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**The influence of ICT on learners'
motivation towards learning English**

– IKT's påverkan av elevers motivation till att lära sig engelska

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Abstract

This degree project aims to investigate if ICT has any influence as motivation for English foreign language learners. Furthermore, this study is to investigate in what way the motivation is affected, if it is affected at all. Today, computers and other digital tools such as tablets influence the society greatly and are a part of the learners' everyday life. The data in this study is analyzed and collected through survey questionnaires. The participants are 45 third graders from a Swedish elementary school.

Many students today have a great interest in computers and tablets since it is a part of their daily life. Andersson (2003) states that many are bored since the Swedish school still hold to the old traditions. Hence, this project aims to investigate if incorporating ICT in the EFL classroom can increase students' motivation. The conclusion of this study is that the majority of students are affected by ICT in a positive way. Also, the collected data showed that students' motivation increased because the lessons got more fun and they felt happier when incorporating ICT in the EFL classroom.

Keywords: ICT, EFL, L2, IT, second and foreign language learning, motivation, tablet, computer

Preface

Our individual contribution to the degree project

We both believe that it is a necessity to make it clear that we have provided an even individual contribution in all the different parts of this degree project. It has been planned, prepared and completed by us two together. Hereby we acknowledge that both authors have contributed equally to this degree project.

The above mentioned statement is authenticated by us both by our signatures.

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1. Introduction

“Motivation undoubtedly is the key in any learning” (Frydrochov Klimova & Poulouva 2014, p.53). Therefore, it is important to motivate students for language learning in English. The English language surrounds many people, and we live in a world that is influenced by technology. Students today have an interest in using information and communication devices including computers and tablets for various reasons. It is a parcel of everyday life, and for young students “ICT are as natural as breathing” (Frydrochov Klimova & Poulouva 2014, p.53).

According to the Swedish Curriculum (Skolverket, 2011), teaching should encourage students into developing an interest in language learning (p. 32). ICT is something that is a part of students’ life since “young children are surrounded by technology at home, in their community, and increasingly, in early childhood education programs” (Blagojevic, Chevalier, MacIsaac, Hitchcock & Frechette 2010, p.1). Coyle, Hood & Marsh (2010) also discuss that educational practices should adapt to the cultural demands of those involved; the learners, teachers and communities. This could be done by incorporating information and communication technologies such as computers and tablets to increase students’ motivation in the EFL classroom. Since these past researches show that learners’ interests should be a part of the classroom, incorporating ICT should therefore have an impact on learners’ motivation.

An article in *Pedagogiska magasinet* written by Bengt-Erik Andersson (2003) states that old traditions of teaching and structure of lessons founded several hundred years ago, still linger on in Swedish schools today. The Swedish schools have not been able to keep up with the changes in the world, despite the fact that society has undergone incredible changes in a very short time in terms of technology development in this modern age. In summary, from Andersson’s article (2003), the students have expressed dislike of the school and described it as boring, rarely containing anything of interest, and it was difficult to get their own interests into school. They also said that it was not fun at school and very little of what they did in school interests them (Andersson, 2003). Therefore, we have chosen to investigate if bringing the students’ interests of ICT in the classrooms can affect the students’ motivation in a positive way.

The intention of this study is to investigate whether ICT has any effects on students' motivation in the EFL classroom, and in what way, if at all, is motivation affected. The ICT tools used in this study is computers and tablets, since those are the two main technology tools used in a classroom. The study should provide detailed findings about the connection between ICT and motivation, and in light of those findings, discuss and draw conclusions connected to the studies in the literature review. The focus lies on the learners and not on the teachers. The participants of this study are EFL learners in schoolyear 3, and the quantitative data provided is collected from survey questionnaires answered by the learners. Evidence has been gathered from studies conducted on ICT and motivation provided in the literature review.

The English language along with information and communication devises is something that probably everyone will use and have use for during their entire life time. Hence, it is very important to learn English in school and incorporating the students' interests of ICT in order to increase motivation.

To summarize, there is a challenge in the English second language classrooms in Sweden today with incorporating the students' interests to motivate them in their learning. Today, we live in a world heavily influenced by technology, and according to SCB (Statistiska centralbyrån), there were 7 767 400 people in the age 16 to 85 in Sweden year 2015 that had access to a computer at home (SCB, 2015, p. 25). As a conclusion, the majority of the population in Sweden has computers at home and children have learned to handle computers and IT very well. Considering students' interests of using information and communication technology devises such as computers and tablets, the Swedish curriculum (Skolverket 2011), stresses the importance of students having access to a variety of learning tools (p. 14) present in our modern age, and their interests should influence the teaching and lessons (p. 32). Therefore, it might be a good idea to integrate these kinds of ICT devises in the classroom since it may help motivate the learners in the ESL classroom.

2. Purpose and research question

ICT is a part of our everyday life and using ICT devices such as computers and tablets in the classroom motivate learners in the English language classroom. The use of ICT in the classroom is becoming more and more convenient and there are many different ways a teacher can use it as a pedagogical tool. According to Skolverket (2011), teaching should encourage students into developing an interest in language learning and they should be given the opportunity to develop their skills in relating content to their own experiences and interests (p. 32). This could be done by incorporating information and communication technologies in the classroom to increase students' motivation in the ESL classroom.

Considering that research studies (mentioned in the previous chapter and later in the literature review) have shown that ICT can have positive effect on and motivation, this degree project aims to investigate if ICT has any potential impact on the learners' motivation in the English language classroom and if so, in what way. The reason for our interest in ICT and motivation is not only previous research, but the idea of making English lessons more fun through using the learners' interests in technology.

Research question:

1. Is motivation affected by ICT in the EFL classroom?
2. In what way, if at all, is the motivation affected?

The purpose is, therefore, to find out if ICT has any potential impact on learners' motivation in the EFL classroom. This research is addressed to teachers of English as a foreign language and those concerned with the use of ICT for learning and teaching purposes in the earlier school years.

3. Literature review

The main focus of this study is if students' motivation can be affected through the use of ICT in the EFL classroom. There are two main concepts of this paper, and that is motivation and ICT. Based on our research question and purpose, it is central to understand these concepts in order to analyze the outcome of our study and being able to answer the research questions. Therefore, this literature review aims to include the concepts of ICT and motivation based on theories and studies conducted on the ICT effects on learners' motivation. Firstly, we describe a 'Motivation' section regarding studies based on motivation among students. Secondly, we describe an 'ICT' section with studies based on ICT conducted with students. Finally, we describe studies that investigate the impact ICT has on motivation.

3.1 Motivation

Chuan and Dörnyei (2007), claim that motivation is one major key factor in determining the success or failure in foreign language learning. Therefore, the aspects of motivation should be seen as one of the more important elements to consider when conducting studies on second or foreign language motivation (p.1). Dörnyei (2001) cites an e-mail from a friend saying "The more teaching I observe (well over 500 lessons, by dozens of different teachers, over the last ten years, I recently calculated) the more strongly convinced I become that Motivation is What Matters" (Dörnyei 2001, p.2). Undeniably, motivation is important considering that the students with high motivation can achieve more learning in the specific foreign language than brighter students with lack of motivation (Chuan & Dörnyei 2007, p.1).

In the literature we have looked at, we found that most research conducted on second language and motivation aims to establish different methods and approaches to increase motivation. Dörnyei (2001) lists many concrete attributes of motivational concepts in his book *Motivational Strategies in the Language Classroom*. Dörnyei (2001) claims that there is no such thing as 'motivation' (p.1). This is only an abstract, hypothetical concept used for explaining why people think and behave the way they do. Obviously in this sense, 'motivation' contains a whole range of different reasons – from financial reasons to idealistic

beliefs. Motivation is an umbrella term and can come across as vague, but Dörnyei (2001) believes that “when we say a certain student is ‘motivated’, most teachers and parents can imagine what we mean – a keen, committed and enthusiastic learners” (Dörnyei 2001, p.1). The term ‘motivation’ highlights one of the basic aspects of the human mind. It relates to three different functions. It relates to ‘affective’ functions which tell what one feels, ‘conative’ functions which tell what one wants and desires, in contrast to ‘cognitive’ functions which tell what one rationally thinks (Dörnyei 2001, p.2). Dörnyei (2001) argues that students ‘keenness’, ‘cleverness’ and ‘temperament’ are all obvious features when it comes to teachers describing a student (p.2).

Dörnyei (2001) has established the most well-known contemporary motivation theories in psychology. Psychologists are trying to reduce the components of human behavior to identify key components to each sub-theory of motivation (p. 9). The three most relevant theories to this study are the Social motivation theory, the Self-efficacy theory and the Theory of planned behaviour. The first mentioned theory’s main motivational components are that most parts of human motivation come from a sociocultural context in contrast of the individual one – external influences. The second theory is the belief a person has towards their ability to complete a task or reach a goal. The third theory’s main motivational components are attitude features. The attitudes towards something influence the responses given towards a task (Dörnyei 2001, p.10). Furthermore, Pintrich, Smith, Garcia and McKeachie (1991) have found three major motivational components:

- a) an expectation component, related to students' beliefs about their ability to perform a task; b) a value component, focused on the students' reasons for becoming engaged in academic tasks, in which students' goals are included, the importance they attribute to that task, and the interest it arouses in them, and c) an affective component, referring to the emotional reactions of the students when facing tasks, operationalized in terms of how they respond to the anxiety produced by exams. (Pintrich et al. 1991, p. 53)

Similar to Dörnyei (2001) and Pintrich, Smith, Garcia and McKeachie (1991), Williams and Burden (1997) have established a framework of second language motivation. Below we list internal and external ‘motivational factors’ that are of relevance to this study based on Burdens (1997) framework:

Internal factors

- Arousal of curiosity

- Personal relevance, interests
- Feelings of competence
- self-efficacy
- confidence
- anxiety, fear
- attitudes towards the target language
- attitudes towards the teacher

External factors

- attitudes from parents
- attitudes from peers
- mediated learning experiences
- comfort (as cited in Dörnyei 2001, p.20).

These internal and external factors can make a difference in the students' motivation towards the topic that is to be learnt. All of these attributes can be connected to the motivational aspects of including ICT in the EFL classroom.

Dörnyei (2001) furthermore explains that there are some crucial aspects of motivation, which are in coherence with William and Burden's (1997) framework for second language motivation. Confidence, self-esteem, self-efficacy and anxiety are aspects that Dörnyei (2001) imply are often being ignored in the classroom. However, these aspects and issues are all connected to motivation in the classroom, and students need to believe in themselves in order for them to be motivated and completing a task (Dörnyei 2001, p. 86). Dörnyei (2001) explains that these aspects are similar to the foundations of buildings; buildings need a firm foundation in order to continue building walls. He further indicates that if the students are not secure enough, "they will be unable to 'bloom' as learners" (p. 87).

Dörnyei (2001) explains that encouraging cooperation between students, increases the students' motivation. Working together with peers, Dörnyei claims the students prosper in self-esteem and self-confidence, and they become more positive in their attitudes towards the tasks presented. He further confirms that collaboration between peers is one of the most successful motivational attributes in history of educational research (p.100). There are several aspects of why cooperation has favourable impacts on motivation among students. For example, cooperation with peers promotes cohesiveness, feelings of solidarity and comradely supportiveness. Cooperative teamwork also promotes a higher expectancy of success, since

the students feel they can count on their classmate. These workings situations also generate less anxiety and stress among the students than other learning situations in the classroom (Dörnyei 2001, pp. 100-101).

Stephen Krashen (1983) has developed the affective filter hypothesis that is a part of the Input hypothesis which is a group of five hypotheses. The affective filter hypothesis demonstrates that there are two different ways of developing skills in a foreign language: by acquisition or by learning. Krashen (1983) argue that language acquisition is a natural process of developing skills in a language, and this suggests that students “are not usually aware of the fact that they are acquiring language, but are only aware of the fact that they are using the language for communication” (Krashen 1983, p. 10). To acquire a language by learning is the opposite of language acquisition, and he believes that language acquisition is way more meaningful than learning a language. Krashen (1983) claim that learning is a conscious process of learning, since the learner is aware of himself learning a language (p. 10).

3.2 ICT

ICT is an abbreviation of Information and Communication Technology. ICT is a wide concept, however, the focus on ICT in this study is tools that can be located and used in a classroom, such as computers and tablets. According to the National Encyclopedia (2013), Communication got included in the concept of IT during the late 1990s, the new name then became ICT and ICT is about the use of computers in a teaching context (National Encyclopedia, 2013). In this chapter the focus is to provide research on ICT in Swedish schools, from different researchers.

A summary of Söderlund’s (2000) PhD, is that a large group of teachers do not include ICT in their teaching. Gu (2011) concluded some critical issues when incorporating ICT in the Swedish education. According to this research, the main reason for teachers not including ICT in their teaching is a result of it bringing new demands on the teachers. These new demands challenge the teachers, and some may have difficulties with these changes the new requirements demand (Gu, 2011). Based on Gu’s research, there are some teachers that still will not make use of ICT despite everything that said in the Swedish curriculum.

According to the Swedish curriculum (2011), the core content of year 1-3 says that students should be given the opportunity to take responsibility for their learning (p. 224). The curriculum also shows that students should be able to write on a computer and make use of pictures and other aids to support presentations. The students should also interact with texts that combine words and images, such as film, interactive games and web texts. They should also be able to search information on websites (Skolverket 2011, p.224). Svensson (2008) is also one researcher who argues that ICT should be integrated with school subjects, because the Internet and computers today are widely used by children and young people. Therefore, Svensson (2008) believes it is important incorporate such knowledge in teaching (Svensson, 2008).

According to Heemskerk, Volman, Admiraal and ten Dam (2011), “Information and communication technology (ICT) in education is assumed to contribute to educational equality due to its motivating effects on students and the opportunities it offers for facilitating differentiation and individualisation” (p. 1). Another researcher, Lindh (1997), believes that ICT in school promotes individualization. Lindh (1997) has conducted a study where he examined whether the use of computers resulted in any positive effects on learning. The focus was on how a more individualized work situation can be created by using computers. Lindh’s study indicates that computers can promote an increasing individualization.

Jedekog (1998) conducted a study in the Nordic countries, and she stresses that the use of computers in teaching will provide varied and exciting lessons. Jedekog (1993) also carried out a study in 1993 where she examined the experiences that teachers and students have when it comes to computer support in teaching. The main result from this study is that the computer has a positive impact on the majority of the students, because it creates curiosity, motivation, and an interest to deepen the knowledge in the current topic. It also shows that students in this study did not have to compare themselves with each other. Furthermore, incorporating computers makes it possible to individualize school work, which in turn gives the teacher more time for each student in need when the other students are working independently at the computer. A study on ICT from Jedekog (1998) shows that the main result is in cohesion with her other studies. The study’s result showed that incorporating computers in the classroom allows for more independent school work.

3.3 ICT and motivation

In 2004, Passey and Rogers, together with Machell and McHugh commissioned a study to investigate the motivational effect of ICT on students and assess the impact ICT have on students' interest in and attitudes towards school work. The study aims to identify good practical examples of ways ICT effectively improves students' motivation (Passey et.al 2004, p.9), and involved quantitative data collected during the school year of 2003. The main methods used for collecting data were interviews, observations and questionnaires. Motivational impacts on students were obtained from questionnaires and the analysis indicated some key findings from this study. These findings show that students use of ICT led to positive motivational outcomes, and were most frequently found when ICT was used to support engagement. Passey et.al (2004) indicated that ethnic background appeared to be impartial to motivation, but socio-economic background had an impact in terms of limited access to ICT tools including computers, either at home or in schools. The report from the teachers in this study indicated that they perceived positive impact on students' interests and attitudes towards schoolwork when including ICT in the classrooms.

Frydrychova Klimova and Poulova (2014) released a paper about two studies conducted on ICT as a motivational tool in the learning of learning of foreign languages. This article focuses on EFL and the role ICT has on students' motivation. Frydrychova Klimova and Poulova (2014) explain that teachers should "make learning stimulating and enjoyable by breaking the monotony of classroom events", and "increasing the attractiveness of tasks", but also "administer tasks in a motivating way" and "Increase student motivation by promoting cooperation among the learners" (Frydrychova Klimova & Poulova 2014, p.53). Frydrychova Klimova and Poulova (2014) further explain that these conditions can be achieved by incorporating ICT in the classroom and the results of this can therefore lead to more independent and personalized learning, but also more collaborative and interactive. The teaching can also become more varied, dynamic and matching more students' immediate needs (p. 53).

In Frydrychova Klimova and Poulova's (2014) study, they explain that all teachers except one can see that their students' enjoys working with ICT tools in the classroom since they can the follow benefits of incorporating ICT. Students are more active and believe the lessons are

more interesting and they also think the lessons are more varied in the teaching and they get more motivated (p. 54). Another researcher conducted a study on secondary education students. Jackie Bullock's (2001) study is about English as a second language and technology-integrated strategies. It aims to evaluate the impact of using ICT upon student motivation and attainment in English.

Bullock (2001) explains that students have been more enthusiastic towards group work, and the teachers interviewed have seen improvements on the students' motivation (Bullock 2001, p.2). The main findings from Bullock's (2001) study are that incorporating ICT in the teaching leads to group work, but it also enabled students to work more independently, which enhances the students enjoyment in the tasks presented (p. 2). Furthermore, Bullock (2001) noticed improvement in motivation in some male students that "often is a little reluctant" towards writing in the English subject (p. 4). There are some disadvantages of using ICT, and the main components were the quality of equipment and technical problems which had led to reduced enthusiasm and motivation towards a task (Bullock 2001, p.5).

3.4 Summary

In summary, motivation is related to one of the most basic aspects of the human mind, and Dörnyei (2001) argues that most teachers and researchers would agree that it has a very important role to determine success or failure in any learning situation (p. 2). Reasons for motivation varies from financial to idealistic beliefs and these reasons include both internal factors with personal relevance, interests or anxiety, and external factors which could be the impact of parents' attitudes. The use of ICT is expressed in the curriculum, although some teachers are not incorporating ICT because they believe it is challenging too for them. However, studies conducted of researchers, describe several positive outcomes of including ICT in the classroom. These outcomes indicate that ICT promotes individualization of schoolwork, curiosity, motivation and an interest to deepen the knowledge in the current topic. The studies conducted on both ICT and motivation show several positive effects ICT has on motivation, and a conclusion is that students show enthusiasm towards working with ICT. Therefore, teachers should incorporate ICT since it provides independent and personalized learning, but also a more collaborative and interactive learning.

Many children spend a lot of time in front of computers or tablets and therefore we believe that it is a good idea to integrate such items in the classroom. This is coherent with what you can read in the curriculum in the syllabus for English: “In order to deal with spoken language and texts, pupils should be given the opportunity to develop their skills in relating content to their own experiences, living conditions and interests” (Skolverket, 2011 p. 32). Since it says that the students should be given the opportunity to develop their skills in relating content to their own interests, we believe that computers, tablets and such should be a part of the teaching. Our thesis is about the influence of ICT on learners’ motivation towards learning English. We will test our thesis by doing a quantitative data collection from our surveys. From our results we will verify, discuss and draw conclusions. Can ICT have positive effects on the students motivation, and if that is the case, in what way.

Research on ICT and motivation thus far has primarily investigated older learners. These studies typically make use of both surveys and interviews, mostly done with teachers. This study addresses a gap in age by using younger learners in the age of 8-9. Therefore, we believe that our study is very relevant since the study include students and not teachers. We think that it is equally important to know the effect ICT has on motivation when it comes to young learners as well as on older learners. To achieve this we use survey questionnaires where 45 different learners in the age 8-9 participated in order to collect our empirical data. This study can possibly contribute to increased knowledge and understanding about the subject, and about how students' motivation will be influenced with the use of ICT in teaching. This study investigate the idea of the learners themselves believe that ICT will affect their motivation. We have chosen not to address teachers' attitudes towards ICT.

4. Methodology

In this section, we present the methodological considerations for this study. These include the development of survey questionnaire, the procedure and a presentation of the participants. This is followed by ethical consideration, and how the data was analysed and collected.

4.1 Mixed methods research

Stukát (2005) argues that a study could not be neither pure quantitative nor qualitative, but something in between with both qualitative and quantitative features (p. 35). He further argues that the two approaches can complement each other, and using different ways in data collecting and the analysis can be profitable to obtain more authentic research and more realistic interpretations (Stukát 2005, p. 34). Combining different components of qualitative and quantitative research is something called 'Mixed methods research' and can be integrated into a single study (Dörnyei 2007, p. 168). Over the past 15 years, mixed methods research has been increasingly seen as a third approach in research methodology. Dörnyei (2007) explain that previously, it was more common to use either quantitative or qualitative research, not a combination of the two (p. 42).

Dörnyei (2007) describes that mixed methods research is to be defined as some sort of a combination of qualitative and quantitative methods within a single research project. Since the use of mixed methods research is becoming more popular, Dörnyei (2007) presents several arguments about the value of mixing methods. The most important one described is increasing the strengths while eliminating the weaknesses. The main idea is to use both qualitative and quantitative features in one study to bring out the best of both approaches, thus combining quantitative and qualitative research strengths and overcome their weaknesses. In a mixed methods study a quantitative aspect can be followed by a qualitative component to add depth to the quantitative results (p. 45). Our study aims to interpret quantitative data in a qualitative way.

Trost and Hultåker (2007) argue that to determine whether a research has a qualitative or quantitative approach, is not so simple. He believes there is eight different alternatives to determine if the three steps of a study are quantitative or qualitative (p. 18). The data collection is the first step. Considering that we aimed to reach more people than it is possible with interviews or observations of the timespan we have, the use of questionnaires was the most relevant method. Thus, the study has a quantitative method for collecting data. But on the other hand, the questions used in the survey questionnaire have a qualitative approach since they regard the students' own opinions towards the use of ICT in the classroom (Trost & Hultåker 2007, p. 21). Stukát (2005) states that answers from a larger group will give strength to the results, and the ability to generalize will be greater than in interview or observation methods with fewer people (p. 42).

The second step includes the result, the presentation of data, which have a quantitative approach since we provide the data collected through figures and percentages. The last step of the scale by Trost and Hultåker (2007) is the analysis and interpretation of results presented. The aim of the study is important to determine if the analysis of the data is qualitative. Considering the content of the literature review provided, this study has the aim to further develop, question and test existing theory (Stukát 2005, p.32). The area of ICT and motivation is insufficiently explored and this study aims to highlight this problem area from a new perspective. Based on our review of the literature, this area has been studied through qualitative perspectives. This study aims to use a quantitative approach, and our purpose is to test our theoretical reasoning if ICT has any positive effects on students' motivation in the EFL classroom by collecting quantitative data through the survey questionnaire (Stukát 2005, p.34). The study also takes a qualitative approach since we intend to "interpret and understand the results that arise" (Stukát 2005, p.32).

When it comes down to generalizations, one cannot generalize this phenomenon on ICT and motivation for all students. The group studied is comparatively small in terms of the possibilities to generalize to any great extent outside the school whose students participated in this study (Stukát 2005, p. 138). The majority of students in our investigation have a Swedish ethnic background, and therefore it may be difficult to make this selected group stand for all primary school students in Sweden. However, Passey et.al (2004) indicate that ethnic background appeared to be insignificant to motivation, but socio-economic background had an impact in terms of limited access to ICT tools. With this being said, ethnicity has no direct

bearing on how ICT affects the motivation of students. This could give us allowance for generalizing the collected data, but one should bear in mind that these indications Passey et.al (2004) have can be false.

Mixing qualitative and quantitative methods has come to be seen as a potentially enriching approach, but according to Dörnyei (2007) there are risks when using mixing methods (p. 46). One issue that could make more harm than good to the study is if researchers are not adequately trained in these aspects of methods. Dörnyei (2007) argues that this is a realistic issue since he claims the majority of researchers lack methodological skills to handle both qualitative and quantitative research data (p. 46). Although, due to the growing awareness of mixed methods research we can expect this situation to improve (Dörnyei 2007, p. 46). These two approaches can complement each other and be profitable to obtain a more authentic research and more realistic interpretations (Stukát, p. 34) and the main reason for using features from both quantitative and qualitative approaches is to bring out the strengths and overcome the weaknesses (Dörnyei, 2005 p. 45). With this being said we felt that this is an approach we wanted to explore. However, Stukát (2005) argues that one can be detached from one's study and let others label it as quantitative or qualitative. It is more important that the study includes a clear statement of how it was conducted and why the methods were chosen (p. 35).

4.2 Collecting data

As explained in the previous chapter, we chose to make use of survey questionnaires when collecting data. Survey questionnaires and structured interviews are in several aspects alike. The difference is that in a survey questionnaire the respondents are alone, and have to read and interpret the questions by themselves (Bryman 2011, p.228). This study could have been done with a different research method such as interviews with the learners and/or the teachers. Stukát (2011) argues that interviews could have given the study a depth that may not have been accomplished by surveys. Interviews also give the possibility for the researcher to ensure that participants understand the question asked. Compared to the questionnaire survey method, there is a risk that the participants in the study misinterpret questions. However, the benefits of survey questionnaires compared to structured interviews are that they are faster to

administer. One can distribute and collect more surveys in a short amount of time compared to interviews that takes time to conduct (Bryman 2001, p. 228).

The interviewing effect could be a negative effect of using interviews, and it is something that can be avoided by making use of questionnaire surveys instead. The interviewing effect is the possible distortion of the answers in an interview; that the interviewer can affect the respondent in different ways. For example, if the interviewer has a certain attitude or shows what he believes or thinks of the issue. The interviewer's ethnicity, gender or social background can also be factors that make respondents answer distorted (Bryman 2011, p. 229).

Although the questionnaire survey is a versatile technique that allows us to collect a large amount of data in a relatively short time, adding a qualitative component to the study can give the study benefits from using qualitative approaches (Dörnyei 2007, p.170). In a follow-up interview we can ask the respondents to explain or illustrate the obtained patterns, thereby adding more useful information. It can be beneficial for almost every quantitative study (Dörnyei 2007, p.171). Due to limited time, we unfortunately were not able to do a follow-up interview. This would have been beneficial for our study since we would have been able to collect more information and answers from the participants. However, a recollective interview with some of the survey participants is something that still can be conducted after our study and in turn be used for future research. A recollective interview allows for a further open-ended reflection about what the participants really meant by their responses (Dörnyei 2007, p.170-171). Mixed methods research truly opens up an exciting and almost unlimited potential for future research (Dörnyei 2007, p.170).

4.3 Development of survey

According to Patel and Davidson (2003), the questions in the questionnaire survey have a great importance and the survey needs to be designed in such way that it is easily understandable and the questions are relatable. Bryman (2011) recommends that the survey looks short in order for the respondents not to be discouraged from responding to the questions. However, this could make the survey counterproductive. Reducing margins, font

size, and the radar distance to get the survey to seem short and less extensive could give off a dense and overcrowded look. Answering a survey like this can be experienced to be a burden to the respondent. If the questions are too close to each other, with a reduced radar distance, it is easy to accidentally skip a question (p. 233). Dillman (1983) among others, believes that an attractive and professionally designed layout for the survey questionnaire increases the response rate.

Accordingly, we have designed our survey with fairly large font size, good spacing between questions and answer options as smiley faces in order for the questions to attract the respondents. But also the students do not feel that the survey questions will be difficult to respond to, or that they will skip a question by mistake. This does not mean, as Bryman (2011) point out, that the survey should have too much space and too much air in between the questions and answer choices. Having too much space does not mean that the survey necessarily becomes more attractive. A survey that is common in social sciences should do spacing between questions and answers with moderation (p. 233).

A clear presentation of the survey is something that is important (Bryman, 2011, p. 233). Not only will to get the survey to seem less extensive but also the construction of the layout makes the survey tempting and easy to answer. Dillmann (1983) recommends that the survey should distinguish between closed and open questions by varying the font, size and style of the texts. If not being consistent when doing this, its purpose will be counterproductive. We only use closed questions in our survey, where the learners can answer by filling in the 3 alternative smileys on a scale from happy to sad. Bryman (2011, p.233) argues that the survey should have a special style form for general guidelines, headlines, questions and for special instructions. Switching between different fonts for different purposes, for instance having the same font for instructions, answers and questions can become very confusing for the respondents. Since we have learners in year 3 for our study, we have decided that all the questions will be designed in the same way just like the rubric and instructions are designed in their own way.

All of the questions in our survey are closed questions. Another concern is if the answers should be horizontally or vertically arranged. It is often the answers appearance that determines if they should be arranged vertically or horizontally. Vertically is something which many authors recommend (Bryman, 2011), since respondents may be confused if the survey

consists of both forms alternately. Consequently, we feel that horizontal response options is the best way to go since it looks better and the learners who respond to the questions will easier understand how to answer. Further, Bryman states that ticking a box for words like: “*Very good __ Good __ Neither bad or good __ Bad __ Very bad _*” can be confusing for young learners and they can accidentally put the crosses in the wrong place, particularly if the questionnaire is filled in quickly (Bryman, 2011, p. 234).

What we know for certain from our experience is that learners would prefer to complete the questions as quickly as possible no matter what the task. Learners do not read through the questions or answers carefully in order to get the answers right. Since we use smiley faces for answers, we hopefully will avoid this problem. Making use of smileys when doing research with young learners is something that attracts them to participate and answer the survey rather than to discourage them from answering the questions when only using regular text options (Bryman, 2011, p.234). We have designed our questionnaire and survey questions based on what Bryman (2011) and Dillman (1983) believe, but also Czaja and Blair’s (2005) views from the book *Designing Surveys*. The questions in a survey according to Czaja and Blair (2005), should be relevant to the central topic, easy to answer, interesting for the respondents, applicable to and answerable by most respondents and have a closed format. This is something we have strived for when we have constructed and developed the survey questionnaire (p. 94).

When having young learners as respondents in questionnaire surveys, the survey need to be extra clear in the questions, answers and instructions. Their circumstances differ from older learners and adults since their cognitive, social and communicative abilities are still under development and may affect their ability to take in and process information. For instance, children can have difficulties with negations and they have a tendency to respond positively and interpret questions literally. Children may also have difficulties with vague scales and they are very sensitive to the ambiguity in the questions and answers (de Leeuw, 2011). It could also be difficult for them to understand that there sometimes is no right or wrong answers. The learners could be stuck in the way of thinking, like when they are doing tests or exams in school, that there should only be one right answer. From all this there are high demands on how we formulate the questions in the questionnaire. We have to be aware of the young learners’ cognitive conditions and adapt the questions and answers to the conditions the learners can be expected to have (Scheffer, 2015).

Considering all the above, we constructed our survey by keeping the questions as short as possible and reduced the number of response options to only 3 smiley face answers. We also strived to avoid ambiguity and use vocabulary that is suitable to the respondents. Considering this, we also have decided to do the survey in Swedish in order for the respondents to fully understand the questions in the survey. Our questions focus more on feelings and less on information, by asking questions such as *what do you like, how do you feel about....* All in all, we aimed the survey to children in the age of 8-10 and we strived to make the questions very literal and avoid indirect questions (de Leeuw, 2011).

It is important to test a survey to know if the survey questionnaire is right developed. We base this on the opinion of Austinresearch.co.uk that “The need to test and refine is even greater than for an adult survey as children are less able to recognise mistakes and make allowances for them” (Austinresearch.co.uk, 2014). Stukát (2011) argues that it is more difficult to motivate a large group of respondents and to know if the questions in the survey were perceived correctly (p. 43). Stukát (2011) further explains that it is necessary to have the questionnaire tested, since the survey must be carefully prepared, and suggests that one would let some critical people, such as supervisors and peers, examine the survey before using it (p. 48). Therefore, we have chosen to test our survey by giving it to our supervisor and another pair of students who also write their degree project, in order to get feedback for further improvement. The received feedback was taken into account and we adjusted the questionnaire according to their comments, before giving it to the learners in our study.

4.4 Coding

Stukát (2005) argues that results collected from surveys should not be presented “question by question in the order they were put in the survey”, and the researchers have the flexibility to show the responses “in the way he/she finds will give the best information and understanding” (p. 138, our translation). He further argues that “a number of themes drawn from survey questions provide a clear structure to the result section” (p. 138, our translation). Therefore, we have chosen to divide the questions from the survey in themes in order to analyse them together, draw parallels, and make tentative generalisations etc. The 13 questions were grouped into 5 clusters based on their content similarities (Dörnyei 2007, p. 160).

The first cluster consists of 4 questions from the questionnaire and is based on the students' indication of whether they think computers and tablets are fun to use in the classroom. The second cluster consists of 3 questions that is based on what the students' think about asking the teachers uses ICT in the classroom. The third cluster consists of 2 questions if the students believe ICT will help them learn English and if they feel motivated when using ICT. The fourth cluster consists of 2 questions and is based on how the students would feel if the teacher removed all use of ICT. The fifth cluster consists of 2 questions based on whether the students think it is fun to learn English. Cazaja and Blair (2005) also argue that "coding respondents' answers to each question allows us to estimate characteristics or to look for patterns among variables" (p. 26).

The data for this study was transferred to statistical figures to present it in a more manageable way, in order for us to analyse the results more easily and have a clear view of the statistics. Stukát (2005) further argues that "the researcher should describe the results in tabular or figure form and penetrate the results so clearly and completely that readers can draw their own conclusions and have the opportunity to compare them with the researchers" (p. 140, our translation). Therefore, we have included graphs for each cluster of questions, where we then provide an analysis by identifying patterns and interpret data.

4.5 The research setting

This section provides an overview where the research took place and a description of the participants. The school where the study was carried out is located in the most southern region of Skåne, the Trelleborg region. It is an F-9 school and the learners who attend the school come from middle-class families living in villas and apartments. The students participating in the study are in two year 3 classes. They are between 8-9 years old, and the participants consist of an even mix of boys and girls. The students in this school have been working with computers and tablets through their education from year 1. The teachers of the two classes often use ICT in their teaching and incorporate it with the students learning. The two classes consist of 45 learners of each class with a homogeneous ethnic background. The majority of learners in both classes have Swedish as their mother tongue and there are very few students with different background than Swedish.

Professor Edith de Leeuw (2011) argues that the students answered their survey questionnaire in an environment where they can be themselves, in order for them to be confident in expressing their own thought and feelings. In our experience, learners are keen to please friends, teachers, adults or whomever they are with, and therefore we are carrying out our study in their home classrooms. When giving the survey to the students we were also expressing that there are no right or wrong answers. We gave them space and time to finish the survey alone in order for their answers not to be affected by watching their classmates (de Leeuw, 2011).

4.6 Selection

We made strategic choices in order to determine where to implement our survey and what school we were to use. Our choice of school was one where we wanted to find teachers and learners with specific experiences that were based on our research questions. In this case we needed students where teachers allowed the use of ICT in the classroom (Alvehus, 2013, p.67). We made the choice of selecting the two schools where we did our teacher training, which is a part of the Teacher Programme at Malmö Högskola.

The two schools were selected since we knew they had a profile of working with technology in the whole school. The teachers in the primary school worked with either computers or tablet frequently in their teaching. The request for participants' ability, interest and willingness to participate were sent out by e-mail to the two schools. We got an approval from one of the asked schools, and the other school denied participating due to lack of time. All in all, it was one school and two third grade classes, with the total of 45 learners to participate in our study.

4.7 Ethical considerations

The 45 participants of this study are 8-9 year old students in a year 3 class from a Swedish elementary school. When conducting the research, the participants were given sufficient information in order for them to decide whether or not they wanted to participate in this research study. Vetenskapsrådet's (2002) suggestions on ethical considerations were taken

into account and the main considerations were based on anonymity. We only used those students who were willing to participate in this study. We also sent consent papers to the guardians asking of permission for their children to participate in our project. The teacher, the learners and the guardians are aware that everything will be anonymized.

All survey questionnaires were identical in design and conducted to protect the privacy of the survey respondents. The participants could not be identified and when results are published it will not be possible to match individual responses with the empirical data published in the result section. The questionnaires were filled in anonymously and contained no confidential information.

5. Results

This project investigates if ICT has an effect on the EFL learners' motivation, and in what way it is motivating. In this section, we present the outcome of our research, and the results of the survey questionnaire by use of figures and percentages. In the figures, the y-axis shows the number of learners who responded to the survey questions in percentages and the x-axis represents the different answer options. We provide the questions from the questionnaire the learners answered, above the figures. After each figure we provide a summary section including an interpretation of the results. Possible errors in the results will be pointed out, such as questions that may have been misunderstood or dishonest answers (Stukát 2005 p.134). Here we provide figures and explanations for every question as result. The 13 questions from the Survey is categorised in 5 different themes accompanied with a figure for the questions in these themes. In the figures, we have converted the smiley faces to Positive☺, Neutral☺ and Negative☺. In the next section, we provide an analysis of the results where we refer to research and theories drawn from the literature review.

5.1 Students' indication if ICT is fun to use or not

The questions in this cluster explore if the learners think it is fun to use computers and tablets themselves in the English classroom.

Translated questions from Swedish to English:

Question 2 - Do you think it is fun when you get to use computers or tablets during the English lessons?

Question 5 - Are you happy when you get to write texts on the computer or tablet instead of using pen and paper?

Question 8 - Do you think the lessons are more fun when you get to use computers or tablet?

Question 6 - Do you feel that it is easier to write on a computer or tablet?

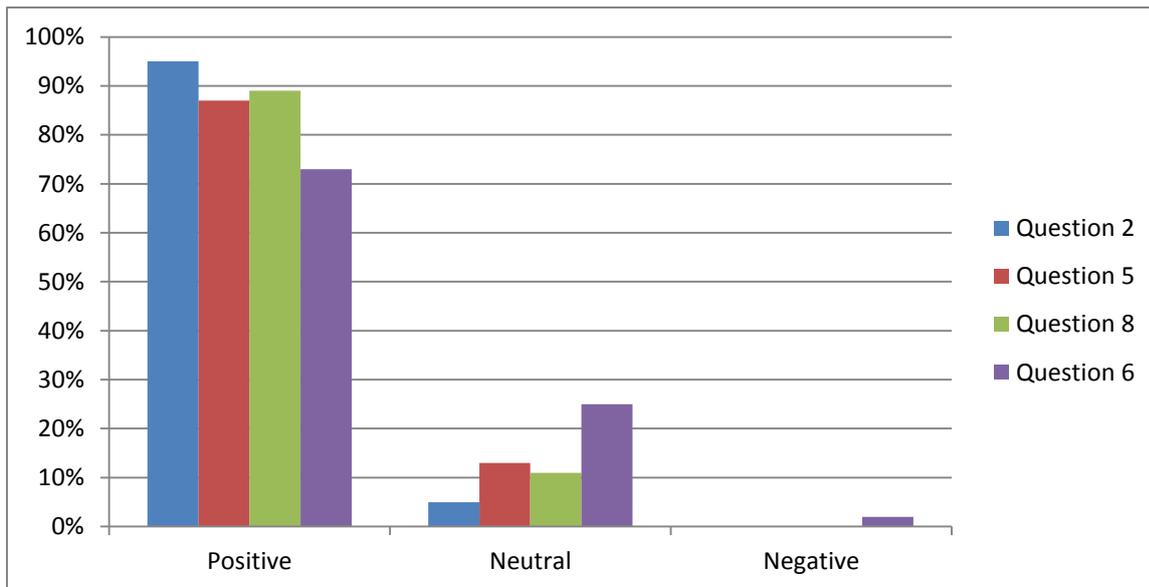


Figure 1: Students' indication if ICT is fun to use or not

Based on the data collected, we see a majority of answers leaning towards a positive attitude. The questions in this graph are based on their similarities if the students thought it was fun and if they felt happier when using ICT in teaching. The results show that the majority of respondents with 95 % of the answers are positive and thought it was fun using ICT instruments in the classroom. The results from question 5 show that 87 % are positive towards writing texts on the computer or tablet instead of pen and paper. This indicates that the majority of students thought it was more fun to use computers and tablets, but the results went down with 8% (from 95 % to 87 %) when the students were asked if they felt happier when writing on computers or tablets instead of pen and paper. But the positive answers increased with 2 % (from 87 % to 89 %) when answering the next question if the lessons are more fun when using computers or tablets.

The results took an unexpected turn when viewing questions 6, where only 73 % of the responses were positive and 25 % were neutral towards if they felt that it was easier writing on a computer or tablet. There is a 14% difference (from 87 % to 73 %) between question 5 (if they were happy when writing on computers or tablets) and question 6. This indicates that 87 % of the students are happier when writing on computers or tablets, but only 73 % felt that this is easier than pen and paper. 25 % were neutral and perhaps do not mind using computers and tablets, or simply do not have a preference when writing. Nevertheless, there was 2 % of the responses were negative and this indicates that those of 2 %, did not find it easier to write on a computer or tablet compared to pen and paper.

There is a significant difference in percentages when looking at the neutral and negative answers, compared to the positive ones. There are 0 % negative answers on the three first questions which indicates that none of the respondents was negative towards using ICT and writing on computers or tablets. The neutral answers, however, indicate that more students (13 %) were neutral when it came to using computers and tablets as a writing tool. A conclusion from this could be that students thought it was less fun when you have to write. This could be because the students thought it was more fun doing ‘other stuff’ with ICT (such as watch videos, look at pictures, using apps or playing educational games) than using it for only writing. Nevertheless, the data still shows that the majority (87 %) of students still believe it is better to use computers and tablets when writing, compared to using pen and paper.

A concern noticed here, is that 5% of the respondents are neutral towards question 2 and 11% are neutral towards question 8. Even though questions 2 and 8 are similar, the result reveals a differentiation with 6%. This indicates that the students may have been interpreting the questions differently.

5.2 Students’ indication if ICT is fun when the teacher uses it or not

Question 1, 4 and 7 are categorised to show if the learners think it is fun when the teachers use computers and tablets to show pictures, movies or powerpoints on a big screen in the English classroom.

Translated questions from Swedish to English:

Question 1 - Do you think the English subject is fun when the teacher uses computers?

Question 4 - Do you feel happier when the teacher shows movies or pictures during the lessons?

Question 7 - Is the lesson more fun when the teacher uses movies and pictures?

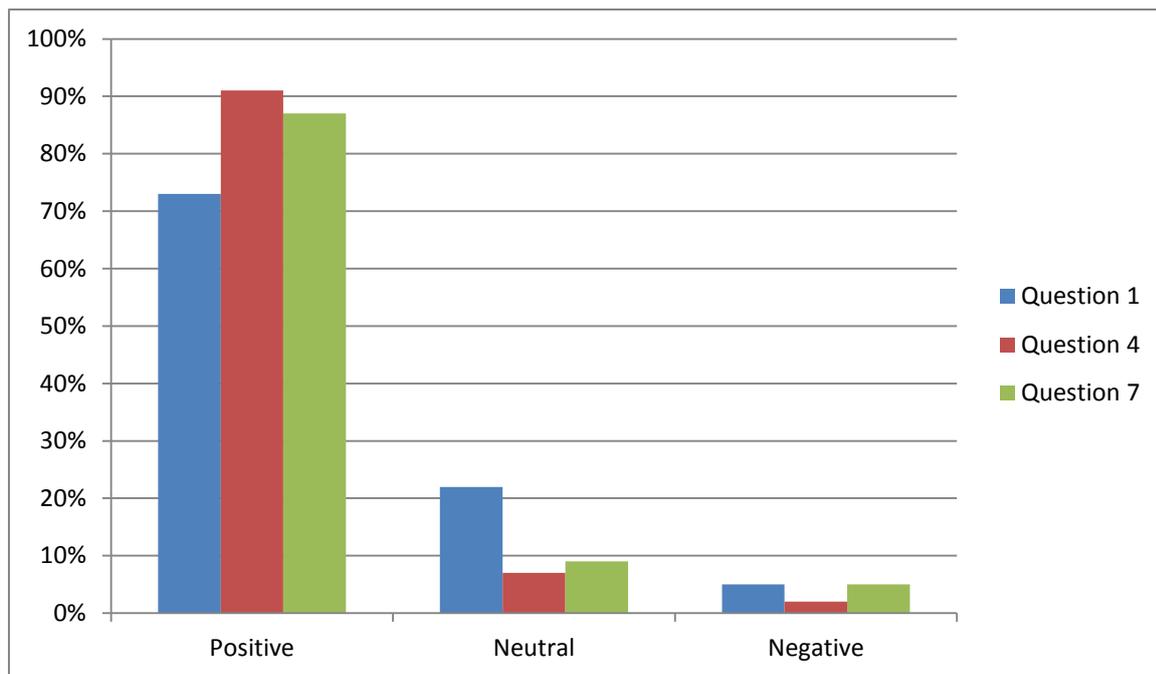


Figure 2: Students' indication if ICT is fun when the teacher uses it or not

The results from these questions indicate that a clear majority of 91 % of the respondents were positive towards question 4, which was about if the learners thought they were happier when the teacher showed movies or pictures during the lessons. In contrast, only 73 % were positive when answering question 1, if the English subject is fun when the teacher uses computers in the lessons. Regarding question 7, the positive answers were 87 %. These questions are quite similar to each other and the students may have interpreted them differently. 73 % of the students thought the English subject were fun when the teacher used computers. However, when changing the question to if they thought it was fun when the teacher used ICT to show movies or pictures during the lessons, the positive answers increased by 14 % (from 73 % to 87 %). This could imply that students thought that it was fun when the teacher used computer with different applications, but it was more fun when computers was used for showing movies or pictures.

However, question 4 shows that the students felt happier when the teacher used computers to show movies and pictures. By changing the meaning of the question from 'fun' to 'happy', the answers increased by 4 %. This could indicate that the students may think it is fun when the teachers use ICT to show movies and pictures, but more students felt that they are happier. Moreover, something that is 'fun' and that one feel 'happy' are two different things. If the questions were interpreted as we mean, then almost all students felt happier when including

ICT in the classroom. Nevertheless, there were a fairly large part of responses that were neutral in question 1. 22 % were neutral towards if they thought it was fun when the teacher used computers. This could indicate that 22 % of the students simply do not know if they think the lessons were more fun, or maybe they do not care if the teacher used computers in the lessons or not.

With the questions in this figure, we came across the first negative responses. Both question 1 and 7 have 5 % negative responses each, and question 4 shows that the responses as little as 2 % were negative towards the teacher using movies and pictures on the English lessons. This could indicate that it is the teacher's use of computers that is the result of the negative responses, since not one single student had a negative answer when it came to their own use of computers and tablets (see figure 1).

5.3 Students' indication if ICT will help them learn English or not

Question 3 and 11 are categorised to show if the learners feel that computers or tablets will help them to learn English as a second language.

Translated questions from Swedish to English:

Question 3 - Do you think that computers and tablets will help you to learn English?

Question 11 - Do you get more motivated if you get to use computers or tablets during the lessons?

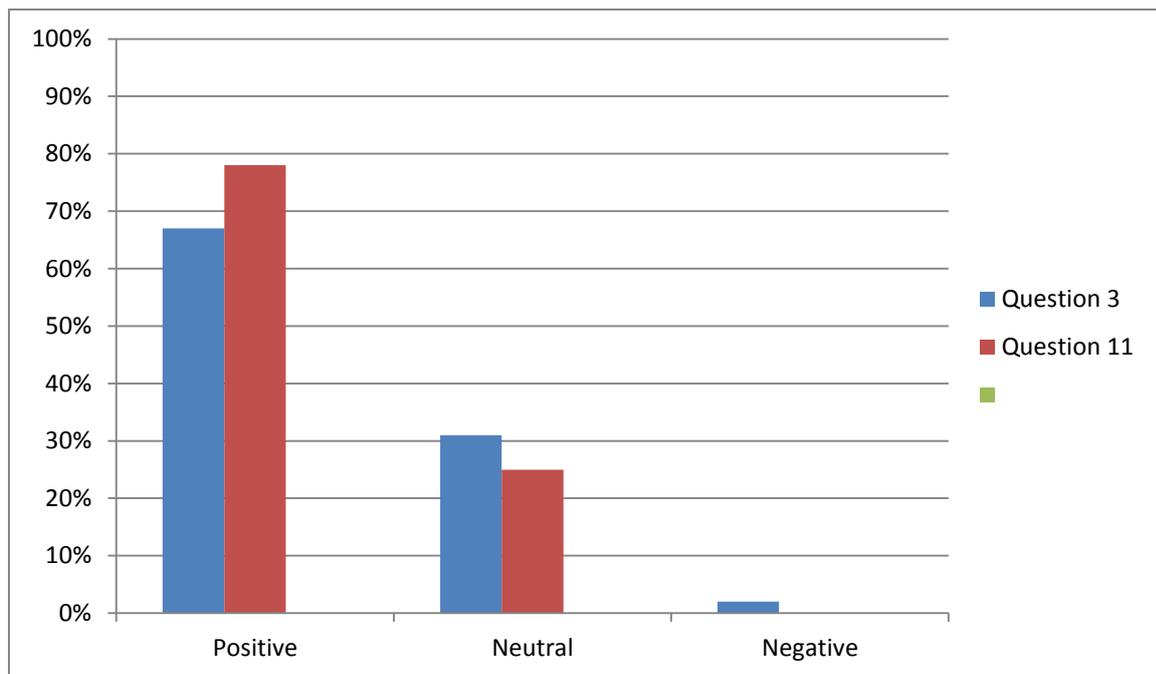


Figure 3: Students' indication if ICT will help them learn English or not

The responses from these two questions show that only 67 % of the responses were positive towards ICT being a tool that could help them learn English. However, 78 % believe they were more motivated. As an assumption, the positive responses of question 11 should lay in more coherence with the positive response in question 3. However, with only 2 % of the students believing ICT was not helpful for learning English, one can assume that ICT still is beneficial for language learning. The indication of these results is that most of the students (78 %) claim they were more motivated, but only 67 % believe incorporating ICT tools such as computers and tablets will help them learn English.

In these questions, there were a fairly amount of responses that were neutral. 31 % of the responses of question 3 and 25 % of the responses of question 11 were neutral. Our assumption is that the students did not fully understand these questions. Perhaps they did not have a deeper understanding of what they believe will help them learn a language, and as a consequence they chose a neutral answer. We also assume that perhaps not all students have the knowledge of what motivation really means. Hence, they gave these neutral responses. There were 0 % negative responses towards if ICT can affect their motivation. This could indicate that the students have some knowledge of what motivation means, and they know that using computers and tablets is at least nothing negative.

5.4 Students' indication on how they would feel without ICT in class

Question 9 and 10 are categorised as how the learners would feel if the teachers would stop all use of computers and tablets in the classroom.

Translated questions from Swedish to English:

- How would you feel if the teacher would take away all computers and tablets from the lessons?
- How would you feel if you did not get to use computers or tablets during the lessons?

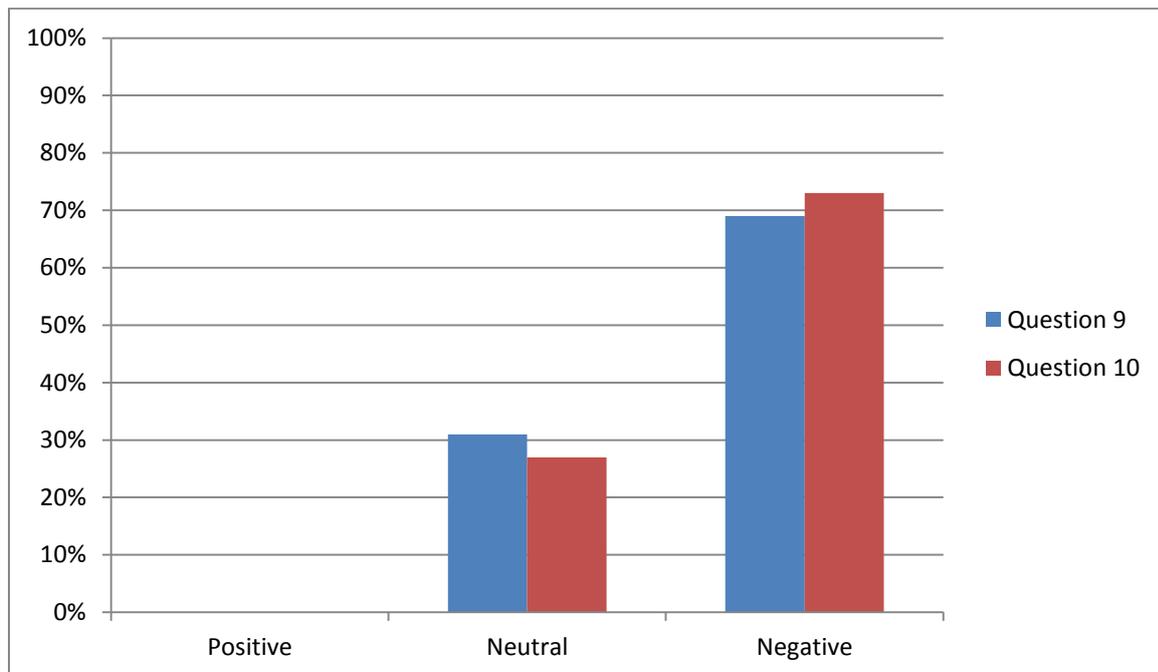


Figure 4: Students' indication in how they would feel without ICT in class

The results from these questions show that the majority of students responding were negative towards them. The results showed that 69 % were negative towards the *teacher not* using ICT in the classroom, and 73 % were negative towards not being able to use computers and tablets *themselves*. This indicates that the students supposedly believe it is worse taking away their own use of computers and tablets than it would be when taking away the teachers use on ICT. However, 31 % of the responses of question 9, and 27 % of question 10 were neutral towards

how they would feel if the teacher did not use ICT and themselves not using ICT. Since none of the students responded positively, an assumption is that the students with the neutral answers simply did not care if they themselves, or the teachers used computers or tablets in the classroom.

5.5 Students' indication of the English subject

Question 12 and 13 are categorised as how the learners feel in general towards the English subject in school. These questions are more statements that the students should respond to, but we will call them questions since it will be easier to follow.

Translated questions from Swedish to English:

Question 12 - I think it is fun to learn English.

Question 13 - I always look forward to the English lessons.

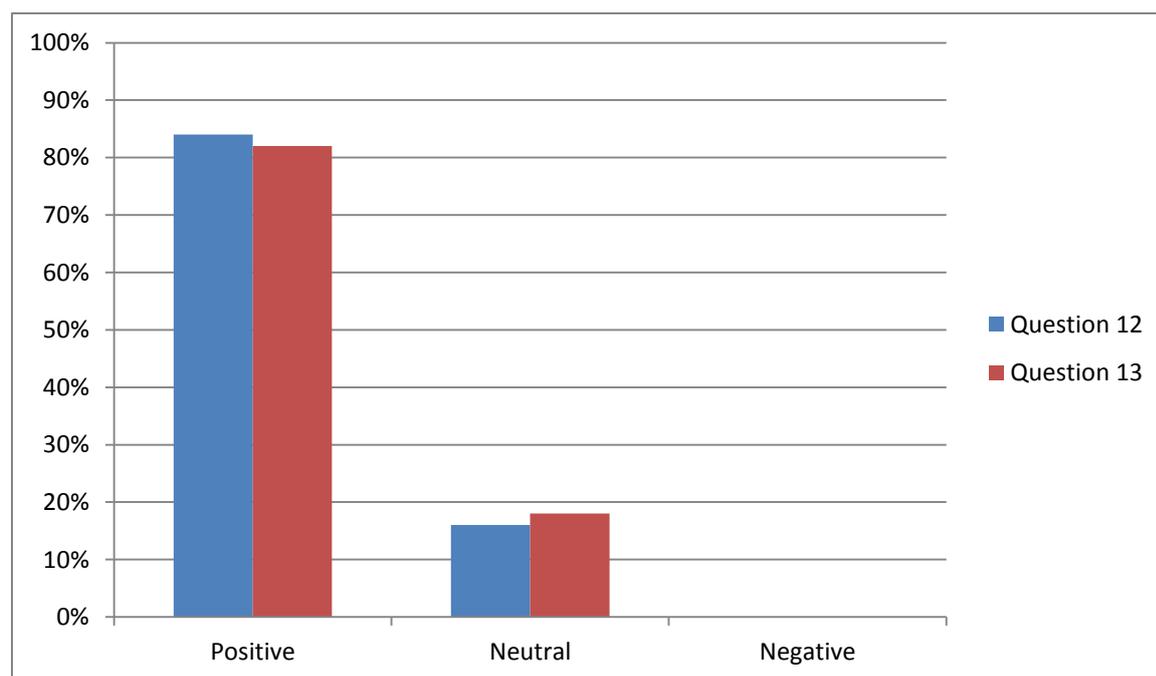


Figure 4: Students' indication of the English subject

These results show that a large amount of the students thought it was fun to learn English, since 84 % of the responses were positive. However, there were no negative responses to these questions. We can assume that not one student thinks it is boring to learn English or thinks the English lessons are boring since 82 % always looked forward to the English lessons and 16 % were neutral. Furthermore, only 16 % of question 12 and 18% on question 13 were neutral,

which could possibly indicate that they do not think the English lessons are neither fun nor boring.

However, questions 12 and 13 are not sufficiently about ICT and we do not know for certain if the students interpret these questions in that way. It is only an assumption that their attitude towards English are affected by ICT in these classrooms. Previous questions have been towards the students internal motivational factors (what gets them motivated), and how ICT could affect their motivation. Looking at these questions, external factors are of great relevance. We cannot be sure that the students feel the way they do because of technology and not because of something else such as parental attitude or the attitude towards the English teacher.

6. Analysis of results

In this section, we analyze our results with the help of relevant theoretical background. We also discuss the benefits and possible challenges that including ICT in school may have. We answer our research question by providing discussions about if the students' motivation is affected by ICT, and in what way. This section is not divided into the same categories as the results were put in. We have incorporated all the data in order to analyze them together with the help of theory, literature and previous research presented earlier. We have divided this chapter in two sections of possible benefits and challenges. Here we address some concerns that correspond with our chosen theories, research and literature.

6.1 Benefits

If we look at the responses in both clusters of questions 2, 5, 8 and 1, 4, 7, it is clear that the students are positive towards ICT. We believe that this can be connected to Jedeskogs (1998) study where she found that computers in teaching will provide varied and exciting lesson. She found that computers have a positive impact on students because it creates curiosity, motivation, and in this case, a bigger interest for learning English. Our result can also be connected to Frydrychova Klimova & Poulouva's (2014) study, since they claim that lessons become more interesting when using ICT and the students also think the lessons are more varied which leads to the students being more motivated (p. 54). Thus, ICT provides varying lessons which we believe are factors for the high positive responses in our study.

From our study, we cannot be certain that some students only become motivated by their interest of ICT. We believe that how the students become motivated can be connected to internal and external factors, such as curiosity, confidence, interests and attitudes from parent and teachers, as stated earlier in this paper. Dörnyei (2001), Pintrich's et al. (1991), and Willian and Burden (1997) talk about these different factors that can make a difference in the students' motivation. By looking at Dörnyei's (2001) two theories explained in the literature review, Theory of planned behaviour and the Social motivation theory, we see how the students become motivated in a certain way. The first of Dörnyei's (2001) theories that is relevant for our results is the Theory of planned behaviour. It includes external attitude

features which connect to William and Burden's (1997) external factor of teachers' attitudes. The teachers' attitudes towards using ICT or presenting a task can have a huge impact on the students' motivation. If the teacher do not like working with ICT and perhaps is forced to do so from principals, their negative attitudes can impact on the students' motivation without them knowing it. We believe, that with support from our results of the survey if the teacher can present a task in a fun an exciting way, the students will get more motivated.

The second theory of Dörnyei (2001) is the Social motivation theory which is based on the sociocultural context influences on the individual's motivation. This also includes external factors, and here we draw a connection to William and Burden's (1997) attitude from peers. One should be aware of the fact that student's peers can affect other students' attitudes towards a task. This could indicate that if the majority of students have positive attitudes towards ICT, the rest could be affected and develop a more positive attitude towards ICT. Therefore, we believe that teachers should have knowledge about these two theories, since it can contribute to the students becoming more or less motivated.

Krashen's (1983) affective filter hypothesis can explain why there was a 31 % neutral and a 2 % negative response to the students feeling that computers and tablets helped them to learn English. Since technology is something that is a part of the students everyday life, it is something that is natural to them. Language acquisition is a natural process of developing skills in a language (p. 10). By learning a language through ICT the students are not realizing that they actually are learning a language. Since the majority (95 %) thought it was fun to use computers and tablets, they might not be aware of the fact that they are developing their English language. Instead they are only aware of the fact that they are using the language in the classroom (Krashen, 1983, p. 10). Krashen (1983) further argues that this natural way of acquiring a language, is way more important and beneficial than when students are being aware of them learning a language (p. 10).

There are two important benefits of including ICT stressed by many researchers that connects to the results from this study: independency and collaborative group work. Volman, Admiraal and ten Dam (2011) explain that ICT has motivating effects on students and facilitate differentiation and individualization. Lindh (1997) states that ICT promotes individualization, and Jedeskog (1998) also stresses that ICT can individualize school work. Frydrychova Klimova & Poulouva (2014) also came to the conclusion that ICT leads to more independent

and personalized learning. This could indicate why so many of the respondents were positive towards ICT in school, for example that 95 % thought it was fun to use ICT and 91 % felt happier when the teacher chose to show videos and pictures to the class. That the school work becomes more individualized, can lead the students not comparing themselves with each other as before. This may be because the students can sit by themselves where no one else is watching them work. If using tablets, it allows the students to sit in a quieter place where they will not be disturbed by peers, since a tablet is detachable.

Another important benefit of using ICT is the differentiation it provides. Incorporating ICT in the teaching leads to working in groups, but it also enables students to work more independently, which Bullock (2001) explains enhances the student's enjoyment in the tasks presented (p. 2). Frydrychova Klimova & Poulova (2014) argues that ICT can increase student motivation by promoting cooperation among the learners which could lead to a more collaborative and interactive learning environment. We believe this is also an important factor to why many students are positive towards ICT. The results show 82 % though it was fun to learn English and 87 % was happy to write on computers and tablets. It also showed that 89 % though the lessons were fun when they got to use computers and tablets. The reason for this could indicate that ICT allows for both individual work and working in groups, with are suitable for every student. Those who want to work alone can, and those who work better in groups or need help from peers that can boost their confidence, can do that to. Working together with peers can motivate them since it enhances the enjoyment of the task. We also believe that working in groups, the students can combine their strengths and eliminate their weaknesses because they learn from each other and each student can have a different ability in the same area. Bullock (2001) noticed improvement in motivation in some male students who often were a little reluctant towards writing in the English subject, and based on this we believe that ICT have positive motivational effects on students (p. 4).

When it comes to motivation, 95 % of respondents were positive towards the use of ICT (question 2). We can draw connections to Jedeskog's (1998) study since she, like we mentioned earlier found that computers increase students motivation. Not only Jedeskog's (1998) study indicates this but the study conducted by Passey and Rogers, with Machell and McHugh also indicates that computers increase students motivation. The findings from their study show that the use of ICT led to positive motivational outcomes. Svensson (2008) stresses that ICT should be integrated in school since computers, tablets and the internet today

are widely used by children and young learners. Much like Svensson (2008), we believe that it is important to incorporate the learner's own interests to make the English lessons more effective and enjoyable. A concluding remark could be that ICT should be a part of the English subject. If most of the students show an interest in using computers and tablets like our survey indicates, ICT should be a part of the English learning.

6.2 Challenges

Some questions in the survey questionnaire are based on affective functions (Dörnyei, 2001 and Pintrich et al., 1991) which focus on what the students feel towards ICT. The overall responses were very positive towards incorporating ICT, but the few who were neutral or negative could perhaps feel that using ICT leads to anxiety or fear. The reasons for the negative answers on questions 6 and 11 had something to do with the students' own use of ICT. This could therefore be that their beliefs of their own ability to use ICT or their ability to complete a task with the help of ICT are distorted. Maybe these students do not feel they are sufficient in their knowledge of how to use computers and tablets. If multiple learners have no interest in ICT, the students' confidence, self-esteem, self-efficacy and anxiety (Dörnyei 2005, p. 86) could perhaps be affected and they would not benefit from using ICT in the classroom and the motivation to learn could be affected. We can further connect this with Dörnyei's (2001) Self-efficacy theory, Pintrich's et al. (1991) expectation component, and Willian and Burden's (1997) external factor of feelings of competence.

Furthermore, we cannot know for certain that every student at home is allowed to use computers and tablets. Passey et.al (2004) indicated that socio-economic background had an impact in terms of limited access to ICT tools including computers. This is something that the teacher may have taken for granted, which then can have resulted in the anxiety the use of ICT may have on students. Dörnyei (2001) also indicates that if students do not feel secure enough with what they are doing, they will not be able to bloom as learners (p. 87). Therefore, it is important that the teacher gives the learners sufficient information and training in how to use the ICT tools in order for them to get more confident with the task. But since only 2 % of the learners were negative towards a question related to their own use of ICT, we believe that the majority have enough knowledge on how to handle ICT tools such as computer and tablets and feel secure with what they are doing.

The 25 % of responses of question 11 is a relatively high number of the neutral answers, regarding if the students feel that it is easier to write on a computer or tablet compared to the regular pen and paper. This could be affected by the quality of equipment, internet connection and other technical problems ICT may contribute to. Bullock (2001) stresses the importance of having good equipment and reduced technical problems. In her study the quality of equipment and technical problems led to reduced enthusiasm and motivation towards a task. Most studies conducted on ICT and motivation provided in the literature review (for example, Passey et.al., 2004 and Frydrychova Klimova & Poulova, 2004) show many positive effects on motivation. The results from our study also indicate that the students are positive towards ICT. The students' motivation is affected in a positive way since the majority of responses where positive on every question, which points to that the student think it is fun with ICT. Thus, we stress the importance of the teachers having knowledge of the quality of their equipment, may have a great influence on the learners. Due to these challenges, teacher should look into their schools and evaluate the equipment used in language learning. If they have problems with equipment, it surely will affect the students' motivation.

Passey et.al (2004) indicated that socio-economic background can have an impact on limited access to ICT tools in school. However, we find it unlikely that this is the main reason for the 25 % neutral answers. It could be something different than the quality of the school's computers, tablets, internet connection or limited access to ICT. One reason could be that the students simply do not have a preference of ICT or pen and paper when writing. Then again, one cannot conclude that these generalisations are for every student in Sweden.

We have now described the benefits and challenges of incorporating ICT. Söderlund (2000) states that some teachers not include ICT in their teaching. Gu (2011) explains that a factor for teachers not using ICT in their teaching is because it challenge them, and some may have difficulties with using ICT instruments such as computers, tablets and the internet. Since Svensson (2008) stresses the importance of incorporating the students' interests, and we must make sure that the teachers can be more confident when using ICT tools in order for the students to benefit from the positive effects of ICT. The curriculum (Skolverket 2011) also states that students should interact with images, movies and web-text (p. 224). Therefore, the teachers own insecurities cannot be justified for excluding ICT in the classroom.

7. Conclusion

In this chapter, we present our conclusions from this study and we provide a summary section of our findings as well as an evaluation of how the results relate to our purpose and research questions. We will also provide a short discussion of the limitations for this study, the relevance for our profession and suggestions for further and future research will be addressed.

7.1 Summary of our findings

The survey answers we received were expected since we during our practices have observed that the majority of the learners enjoy the use of ICT during the lessons. This independently of whether the teacher uses it or if they use it themselves. Since we have observed this in our practice we decided to test our thesis with this study. We believe that the purpose of our study has been achieved, since the purpose was to find out whether ICT has any effect on student's motivation when it comes to learning a second language and in what way that motivation could be affected.

The results regarding our first research question, whether motivation is affected by ICT, our conclusion is that the majority of students were positive to all questions about incorporating ICT in the classroom. The students' responses showed that they were happier and thought it were more fun when they use ICT in class. The positive responses dropped by a few percentages when the questions switched from including their own use of ICT to the teacher's use of ICT. Still, all were over 50 % positive towards the teacher using ICT. A summary of this research question is that most learners have a positive view on incorporating and using technology in school. The ICT technology in the classroom is beneficial for learning as a result of it being a motivational tool for learners. A conclusion can be made that the students believe it is fun when the teacher uses ICT, but it is even more fun when they use computers and tablets themselves. In this way the motivation for using ICT is clearly stated, based on the results.

The second research question, in what way the students' motivation were affected, we can make assumptions based on former research on motivation. This question had been easier to answer if we had time to ask follow-up questions after the survey or include interviews with the students. However, we assume that motivational factors are increased individual and collaborative working ways for the students and that they get motivated for this. As well as the internal and external factors such as curiosity, interests, feelings of competence, self-efficacy, confidence, attitudes from parents and peers, and attitudes from the teacher towards ICT. We can also use the three theories (self-efficacy theory, social motivation theory and theory of planned behavior) from Dörnyei. However, the external and internal factors are built-in in these theories. But the main motivational factor in our study is the students' interests of ICT.

7.2 Implications for teaching

Working with ICT in the English language classroom can have beneficial impacts in motivation but also allow differentiation in the teaching since ICT can be used both individually and collaboratively. This is why we find it important to work with ICT in our future profession. Furthermore, we want to influence others to consider working with ICT because of the benefits provided in this study. But also since it is stated in the curriculum that it is important that students have access to a variety of learning tools suitable in our modern age, and that their interests should influence the teaching and lessons (Skolverket 2011, p. 32). It also says in the curriculum (Skolverket 2011, p. 32) that teaching should encourage students into developing an interest in language learning, and we believe this could be done by incorporating ICT since ICT is a part of their life. We believe that the teaching should adapt to the students in the class. Moreover, another reason for including ICT is that Bullock (2001) observed students that were reluctant towards writing in English, showed improvement in their motivation when being able to write on computers instead of pen and paper. With this being said, we believe that ICT could possibly be beneficial to most students in a class.

7.3 Study limitations

One way of implicating this research could be to use more respondents from different areas in Sweden in order to get more nuanced results. Making samples on a bigger percentage of the population, will make allowance for greater generalisations (Stukát 2005, p. 138). Another way would be the use of follow-up interviews. Including a qualitative component to the study such as follow-up interviews, can eliminate the weaknesses of surveys and give the research the benefits from qualitative approaches (Dörnyei 2007, p.170). Then we could ask the respondents to explain or illustrate the obtained patterns and thereby adding more useful information. It can be beneficial for almost every quantitative study (Dörnyei 2007, p.171).

7.4 Further and future research

When conducting this study, we chose to focus on English as a foreign language. This opens for future research on ICT's effect on motivation in different subjects in the school and not only English. Another approach for future research is to include teachers in a study since we only included students. Conducting a larger research with both teachers and students could give a more reliable answer since then it is possible to explore both the teachers' view on motivation and the students' views. This could be very interesting, if you were able to see if there are any similarities or differences of how the teachers and students believe ICT effect student's motivation.

For a deeper research on this study, one can make recollective interviews with some of the survey participants. Conducting interviews using the students' responses is something that still can be conducted after this study and in turn be used for further research. A recollective interview allows for a further open-ended reflection about what the participants really meant by their responses (Dörnyei 2007, p.170-171).

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Appendix 1: Survey

ENKÄT

Här är några frågor som handlar om hur du tycker att du lär dig bättre i skolan när ni använder er av datorer när ni har **undervisning i engelska**.

Läs frågan noggrant och fyll sedan i den smiley som du tycker passar.

1. Tycker du att det är roligt med engelska när läraren använder dator?



2. Tycker du att det är roligt när du får använda dator eller surfplatta på engelska lektionen?



3. Tycker du att datorer eller surfplatta hjälper dig att lära dig engelska?



4. Blir du glad när läraren visar filmer eller bilder på lektionen?



5. Blir du glad när du får skriva text på dator eller surfplatta istället för penna och papper?



6. Känner du att det underlättar att skriva på dator eller surfplatta?



7. Blir lektionen roligare när lärare använder visar film och bilder?



8. Blir lektionen roligare när du själv får använda dator eller surfplatta?



9. Hur känner du om läraren skulle ta bort datorer och surfplatta från lektionerna?



10. Hur känner du om du inte fick använda surfplatta eller dator på lektionen?



11. Blir du mer motiverad när du får använda dator eller surfplatta på lektionen?



12. Jag tycker att det är roligt att lära mig engelska.



13. Jag ser alltid fram emot att ha engelska.

