Swedish teachers’ and students’ views on the use of ICT in the English classroom

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Abstract

This thesis aims to explore whether some Swedish teachers and students feel that they are helped by ICT tools in their classrooms or not. It is vital for this thesis to find out whether or not teachers experience that their students are positively stimulated by the use of ICT when learning English. Ascertaining whether teachers find that ICT tools make it easier for them to teach or not is also of particular interest. Students’ answers to questions regarding the perceived benefits of technology and what they think about their teachers’ technology usage are also important. In order to accomplish this aim, four teachers were interviewed about their opinions on this matter and one English class per teacher, totaling 70 students, answered questionnaires regarding their opinions on the matter. The results reveal that teachers believe that while ICT offers some great tools to create variation in the classroom and that it might increase student motivation, opinions on whether or not technology also helps students to produce better results differ. The students’ results on the other hand clearly show that most students believe that they learn better when using computers, they would like to use computers more during class, and they prefer to write using a computer rather than pen and paper. Overall, the students have a more positive attitude to ICT tools than the teachers.

Keywords: computer-assisted language learning, EFL teaching, EFL learning, ICT and language learning
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1. Introduction

This thesis explores both teachers’ and students’ opinions on and attitudes toward the technology that is used in their English classrooms. The term Information and Communication Technology (ICT) has become increasingly prevalent in discourse about schools and teaching during the last decade. Involving the use of ICT tools such as smart boards, teacher-created websites or wikis, student blogs and much more, the use of and knowledge about ICT has grown considerably since the beginning of the new millennium. Don Tapscott (1998:1) points out that the current generation is the first to grow up surrounded by digital media, a statement that is even more true thirteen years later. The new technology and its new ways of teaching will change, or rather, has already changed the way children learn. Therefore, it is important to explore the ramifications this, in many aspects, completely new way of teaching has, on teachers and students alike. What if research shows that the use of ICT has no benefits over more traditional methods when it comes to student learning?

1.1 Aim, scope, research questions

The aim of this thesis is to investigate whether or not teachers and students find ICT tools helpful in their classrooms. The key question is to find out whether or not teachers experience that their students are positively stimulated by the use of ICT when learning English. Also of particular interest is finding out whether or not ICT tools make it easier for teachers to teach. Other important questions are whether or not students that are struggling with reading disabilities or other problems experience any additional benefits compared to mainstream students, and if teachers feel that ICT offers good tools to help these students. Student opinions on questions regarding the perceived benefits of technology and what they think about their teachers’ technology usage are also important. Lastly, finding out how ICT is used in accordance with Svensson’s (2008) four pillars is also important. In order to fulfill this aim the following research questions have been addressed:

1. What are four Swedish teachers’ general views on the use of ICT in the English subject?
2. What are 70 Swedish students’ general views on the use of ICT in the English subject?
3 a. What are the teachers’ views on the usefulness of ICT tools in increasing their student’s proficiency in English?
3 b. What are the teachers’ views on the usefulness of ICT tools when it comes to helping weaker students?

4. What are the students’ views on the usefulness of ICT tools in increasing their proficiency in English?

5. Looking at the four pillars described by Svensson (2008), in what ways are ICT tools used?

The scope of the study is limited to interviews with four upper secondary school teachers and a survey distributed to four of their English classes, totaling 70 students. One goal of this thesis is to assess the current conditions and attitudes towards ICT tools in Swedish schools and the scope has been limited to two schools in the south of Sweden. The limitations of the scope are discussed below in Section 3.3

2. Theoretical background

This section contains research and interview excerpts from predominantly Swedish books and journals. It aims to give the reader an introduction to and understanding of previous research done on the subject and what the current debates are. Svensson (2008:43) points out that it is most uncertain if ICT promotes any direct improvement of the students’ results compared to more traditional teaching. According to Svensson (2008:43), ICT is often used as a mantra that will solve everything and this way the people in charge can avoid dealing with the real issues. He writes that “if the fundamental problem is that classes are too big, the problem is of course not going to be solved by implementing ICT” (Svensson, 2008:43f, my translation). ICT has become an easy way out for politicians claiming that they are doing everything in their power to improve schools and student results, even though the effects are largely unknown (Svensson, 2008:44). However, Svensson (2008:65) acknowledges that ICT seems to harbor an intrinsic power to motivate students, which in the best case scenario pushes students to be creative and curious in their learning, key features for modern language learning.

One fear that many teachers might have is that the students know more about technology than they do. Svensson (2008:23) does however believe that this is not the case. He admits that today’s youth use computers and other technology more than other segments of the population. However, what students use their computers for in their spare time and what is required in school are two entirely different stories according to him. He quotes research from the ITiS-project, showing the differences:
The material shows two things. Firstly, teachers point out that for the most part students’ superior knowledge when it comes to using computers is vastly exaggerated. Indeed, the youngsters know more about computer usage than most of their teachers. This knowledge is however to a high degree restricted to what young people do best, play videogames and chat. (Chaib & Tebelius 2004:36 in Svensson 2008:23) (my translation)

Svensson (2008:22) suggests that while many writers, including Canadian author Don Tapscott (1998) and Swedish researchers at the Interactive Institute (2005), consider the current generation to be the golden generation of technology, this is far from the truth once the students are put in a learning situation. When this happens, he describes the students as “computer illiterates” who do not know how to use the tools available to them properly. The bottom line here is that the teacher is still usually the one who knows best, and therefore s/he should not be afraid of using technology in front of his/her students. It is important to note however that it is not necessarily fear of not being knowledgeable about the technology itself (being computer literate) that might be a teacher’s biggest concern. In a recent study, Estling Vannestål (Forthcoming) found that teachers are afraid of losing control over their classroom when using technology. Simply put, when using a text book it is hard to be taken by surprise or to be put in situations where one does not know how to act. But when going online, one might encounter words, phrases or cultural phenomena that one is not familiar with (Estling Vannestål, Forthcoming). Suddenly the teacher is not omnipotent anymore and a fear of losing one’s authority and control over the classroom hinders teachers from utilizing computers’ full potential. Therefore, one should heed Dudeney’s (2007:32) advice to familiarize oneself with the technology and check out material such as websites that are going to be used prior to using them.

One important point to note is that it is very likely that teachers in the not-so-distant future have to be able to teach their students how to use technology, much in the same way as they teach them how to write and read. This is something that has not been an issue for previous generations of teachers. Säljö (1999:284) notes that

Concerns regarding students’ lack of competence when it comes to handling the resources of technology will soon be as important as more traditional concerns about writing- and reading literacy and other basic skills. To be computer literate will be as important as it once was to be able to read and handle paper and pencil correctly. (Säljö 1999:284 in Svensson 2008:32) (my translation)
Teachers of English and other languages will most likely be put on the forefront of this mini-revolution, and therefore need to be prepared and eager to adapt, instead of afraid or wary of the new technology. As a matter of fact, in the new curricular documents from the Swedish National Agency for Education, effective as of 1 July 2011, emphasis has been added on creating and communicating using digital tools. In the new curriculum (Lgr11), it is stated that the students should be given the chance “to use various different tools in order to learn, understand, create and communicate” (my translation) (Skolverket, 2011:31). Thusly, “creating” and “communicating” will be added as parts of the students’ digital competence that were not as prevalent in the old curriculum.

For Svensson (2008:37), it is only natural that teachers of English should be bold enough to incorporate such things as computer games, electronic literature, instant messaging and web pages into their teaching. By doing so, students will be trained in both English and digital competence. He states that “It is important that we look critically at different combinations of language teaching and information technology, but at the same time it is also important that we experiment and try new methods” (Svensson, 2008:36, my translation).

With this quote in mind, a short look at the different ways that one can make use of information technology, known as “the four pillars” (Svensson, 2008), follows. The pillars all exist side by side and are presented in the chronological order in which they were fashioned. Therefore, this is not necessarily an evolutionary development (Svensson, 2008:49). The first pillar presents IT as an automaton, a drill instructor of sorts (Svensson, 2008:50). In language education this is usually manifested by various computer programs aimed at teaching the student different aspects of language such as glossaries, verb endings, prepositions etc. The student is kept active and the computer works tirelessly and provides immediate feedback, core features for the first pillar (Svensson, 2008:51). The second pillar describes IT as a tool (Svensson, 2008:51), ready to be used by the student in any possible way. Rather than being used more or less for one purpose and one purpose only as in the first pillar, the computer is here viewed as a machine without limited capabilities, as opposed to for example the whiteboard, the overhead projector and the encyclopedia (Svensson, 2008:53). These tools serve a specific purpose, whereas the idea with the computer as a tool is that students should use the computer for a number of things and that, basically, only imagination sets the limit for thinking about new ways to use it (Svensson, 2008:53). Examples of what one can use the computer for within the second pillar includes using it as an encyclopedia, using it to find information for an essay, blogging, creating and searching wikis, and then using it to write the
The most obvious gain of using computers and the Internet in the English classroom is, according to Estling Vannestål (2009:17), that it creates variation. Variation might lead to increased motivation among the students and this in turn creates a good foundation for a healthy learning environment. However, Estling Vannestål (2009:19), like Svensson (2008), is quick to point out that there is no research that shows any connections between the use of ICT and efficient language learning, meaning that students do not necessarily learn more or faster just because their teacher uses ICT tools. On the other hand, connections have been made between motivation and learning (Estling Vannestål 2009:19), and therefore the use and value of ICT should not be disregarded solely because it may not help students to learn better, as it might in fact do just that indirectly by raising their motivation for learning English.

Estling Vannestål (2009:16) concludes that the old debate of whether computers should be used in schools or not is no longer relevant. Since the technological advancements move at such high speeds today there is no way of avoiding adaptation, and teachers should adapt, not only for their own sake but also to prepare their students for the future (Estling Vannestål 2009:16). This point resonates well with Svensson’s (2008:37) argument that teachers should take advantage of the technology that is available to them to educate their students in digital competence. Estling Vannestål (2009:16) also points out that it is stated in the curriculum established by the Swedish National Agency for Education (Lpo 94) that students graduating from elementary school are supposed to be able to use ICT as a tool for learning and discovering knowledge. As can be seen above, digital competence will become even more important in the new curricular documents.

According to Sofkova Hasemi (2007:221), quite a big problem arises when students write more and more on the computer. They risk becoming lazy when writing a text on the
computer since they do not bother on purpose to check the text themselves for errors but let the computer do all the work. After conducting an experiment where students corrected a paper both by hand and on the computer she concludes that “Some mistakes are found when the students themselves search the text manually, but then they miss them on the computer since they are not marked up. It is evident that the attention of the student is placed first and foremost on what the computer has marked” (Sofkova Hasemi, 2007:221, my translation). This of course creates a problem, as a both basic and crucial skill (to be able to correct one’s own work) is lost among the students.

Do the advantages of ICT outweigh the disadvantages? In an interview in Lärarnas tidning (a magazine for members of one of the teacher unions), Lotta Liirus Van Den Hark, a teacher who works at a school where all the students have their own computers, certainly thinks so:

I have been a teacher since 1997 and I can compare it [the use of computers] to when we worked more traditionally. The computer is a very good tool and I believe that students that get their own computer generally have a better self-image. They see themselves as someone who can read and write. They think it’s fun and write longer and richer texts. They hardly ever say that they can’t [write], they just do it.” (Bjarneberg, Anna-Lena 2011:14-15, my translation)

Some of the other advantages that Liirus Van Den Hark lists include increased curiosity, that it is easier for the students to find material for their assignments, and increased knowledge about copyright and criticism of sources. The article unfortunately leaves out any possible disadvantages, but the overall painted picture is that of a teacher who is more than happy to work with ICT and who focuses on the benefits that it brings into her classroom.

An important factor when it comes to the use of ICT is of course the schools’ access to computers and other technology, such as smartboards. Jane af Sandeberg, editor-in-chief at Skolvärlden, (Sweden’s largest magazine for teachers) does not mince her words when writing about the problems that are created by the fact that schools do not have the same resources to provide access to and training with ICT. She (2011:4) writes about “technology segregation” and points out that such segregation violates the education act with regard to equality. Furthermore, af Sandeberg (2011:4) regards this as “deeply undemocratic” as today’s modern citizens are expected to be able to retrieve a lot of information that concerns them from the Internet. The fact that some municipalities (she brings up Västerås as a good
example) give every teacher and student their own computer whereas others still have separate computer rooms in their schools is also disturbing for af Sandeberg (2011:4). She (2011:4) is “deeply concerned” by this difference (using the strong comparison of “modern day” versus “stone age”) since students at these stone age schools are unable to learn what their peers learn at the modern day schools, yet they are expected to. As the frequent usage of ICT is fast becoming the standard, these students will be left behind, unable to handle technology as is expected of them and in the end, this will create an A-team and a B-team, a development no one wants to see (2011:4). Concluding her editorial, af Sandeberg urges politicians to take this matter seriously so that future students may have the opportunity to learn under the same conditions.

In an interview from February 2011 with *Skolvärlden*, Anna-Karin Hatt, Sweden’s Minister of IT, talks about her vision that Sweden should become the world’s most successful digital society. In order to achieve this, she says that the country needs people who can handle and master modern technology and that it is crucial that this education starts early on in the schools. This does, in turn, require teachers that not only have access to such technology, but also know how to use it. Part of making sure that the vision becomes reality involves a new demand that is being placed on all new teachers: as of January 1st 2011, they have to be able to use the available technology and understand how to make the best of it from the student’s point of view. Using technology “in a broader sense”, as Hatt (2011:10) puts it, would allow teachers to cut lesson preparation times, giving them more time to teach and she also points to the fact that technology such as speech synthesis can greatly help students that struggle and underachieve when using more traditional methods. With these points in mind, it is vital that teachers know how to use the available technology. Hatt (2011:10) also makes the reader aware that it is now part of the curriculum that technology should be used in “relevant subjects” and that students have a right to modern tools of learning. Hatt (2011:11) also refers to a survey done in 2009 that showed that Sweden is in the very top when it comes to the general population’s access to high-speed Internet and ability to use IT, but only placed number eight when it comes to schools. She stresses the point that “this is not because technology is unavailable, because it is readily available, it just has to be used” (Hatt, 2011:11) (my translation).
3. Material and method

3.1 Material

For the study, four teachers were interviewed about their opinions on and experiences of the use of ICT in the English subject. The four teachers, two males and two females from southern Sweden, all teach in all available classes at the high school level. Freya is 38 years old and teaches at the Asgaard school. Thor is a 39 year old male from the Jotunheim school. Oden is a 62 year old male, he also teaches at the Asgaard school. Idun is 56 years old and also teaches at the Asgaard school. In accordance with the interviews, questionnaires were also distributed to these teachers’ classes, totaling results from 70 students1. The two schools, Asgaard and Jotunheim, are both municipal schools located in the city of Midgaard. The reason for choosing municipal schools over private schools was simply because they were fewer in number, and it was expected that a large enough amount of teachers would be willing to help. Therefore it seemed unnecessary to involve a larger amount of teachers, or having to decide which private schools to contact.

3.2 Method

Emails were sent out to the 25 teachers that were listed as English teachers at the three municipal schools in the city of Midgaard. Eight replies were received and out of these eight, five teachers were willing to let themselves be interviewed. In the end, interviews were conducted with four teachers. The teachers were all interviewed individually and a dictaphone was used so that the answers could be minutely examined afterwards. The interviews were semi-structured; a set of specific questions were used in all of the interviews but different follow-up questions were asked depending on the answers given. Room was also given to the teachers to “trail-off” without them being interrupted. The questionnaires addressed student opinions and experiences concerning the use of ICT when studying English, but also included questions regarding their teachers’ use of ICT and more general questions, for example if the students ever used English when they were using a computer in their spare time to see if there were correlations between private usage and attitudes towards school usage (see Appendix 2).

The interviews conducted with the four teachers (see Appendix 1) were then analyzed and the questionnaires summed up to gain an understanding of what the teachers and students think of

1 The total numbers shown in the tables below varies however, since some students chose not to answer some of the questions.
ICT in the teaching and learning of English. All names, of schools as well as people, have been changed to make sure that no one, journalist, politician, school administrator or other, can identify neither the schools nor the teachers. Suffice it to say that the schools and teachers are all situated in southern Sweden. The students were told that they would be completely anonymous and that there would be no way in which anyone would be able to find out who wrote what. The students were also told that they needed not fill out the questionnaire if they did not want to. However, all of the students did fill out the questionnaire, although some students left some questions unanswered (see footnote 1 on the previous page). The interviews and an example questionnaire can be found in Appendices 1 and 2.

3.3 Problems and Limitations

Both the study and the method have some limitations. Firstly, four teachers and 70 students are by no means a representative sample for, say, a whole country, and therefore the results in this thesis have to be regarded as a case study. Secondly, the teachers all taught in the same city and at municipal schools, so the results do not necessarily reflect other parts of the country or private schools. Thirdly, the choice of method might result in inaccurate results, if students choose not to fill out the questionnaires accurately if for example they do not like the teacher. Fourthly, depending on how much the teachers have prepared before the interviews, the answers given can be more or less thought through and accurate in terms of what the teacher really thinks. Fifthly, the interviews were carried out in Swedish and the questionnaires were also written in Swedish. This was simply done since it is easier to express oneself in one’s mother tongue and so that the chance of misinterpretations would be as low as possible. This also means that all the quotes presented in the results section have been translated from Swedish to English. Lastly, it would make sense to claim that only teachers that are interested in ICT replied to the emails, explaining the overall positive opinions in the results section. This in turn would mean that the results are at least somewhat biased towards being positive of technology.

4. Results and Discussion

4.1. Teachers’ opinions on the use of ICT in the English subject

First, let us take a look at what the teachers have to say about using ICT tools. Has it made their professional lives easier, is it more fun to teach when using technology, or has their workload increased as more and more opportunities present themselves? Freya says that while it takes a lot of time to keep oneself updated and find good information, there really is not that
big a difference compared to more traditional teaching. She says that it is all about planning; as a teacher you have to plan your lessons, go over your material etc. regardless of whether you choose to work with technology or not. However, since Freya thinks it is fun to work with technology she does not see it as something that one “must” use, but rather as a privilege that is there if one chooses to. For Thor, it is mostly about “easing things up” a little and creating or showing something that the students will consider fun or different and that creates variation. Thor agrees with Freya, saying that, basically, one has to have a natural interest in technology in order to make it work in the classroom. It takes longer to do research and find suitable material, time that usually has to be taken from one’s spare time and therefore a certain degree of interest is necessary in order to “make it work”. Oden only briefly states that since he finds technology interesting, he believes that it makes it fun for him to use. Idun too says that she finds working with technology to be fun, and it helps her to vary her teaching. She also finds that a lot of material has now become easily available thanks to computers and the Internet. Rather than seeing it as time consuming, Idun says that because her students are so good at using current technology it motivates her to “try to keep up” with them and she also says that she uses a lot of technology herself, and therefore does not see it as taking up a lot of her time.

All in all, the teachers agree that it is fun to use technology, both for them and for their students. They also think that the information and material available (mainly from the Internet) is good, but that it takes time to find the real pearls and that a natural interest in technology is necessary to be able to use it to its best capacities. While there are some drawbacks (mainly the time consuming part) the teachers see technology as something positive, something that enriches both their teaching and their students’ learning.

**4.2 ICT and weak students: offering great tools or creating great problems?**

When asked whether or not ICT tools are extra beneficial for weaker students (mainly students with dyslexia, concentration difficulties or immigrants that have not mastered Swedish, English, or both) the teachers are all in agreement: it definitely is. Freya, who works a lot in particular with these kinds of students, says that particularly speech synthesis and audio books are very helpful. She has also found that letting her students read a text while at the same time listening to it via a program called ViTal (that lets one control the speed with which the text is being read) is extremely helpful for students that have a hard time
understanding spoken English. Freya also says that once her students have learned and mastered the various tools that are at their disposal, the tools become a huge time saver:

To be able to put a text on your mp3-player and then have both the book with the text and the sound at the same time [...] is very important for these students. And it helps a lot.²

Thor also believes that being able not only to read a text but also listen to it is a big help for these students. He also believes that weaker students are helped a lot in their writing by computers. He says that he has a few examples of students who plainly refuse to write by hand, but if they are allowed to write on the computer, they will do it:

I don’t know if they feel that it is like ‘Now I’m at a computer, now I can write because I’ve got something here that can help me’. And sure, they get help with spelling and don’t need to worry about that. Or maybe they just feel like they’ve got bad handwriting […] and then they get some help with that.

For these students, the computer is obviously a great tool. Oden says that he urges his struggling students to use the CD that comes along with their course book as much as possible, and he has also brought in audio books when it is time to read novels for his weaker students to listen to. As for writing, he too believes that the computer really can help students that have problems with spelling and such. He does however also say that if any of this is to be useful for the student it is important that they themselves are willing to learn and acknowledge the fact that they need extra help. Finally, Idun too says that it is “definitively an advantage” for weaker students to be able to write on a computer. For her, the biggest advantage over writing with pen and paper is the fact that you get an immediate response and can see if something is wrong, and then it is also easy to correct. For this reason, Idun also finds various computer programs that are designed to help students to learn grammar, increase their vocabulary etc. very useful.

² All of the longer teacher quotes have been translated from Swedish to English by the author.
To sum up this question, yes, the teachers do believe that various ICT tools help provide weaker students with better opportunities for learning. The two most important aspects are i) the opportunity to listen to texts instead of/while reading and ii) the opportunity to write on a computer rather than by hand. Fortunately for the students, both of these aspects seem to be in no short demand. Worth noting is not only that all of the four teachers agree that ICT tools are a big help for weak students, but that they also largely agree on what methods/tools that are most effective.

### 4.3 ICT, learning, and motivation

For this section, the teachers were asked if they can see any direct improvements in student results and/or motivation/commitment when using ICT tools in the classroom. Freya says that she uses the website www.glosboken.se quite a lot. The site allows its users to create their own word lists which can then be structured in different ways, such as fill in the blank, do direct translations etc. Freya says that so far she has not had a single student that has disliked the site, and their results have significantly improved. She says that

> It is immensely satisfying for these students, they don’t have any study technique, and so this sort of becomes a fun way for them to learn these words, and it also turns into a competition for them [...] for a student who’s never had more than two or three points on an exam to suddenly score 38 out of 40 of course creates an incredible feeling [...] and they don’t have to put in that much time.

Here we can in other words see a direct improvement in the students’ results thanks to computerized learning. Freya also tries to book computer rooms often since she knows that her students appreciate working with technology. Thor, on the other hand, has seen both the advantages and disadvantages of working with technology. He says that while he can definitely tell that his students become more focused when for example he lets them write on a laptop, there are always a few that cannot really handle the responsibility and instantly log on to their Facebook account or chat with friends rather than doing school work, and as a teacher you cannot be everywhere in the classroom at once. And even though Thor cannot really say that he has seen any direct improvement in terms of grades, he concludes the question by saying that most of the time he finds that it is easier for the students to work when they are allowed to use computers. It creates more focus than sitting and taking notes. “Then
the students know what to do and what is expected of them” as he puts it. Veteran teacher Oden immediately says that the one thing that he notices is that students of today have a much larger vocabulary than they had 30 years ago. He attributes this largely to the fact that once computers made their entrance into Average Joe’s home and the kids started using them, they picked up many words that they had never heard before from games and other sources. Oden does however add that while this is mostly attributed to technology at home and not in schools, he would like to believe that the fact that Asgaard was one of the first schools in Sweden to get computers has played a role in this development, at least back in the 80s-90s when computers were rarely seen in people’s homes. Lastly, he also adds that he believes that his students seem more motivated when using computers than when they do not, even though he might attribute this to the fact that they rarely visit computer labs anymore. Idun sets herself apart from the other three teachers by saying that it is not about motivation or grade improvement, but about variation.

I doubt that you will see any grades improve, but I don’t think that is what this (technology) is about, what it is really about is creating variation. And you can vary your teaching just as much using traditional ways […] But for me this is about variation, to be able to surprise and introduce new things to keep the curiosity and interest alive.

All in all one can see that the opinions differ somewhat, ranging from seeing concrete result improvements to being able to vary one’s teaching for the sake of keeping the subject fresh and the students interested. In total, a majority of the teachers (3 out of 4) say that they consider their students to become more motivated when they use ICT tools in their classrooms. Some claim to see direct improvements in terms of grades or other concrete benefits (increased vocabulary) and others do not. However, all of the teachers believe that ICT tools offer good ways to spark student interest and make them want to use the available technology to achieve better results in their school work.

Next, let us take a look at what the students had to say about learning, motivation, and the use of ICT tools. First in this section, the students were asked if they feel more motivated or interested during lessons where the teacher uses technology. The answers are shown in Table 1 below.
Table 1. Results for the question “Do you feel more motivated or interested during lessons where the teacher uses technology?”

<table>
<thead>
<tr>
<th>Options</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, to a large extent</td>
<td>29</td>
<td>43</td>
</tr>
<tr>
<td>Yes, to some extent</td>
<td>31</td>
<td>46</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>68</td>
<td>101</td>
</tr>
</tbody>
</table>

A clear majority (87 %) of the 68 students state that they do indeed become more interested, motivated, and therefore (as theorized by both Svensson (2008) and Estling Vannestål (2009) above) prone to learn when their teacher uses some form of technology. But there is of course a difference between motivation and actual learning, and therefore we shall now take a look at how the students think that technology, more specifically the computer, affects their actual learning. Table 2 provides the figures for this question.

Table 2. Results for the question “Do you think that the computer facilitates your learning of English?”

<table>
<thead>
<tr>
<th>Options</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, to a large extent</td>
<td>25</td>
<td>36</td>
</tr>
<tr>
<td>Yes, to some extent</td>
<td>38</td>
<td>54</td>
</tr>
<tr>
<td>No</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100</td>
</tr>
</tbody>
</table>

Seeing a small decrease in the “Yes to a large extent”-category followed by an increase in the “Yes, to some extent”-category as compared to the previous section, the total number of students who believe that the computer facilitates their learning of English is 90 %, in other

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3 Percentages are rounded up or down to the nearest whole number. Therefore, sometimes the tables will show 99 % or 101 % as the total.
words almost the same as the percentage of students who believe that technology gets them more motivated.

First of all, it is of course harder to be able to truthfully answer the second question than the first one. The question about interest and motivation is quite simple, but one can hardly expect all of the students to actually know if the computer facilitates their learning of English. On the other hand, after at least ten years in school, informed guesses from the students should be accurate.

Now, are these figures higher than expected? The answer is “No” regarding the first of the two questions but “Yes” regarding the second question. It could be expected that around 85% of the students would choose one of the yes-options in the first question. Nonetheless, accurate as this was, it was expected that these figures would drop to around 70% in the second question as some students would “realize” that there is a difference between motivation and actual learning. However, looking at what both Svensson (2008) and Estling Vannestål (2009) wrote in Section 2 (presented above) about the links between motivation and learning, perhaps this is not very surprising at all. Summing up section 4.3, a majority of both students (87%) and teachers (75%) alike believe that technology (and computers in particular) favors student interest/motivation, and almost nine out of ten students testify that it also facilitates their learning of English, whereas two out of four teachers agree with this.

4.4 Attitudes towards writing: by hand or on the computer?

Is it preferable to have your students write by hand or on the computer? Freya thought about the question for quite a while. In the end she answered

> I really don’t know if you can see a difference. In my experience the only thing worth noting is that students write faster on the computer, but I don’t know if that is better (than by hand). But this is very individual, some write faster by hand so it is very… hard to answer this question.

Thor points to the benefits of being able to change the layout and make various stylistic changes to make a text more fun or enjoyable. But he is also worried that it is so easy for students to take text straight from the Internet and send it in as their own, and that as a teacher he has to teach his students about plagiarism and cheating, which was not as necessary “in the old days” when students wrote using their own words. Oden, who has been teaching since the
early 80s, says that, as a rule of thumb, the students’ writing have definitely become better over the years thanks to computers and spell checks. But he also suspects that writing nowadays occur at a much more shallow level, saying that

> There is a high risk that you don’t learn anything (when writing on a computer). You know that the next time you spell “immediately” wrong, you’ll only have to tell the computer to correct it for you […] I think that spell checking programs cause students not to care that much about spelling.

So while Oden believes that a student’s work comes out as better when written on a computer, he is concerned about the learning process that goes on, or maybe rather is lost, when not writing with pen and paper. Overall however, Oden views computers as good and effective tools that definitely should be used in schools. Idun says that she regards the computer as a “marvelous tool for writing” since it easily allows her students to rewrite texts and find mistakes. She does however believe that sometimes students become a little lazy and skip the proofreading part of the writing process, which manifests itself in simple sentence structure errors.

When the students were asked if they prefer to write by hand or on the computer, they are more or less in agreement: computerized writing is preferred. Table 3 provides the details.

**Table 3. Results for the question “Do you prefer to write on the computer or by hand?”**

<table>
<thead>
<tr>
<th>Options</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer</td>
<td>52</td>
<td>80</td>
</tr>
<tr>
<td>By hand</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Either is fine</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>100</td>
</tr>
</tbody>
</table>

The most common replies as to why students prefer the computer is that they write faster on it, one can edit and erase faster, and they think that overall the end result looks better since one has more control over the graphical layout.
To sum up this section, it can be concluded that most of the teachers are somewhat ambivalent and find it hard to answer the question straight away, showing that even if the students definitely prefer to write on the computer, the teachers are more aware of its benefits and drawbacks. However, it is worth noting that none of the teachers explicitly said that they thought paper and pencil was better than writing on the computer. Based on the answers and general impressions given in the interviews, it seems as if they all see the potential value of the computer as a writing tool as being greater than its potential drawbacks.

Next, the teachers were asked whether or not they think that spell checking tools (such as the one in MS Word) helps students to find and correct more mistakes than they would have been able to find on their own. Freya works mostly with students on the IV-program (a program for students that failed to meet the minimum criteria for Swedish, English, Math, or a combination of these, in secondary school), students who already might have difficulties both with English and with writing in general. In her own experience, when her students write directly on the computer there will be a lot of both red and green markings (misspellings and grammatically incorrect constructions in MS Word) and she therefore feels that her students more often than not might be overwhelmed by all the colors. For Freya and her students, she has found that the best course of action is if her students first write on paper so that she can make remarks

where I feel that the student is able to correct him/herself and otherwise I’ll make comments on how they should go about finding out what is wrong, by writing that a verb is in the wrong tense for example.

She is however quick to add that nowadays the students can just as well send in their texts on the computer and then she can make comments and markings in the document and e-mail it back to them. But in conclusion, Freya does not really believe that her students are helped that much by spell checking tools, simply because they “work too well” and mark up too large a part of the text. Freya’s students are instead in need of a human (the teacher) to look over and improve their texts. Thor believes that students tend to become a little lazy when having spell checking tools at their disposal and says that as a teacher you have to
work more with the whole writing process when using computers to get the students to understand the importance of reading what they have written. Sometimes mistakes are made that the computer doesn’t catch [...] I usually say 'you can’t make completely obvious mistakes when you have access to spell checks'.

He goes on:

Sometimes you wonder how they can make such elementary mistakes, when it is marked up and everything. I do believe that students tend to get lazy and not correct as much as they should be able to when they get all this help.

Oden says that he usually spends some time at the beginning of each new school year trying to teach his students not to misspell some of the more complex everyday words, (“which doesn’t always work, ‘which’ can still be spelt with a t or without the initial h even if you’re a senior with an A.”) Even though this might not always work, Oden is not sure that spell checking tools do either. According to him, students tend to get a bit lazy and will still miss mistakes that are not marked up by the computer. Despite this, combined with what he said above about a more shallow writing style and the fact that assignments look better today than 30 years ago, Oden does believe that students find more mistakes with spell checking tools, but perhaps regrets that they are needed at all. Idun maintains that the computer is an excellent tool for writing and definitely believes that her students find it easier to correct their texts on a computer as compared to by hand. As opposed to the others, Idun does not really see any of the potential problems, but she prefers to see the opportunities to a larger extent.

Next, students were asked the same question. The figures in Table 4 show the results.
Table 4. Results for the question “Do you experience that Word (or its equivalent) helps you to correct more mistakes than you would have found on your own?”

<table>
<thead>
<tr>
<th>Options</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>46</td>
<td>74</td>
</tr>
<tr>
<td>No</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Don’t know</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>100</td>
</tr>
</tbody>
</table>

Almost 75% of the students believe that spell checking helps them correct more mistakes than they would have done themselves if they would have simply proofread their own work.

Concluding this question, it is not hard to see why students would think that spell checking helps. A mentality such as “If I did not find any errors the first time around when I wrote it, why would I find any now? I will just let the computer do it for me” is easy to imagine. Proof reading might also be regarded as the dullest work one can do when working on a text.

However, the teachers largely agree that what will be called “the human factor” is very important in order for student texts to work out well, both the student factor and the teacher factor. Sofkova Hasemi (2007:221) sums it up nicely with this quote (written after doing a study where students corrected texts both manually and on the computer): “Some mistakes are found when the students themselves search the text manually, but then they miss them on the computer since they are not marked up. It is evident that the attention of the student is placed first and foremost on what the computer has marked” (my translation). It might also be worth mentioning that none of the teachers that were interviewed thought that a student’s possible problems (such as dyslexia) might be missed just because students nowadays write a lot on computers and thereby get a lot of extra help from the computer with spelling. “That risk is non-existent” as Freya put it. All four teachers said that since English is such a communicative subject with both a lot of writing and speaking in so many different situations there are no students whose problems are missed. “You will definitely notice if a student has problems in other situations than when they are in front of the computer” as Thor put it.

However, an interesting question is raised: suppose that “technological writing” will increase in schools over the next few years, up to the point where all writing is performed on a
computer, tablet, or some other device. Will this make it harder for teachers to spot students with problems? This is a tough question to answer, but if the teachers participating in this thesis are positive that they do not miss any students today, hopefully future technology will allow future teachers to be just as effective.

4.5 Students’ opinions on the use of ICT in the English subject: not enough or too much?

The most interesting find in this subcategory turned out to be the difference in opinions regarding the students’ own usage of technology and their teachers’ usage. As Table 5 below shows, 84 % of the students state that they would like to use computers more than they are currently doing.

Table 5. Results for the question “Would you like to use the computer more often during English class?”

<table>
<thead>
<tr>
<th>Options</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, to a large extent</td>
<td>21</td>
<td>31</td>
</tr>
<tr>
<td>Yes, to some extent</td>
<td>35</td>
<td>52</td>
</tr>
<tr>
<td>No</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>67</td>
<td>99</td>
</tr>
</tbody>
</table>

At the same time, 57 % of the students state that they think that their teacher is using enough technology and only 9 % state that they think their teacher should use more technology. The remaining 34 % chose the “No opinion”-option. Table 6 summarizes these figures.
Table 6. Results for the question “Do you think that your teacher is using enough technology?”

<table>
<thead>
<tr>
<th>Options</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>37</td>
<td>57</td>
</tr>
<tr>
<td>No opinion</td>
<td>22</td>
<td>34</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>100</td>
</tr>
</tbody>
</table>

As one can see, the results in this subsection almost mirror the ones in subsection 4.4 that concerned student motivation when the teacher uses technology and student learning when using computers. The conclusions that we can draw from these results are two: i) The students feel more motivated when their teachers use technology in the classroom, and they also feel that their teachers have found a suitable level in their technology usage, not too little but not too much either. ii) While the answers given in Table 6 are largely positive, meaning that the teachers keep the use of technology on a suitable level, the students would like to use computers more themselves when working with various assignments. Perhaps the correlation between Tables 4 and 5 is not all that surprising. A majority of the students feel that learning English becomes easier when aided by a computer and thus they want to use the computer more often. Could it be that while the teachers are good at using technology themselves, they are not as good at letting their students use it? Perhaps, the questionnaires and interviews do not answer this question. Another probable explanation however might be that the students are hindered by lack of funds, availability etc. When Freya was asked the question “How do you think the students feel about working with ICT?” she answered that

I think they want even more [technology]. And what I think that you’ll find the students to be critical about when handing out your questionnaire is that they don’t have the access that they would like to have [to computers] […] obviously we would like to have “one-to-one” (meaning one computer for each student) but as of now we unfortunately don’t.
Worth noting is that while a clear majority (90%) of the students believe that they are aided in learning English when using a computer (see Table 2), this study can neither prove nor disprove that this is the case. However, previous research (see Svensson (2008) and Estling Vannestål (2009) above) suggests that the use of ICT tools may actually not play an important role in learning at all. It is of course interesting to see what the students think about these questions (as that is part of this thesis), and perhaps they should be allowed greater access to current technology, but only further research can prove what course of action is the right one to take regarding technology and learning.

4.6 Incorporation of the four pillars in the investigated schools

The teachers and students use ICT as an automatic tool when utilizing web pages such as www.glosboken.se and the supplemental CD that is available together with the course book. For the intended purpose of teaching students rather basic language components (such as new glossaries or different verb endings), the computer works magnificently as an automaton. Also, letting a machine perform this kind of easy work allows the teacher to concentrate on harder aspects of language teaching, having more time to plan and carry out meaningful lessons (Svensson, 2008:51). It is almost easier to say when the students do not use IT as the tool that is described in the second pillar. A lot of their writing is done on computers, both in class and when working on assignments at home. Presentations are performed with Powerpoint as a back drop, and they constantly search the Internet for information. Svensson (2008:53) writes that “[the computer] is a machine without any given area of usage […] therefore it is a machine whose applications can be developed into infinity” (my translation). Students and teachers alike are constantly finding new uses for their computers (a few years ago blogging would not have been thought of as a valid means of writing a school project and it seems as though more and more teachers create their own websites or class/subject wiki’s to aid their students). As stated in Section 2, the possibilities for developing IT as a tool are limitless and students and teachers alike continue to develop this tool and find new uses for it. IT as an arena does not seem to be used by either the teachers or the students that participated in this study. Some of the students answered that they chat in their spare time, but not for school related purposes. Perhaps this is an area to expand upon. Students from different countries could for example meet in a virtual classroom and use their English to talk to each other, making English the communicative subject that it should be. The fourth pillar, concerning IT as a medium, is used to various extents by all of the teachers. They post
schedule updates, email homework to sick students, log absences, notify their students of classroom changes and send out test results to name a few applications.

In conclusion, looking at the four different ways that one can use IT in schools according to Svensson (2008), one finds that most of the applications that he describes are found in the schools investigated in this thesis. This goes to show that the participating teachers (and students) are up-to-date with current technology and its applications. If the study for example only had found evidence of the first pillar, the teaching and learning of English would not have been very modern at all.

5. Conclusion

The aim of this thesis was to find out whether or not teachers and students found ICT tools helpful, and the aim has definitely been reached. Looking at the first research question, concerning what the teachers think about using ICT, one finds that the teachers believe that ICT helps to create variation, both for their own and the students’ sake, it gets the students more motivated, and to some extent it helps students to directly improve their results. The second research question concerned what the students thought about using ICT. The students largely believed that they become more motivated when using computers, and to a larger extent than the teachers they believed that their results and learning is increased when working with computers. When reading the opening lines of this paragraph, one can see that research questions 3 a and 4 (regarding teachers‘ and students’ views on the usefulness of ICT tools in increasing student proficiency in English) also have been answered. Some of the teachers believe that ICT tools might help to a certain extent, whereas a majority of the students are confident that ICT tools increase their proficiency in the English language. In order to answer research question 3 b, a question that asked the teachers how they viewed ICT tools when it came to helping weaker students, it is concluded that the teachers believe that ICT offers some great tools for helping weaker students, with everything from help with writing to audile aids when reading to offering useful exercises concerning just about anything within the English subject. Finally, research question 5 looked at how the four pillars were used in the schools and it was concluded that all of the pillars except for the third one (IT as an arena) were used to a large extent, helping both teachers and students alike with a variety of different tasks.

Furthermore, the students are more prone to see technology as something that is unequivocally good, whereas the teachers are more aware of the drawbacks that come with it.
Despite this, both students and teachers alike definitely regard technology and the tools that it provides as having a positive effect on their work/performance. Simply put, technology in schools is not something that is going to go away, and neither students nor teachers want it to. They would rather see greater implementations and training on the new innovations that are coming, as they regard these innovations as great aids and working tools.

The strength of the method used lies in the fact that the interviews give a very deep and thought out picture of what the teachers really think. One gets close, and gets good answers because of it, as compared to a questionnaire, or an interview via phone or e-mail. The author does however feel that the questionnaire was a good choice for the students, better than to for example interview four students to go with the four teachers. Here, the strength lay in numbers in order to get a bigger picture. But since the information needed not necessarily be as deep as the information given by the teachers, the questionnaire was chosen instead of the interview. As for weaknesses, the sample in the material could have been bigger. For a study of this kind, the numbers are quite decent, but the results would obviously be more reliable if they included, say, ten teachers and two hundred students. Therefore it is also hard to generalize the findings beyond the schools concerned, and one cannot for example say that the results are accurate for the whole of Sweden.

Possible further research could include interviews with weaker students, to get a more in-depth look at how they experience the pros and cons of technology. Seeing as this was the original idea, that would be most interesting. Another interesting aspect would be to look at how or if students use any technology at home for the purpose of learning English. If so, do they use something that teachers do not? It would also be interesting to examine what methods teachers use to “find” students with problems. If they are so sure that they do not let a single student fall through the net, examining those methods and ways to improve them would be exciting. Furthermore, in this study ICT is seen as one complete unit. Narrowing the scope and examining different aspects (for example the different pillars) of ICT would be interesting.

People that might find this study useful include school officials and teachers, who want to find out how their school is doing in comparison to others. They might also, to a small extent, find ideas and inspiration for what kind of tools they can start using themselves. The study could also be useful for other researchers within the school/ICT area, to draw material from.
References

Primary sources

Interview and questionnaire data

Secondary sources


Appendix 1. The questions that were used during the teacher interviews (translated from Swedish to English)

**Background knowledge:**

- How long have you worked as a teacher?
- At what level do you teach?
- How old are you?

**Questions about students (with difficulties in English):**

- How many students do you teach in your average class?
- How many of these have trouble learning English?
- What types of difficulties are the most common?
- What do you think these difficulties can be attributed to?
- In what ways do you/the school help these students to achieve better results? In what ways do you help students with reading/writing difficulties?
- Do you experience that ICT works “extra well” for these students?

**Questions regarding the use of ICT in teaching English:**

- What do you think of the teachers’ access to computers in the classrooms?
- What do you think of the students’ access to computers in the classrooms?
- How often do you use ICT (particularly the computer and Internet) as aids in your teaching?
- In what ways do you use ICT as an aid in your teaching?
• What sources do you use? For example different software (like photo story, ppt), web pages (what pages?), other?

• What are your thoughts on working with ICT when teaching? Does it make your job more fun/easier/harder?

• Did you experience any difficulties when you started working with ICT (technology wise, educational wise or other)?

• How do you judge ICT’s effect on students when it comes to improving their knowledge of English? Can you see any concrete results such as grade improvement or a higher motivation among the students?

• Do you think that students write better on a computer than by hand?

• Do you experience that students become lazy when using spell checking tools and that they only correct what the computer marks up for them?

• Follow-up question: What about weak students, any differences between computerized writing and regular writing?

• Follow-up question: Do you think that technology in general is beneficial for weaker students? Or does technology make it harder for them?

• Do you think that a student’s “real” problems might slip through the net when using spell checking tools and such?

• Have you ever let you students write a blog, post on a forum or send an email to train them in writing for different situations?

• Have you recorded any sound/video clips of your own and used them in your teaching?

• Have you ever distributed a test/homework/evaluations etc. online?

• Do you regularly communicate with your students via mail?
• Are you afraid of using (certain aspects of) ICT because you don’t want to seem ignorant in front of your students? Which aspects?

• Do you always check the material that you are going to use before using it?

• Have you ever felt a pressure from principal/politicians/co-workers that you have to use a certain degree of ICT in your teaching?

• How do you think that the students feel about working with ICT?
Appendix 2. The questionnaire that was handed out to the students (translated from Swedish to English)

Circle the alternative that you believe fits best. On some questions you may circle as many alternatives as you like.

I am
Girl
Boy

1. Do you like English?
   Yes, a lot
   Yes, a little
   No

2. Do you think that English is a hard subject to learn?
   Yes, very much so
   Yes, a little
   No

3. Which of these options is the hardest one (please only circle one option)?
   Understanding when someone talks
   Talking
   Reading
   Writing
   Grammar
4. Which of these options is the most fun (please only circle one option)?

- Listening when someone talks
- Talking
- Reading
- Writing
- Grammar

5. Do you think that it is important to know English?

- Yes, very much so
- Yes, a little
- No

If yes, why?

6. Do you think that your knowledge of English will prove useful in the future?

- Yes, very much so
- Yes, a little
- No

7. Do you prefer to write on the computer or by hand? Why?
8. Do you experience that Word (or its equivalent) helps you to find more mistakes than you would have found on your own?

Yes
No’
Don’t Know

10. Do you believe that programs such as Powerpoint, Photostory, Excel etc. are useful during presentations?

Yes, a lot
Yes, a little
No

11. Is there a computer within your household?

Yes
No

12. Do you ever use English when you sit in front of the computer in your spare time?

Yes, a lot
Yes, a little
No

13. For what computer based activities do you use your English?

Write pen pals
Chat
Play computer games
Listen to/read texts
Watch movies
Other-what?
14. Do you ever use the computer to actively learn English at home?

Yes, often
Yes, sometimes
No

15. What types of computer based activities do you engage in to learn English in your spare time?

Seek out information
Learn glossaries
Perform grammatical exercises
Translating (look up words or phrases online)
Read material from the school/the teacher
Write essays
Write: email, blogs, chat, etc.
Listen to: news, music, interviews, etc.
Watch movies
Play games
Other-what?

16. What software/web pages do you think is best in order to learn English?

17. Do you use the computer or other technological aids to learn English in school?

Yes, often
Yes, sometimes
No
18. What types of computer based activities do you engage in to learn English in school?
Seek out information
Learn glossaries
Perform grammatical exercises
Translating (look up words or phrases online)
Read material from the school/the teacher
Write essays
Write: emai, blogs, chat, etc.
Listen to: news, music, interviews, etc.
Watch movies
Play games
Other-what?

19. Do you like using the computer when learning English?
Yes, a lot
Yes, a little
No

20. Would you like to use the computer more often when learning English?
Yes, a lot more often
Yes, a little more often
No

21. Do you feel more motivated in English classes where the teacher uses a lot of technology?
Yes, a lot
Yes, a little
No
22. Do you experience that the computer facilitates your learning of English?
Yes, a lot
Yes, a little
No

23. What types of activities do you find the most fun/useful?
Exchanging emails
Listening to interviews (and answering questions)
Reading texts and answering questions
Completing grammatical exercises
Learn glossaries
Translate
Seek out information
Play (educational) games
Watch (educational) games
Write in English

24. What would you like to use the computer for in English class?

25. Do you think that your teacher uses enough technology? If not, what would you like to see more of?
Yes
No
No comment