op cit) for a new technological device to become rapidly effective the teachers have to be enthusiastic and very eager to quickly learn the functions on the new tool. Despite the participants’ positive attitude, it has taken a long time for them to use the IWB for its intended purposes and the responses seem to indicate that the IWB was still not used to its full potential. Consequently, the insufficient amount of time available for self-training resulted in deficiencies in the participants’ knowledge and influenced their usage of the IWB negatively.

5.3 Benefits with the Interactive Whiteboard
The participants in this study mentioned a few different aspects with the IWB, which they found beneficial for ELT and the pupils’ language learning that possibly affected the participants’ incorporation and usage of the IWB in ELT in a positive way. One of the factors was the positive motivational effect the IWB had on the pupils. The responses showed that the pupils had a positive attitude towards the IWB and the teachers’ integration of the IWB made the pupils more actively involved and engaged in the classroom activities. The interactivity the IWB generated through activities from websites were more exciting for the pupils than the exercises in different textbooks since the several functions and possibility to bring everything on the web into the classroom in a convenient way created a more varied learning experience, which according to the participants made the learning of English more enjoyable for both the pupils and teacher. Furthermore, the participants mentioned different websites such as Kahoot and Answergarden and claimed that the interactive activities that could be found on these websites had a positive effect on the pupils’ participation and engagement in ELT. Also Hubbard (2009:2) mentions that the main benefit with CALL is that it engages pupils in activities and makes them enjoy the learning process more (Hubbard, 2009: 2), which agrees with the results from this study. Moreover, an assumption is that there is a connection between the motivational effects the IWB has on pupils and how the IWB
supports all learning-styles. According to the responses, the IWB was helpful and beneficial for all pupils, no matter what learning-styles they preferred or what level of knowledge they were on. The responses imply that the way the IWB can connect all language skills in one single activity and support all learning-styles made it easier for the teacher to satisfy all pupils’ needs in a more convenient way. This might create a better level of listening comprehension among the pupils and generate a higher number of enthusiastic pupils. Just like Ellis (1997) claims, all people learn a new language in different ways (Ellis, 1997) and since the IWB supports all learning-styles (Glover et al, 2005) this might be the reason for the IWB’s positive effect on the pupils increased motivation on language learning, which is something the participants mention in the responses as a benefit with the IWB. Furthermore, the responses also indicate that the IWB facilitates teaching. The IWB made it possible for the teacher to bring the wide range of material from the web into the classroom and teach the whole-class at the same time in a clear and visible way. The participants stated that the teacher does not have to walk around and teach or explain something to each and every pupil in the classroom; in this way the IWB saves time for the teacher. This is something that Hubbard (2009:2) also mentions to be beneficial with CALL, he uses the term Institutional efficiency, which means that the pupils require less teacher time when the IWB is used effectively in the classroom (Hubbard, 2009:2).

Furthermore, the primary benefit with the IWB, which was mentioned repeated times in the responses, is the visual clarity the IWB creates for all pupils, within the context of the communicative classroom. There is a comparable parallel between this and the fact that the IWB supports all learning-styles. This is assumed to be the main reason for the participants’ positive attitude and integration of the IWB in ELT. According to the participants everything could be explained and demonstrated in a clearer way through the IWB. Useful examples could be shown on the board to make an activity, exercise or instruction etc, more clearly to the learners. Looking at the responses it is obvious that the IWB was beneficial within all areas in ELT, however, the participants specifically mentioned grammar and structure as areas where they found the IWB most beneficial. The visual clarity the IWB creates made it easier for the teachers to teach grammar by focusing learners’ attention on form. For instance, the participants mentioned that the teacher and pupils could in whole-class go through a text on the IWB and discuss how it could be improved and then together change and move around words and sentences on the board. This demonstrates how the IWB can put exercises into context, supporting form-focused teaching. Additionally, there seems to be a similarity
between the participants’ responses about the IWB’s clarity and what Condie et al. (2007:5) argue about the IWB, where they claim that the IWB makes concrete examples out of abstract concepts through images (Condie et al. 2007:5). Also, Harmer (2008) emphasise that meaning-based exercises are beneficial for language learning (Harmer, 2008).

Thus, there are a few different factors that can affect teachers’ integration and usage of IWBs in ELT in positive and negative ways. These factors and the amount of time and training it takes for teachers to learn and use a new technology, such as the IWB, in teaching should be taken to account when analysing whether the integration of it has any affect on pupils’ attainment or not.
6. Conclusion

The aim of this study was to investigate English Language teachers’ integration of the IWB in ELT in Sweden and to study what factors that determine English teachers’ usage of the IWB in ELT. Through qualitative interviews with English Language teachers at a lower secondary school in southern Sweden the aim of the study was reached. The result from the study shows that the IWB was frequently used in English classrooms at upper secondary level. However, it was most regularly used non-interactively. Furthermore, the result shows that there were some factors, which were determent for the participants’ integration of the IWB in ELT. The first one was attitude. The participants’ positive attitudes were the prominent factor that affected their integration of the IWB in a positive way. They saw the positive effects with the IWB and how it could be beneficial for both the teacher and the learners and therefore wanted to use it in their teaching. However, there were also some negative factors that were decisive factors for the participants’ incorporation of the IWB in ELT. These factors were time and knowledge. The lack of knowledge prevented the participants from using the IWB as regularly and interactively as they would have liked and lack of time prevented them from expanding their knowledge in order to use it more regularly and interactively. This can be compared with previous research, which shows that training and knowledge are two main factors that are crucial for the success of the IWB. The result of the study turned out, to some extent, as expected. The IWB was most frequently used to display information despite the participants’ awareness of its various possibilities and this was, as expected, due to the teachers’ lack of time and knowledge to find out more about the different functions and possibilities on the IWB. Nevertheless, because of the small sample of data one should be cautious about making generalisations from this study.

The method and material used for this study seemed appropriate for the aim. The interviews opened up for flexibility for the researcher and the participants, which resulted in detailed answers. However, a questionnaire with carefully elaborated questions would probably have been beneficial too, and had probably been beneficial for the collection of data and the result, since it perhaps would have resulted in a greater number of participants and the collection of a wider range of empirical materials.

The weaknesses in this study were the number and assortment of participants. The restricted
time for this study and the teachers’ busy schedule limited the research. Furthermore, the random selection of English teachers resulted in a sample of only female participants, who were all in the same age. For further research it would be preferred to have more participants and a mixed selection of age and gender. It would also be interesting to do classroom observations in order to actually see how the IWB is integrated in ELT.
7. References


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8. Appendix

<table>
<thead>
<tr>
<th>Interview Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview Question 1: What is your attitude towards the use of ICT in ELT</td>
</tr>
<tr>
<td>Interview Question 2: Do you use ICT a lot in ELT?</td>
</tr>
<tr>
<td>Interview Question 3: How do you rate your knowledge of using technological aids in ELT?</td>
</tr>
<tr>
<td>Interview Question 4: For how long have you used an IWB in ELT?</td>
</tr>
<tr>
<td>Interview Question 5: How often do you use the IWB in ELT?</td>
</tr>
<tr>
<td>Interview Question 6: How confident are you in using the IWB?</td>
</tr>
<tr>
<td>Interview Question 7: Within which areas (The four language skills) do you most often use the IWB?</td>
</tr>
<tr>
<td>Interview Question 8: Within which area is the IWB most beneficial for the teacher and the pupils?</td>
</tr>
<tr>
<td>Interview Question 9: What effect has the IBW had on the pupils’ understanding and progress and your English teaching?</td>
</tr>
<tr>
<td>Interview Question 10: What was your attitude towards the IWB before you began to use it and what is your attitude towards the IWB today?</td>
</tr>
<tr>
<td>Interview Question 11. Were you provided with any Training before the IWB was placed in your classroom and how has it affected your usage of the IWB in ELT?</td>
</tr>
<tr>
<td>Interview Question 12: What prevents you from using the IWB more interactively in ELT?</td>
</tr>
</tbody>
</table>