Attitudes towards, expectations of, and competence regarding ICT and digital learning tools

A quantitative study among Swedish EFL teachers in secondary/upper secondary school

Author: Anton Nilsson
Supervisor: Christina Rosén
Examiner: Charlotte Hommerberg
Term: VT18
Subject: English
Level: G3
Course code: 2ENÄ2E
Abstract

The aim of this paper is to highlight and analyze the attitude towards and expectations of ICT and digital tools amongst Swedish EFL teachers in secondary/upper secondary school. In addition, this paper also contains results and analysis of how teachers most commonly acquire new digital learning tools, as well as what they consider to be most important when incorporating ICT in the classroom. Another contributing factor behind conducting this study is the upcoming changes to the current curriculum, as the Swedish Government (Regeringskansliet) decided that changes shall be made in order to ensure and enhance the digital competence amongst Swedish students (Regeringskansliet 2017).

The results and analysis are based on a questionnaire sent out through Facebook and Google Forms, targeting two different groups with the purpose of serving as networks for teachers of English within the Swedish educational system. Combining their answers as well as comparing to previous research, this study identifies, and argues for, two key aspects responsible for improving the ICT competence amongst Swedish EFL teachers in secondary/upper secondary school; high quality digital learning tools and the ability to identify your ICT skill and pick digital tools accordingly. Moreover, this study reinforces the claim made in previous studies that the attitudes towards ICT and digital learning tools amongst Swedish EFL teachers are overwhelmingly positive. However, the study also shows a lack of quality concerning in-service teacher training, resulting in a majority of teachers learning ICT and digital learning tools on their own. Finally, answers show a juxtaposition regarding what teachers actually wish for in order to facilitate the work with ICT and digital learning tools.

Key words

ICT, EFL, Swedish secondary school, Swedish upper secondary school, empirical research, digital tools

Thanks

I would like to thank my supervisor Christina Rosén for all support and help during the process of writing this essay.
# Table of contents

1 **Introduction** .................................................................................................................. 1  
1.1 Aim and research questions............................................................................................... 2

2 **Contextual and theoretical background** ........................................................................ 3  
2.1 The 1:1 computer system in Swedish schools ................................................................. 3  
2.2 Previous research ............................................................................................................. 4

3 **Method and Data** ........................................................................................................... 8  
3.1 Data .................................................................................................................................. 8  
3.2 Validity and Reliability .................................................................................................... 9  
3.3 Problems and limitations ............................................................................................... 10  
3.3.1 Non-response analysis .............................................................................................. 10

4 **Results and Analysis** ................................................................................................... 11  
4.1 Participation demographic ............................................................................................ 11  
4.2 The use of ICT and digital learning tools in EFL teaching ............................................ 13  
4.2.1 The use of ICT ........................................................................................................... 13  
4.2.2 The use of digital learning tools ................................................................................ 16  
4.2.2.1 What defines high quality digital learning tools? ................................................ 18  
4.3 ICT competence and in-service teacher training ........................................................... 20  
4.3.1 Current state of ICT competence amongst EFL teachers ......................................... 22  
4.4 Attitudes towards ICT and digital learning tools ........................................................... 24  
4.4.1 What would facilitate the work with digital learning tools? .................................... 27

5 **Conclusion** .................................................................................................................. 28

References ........................................................................................................................... 31

Appendix .............................................................................................................................. I  
Appendix A Questionnaire ...................................................................................................... I  
Appendix B Cover Letter ....................................................................................................... III  
Appendix C Complete answer sheet ..................................................................................... IV
1 Introduction

In March 2017, the Swedish Government (*Regeringskansliet*) decided that changes to the current curriculum shall be made in order to ensure and enhance the digital competence amongst Swedish students, which in turn directly affects teachers and their work as well (*Regeringskansliet 2017*). This change comes as a result of the rapid technological development in our society and its increasing space in our everyday life. Consequently, Information and Communication Technology (ICT) is becoming an expected part of preparing and carrying out your work as a teacher in Swedish schools, as the teacher is ultimately responsible for including new technology in the classroom. However, looking at the changes about to occur, none will be made to the subject of English (*Regeringskansliet 2017*). Instead, it is possible to argue that the use of ICT in the EFL classroom could be derived from the existing syllabus. For instance, the Swedish National Agency for Education (*Skolverket 2013*) states, in the compulsory school curriculum for year 7-9, that the core content should, amongst other things, include (2013:34-35):

- Spoken English and texts from various media.
- Literature and other fiction in spoken, dramatised and filmed forms.
- Different ways of searching for, choosing and assessing texts and spoken language in English from the Internet and other media.

Similarly, the core content of English 6\(^1\) should, amongst other things, include (*Skolverket 2013:7*):

- Spoken language, also with different social and dialect features, and texts, including complex and formal texts, which relate, discuss, argue, report and provide descriptions, also via film and other media.
- Strategies for source-critical approaches when listening to and reading communications from different sources and in different media.

Admittedly, analyzing and comparing the curricula strengthens the argument for the English syllabus already being compatible with the new changes regarding ICT; referring to “various media” as well as “the internet” as an integrated part of the EFL.

---

\(^1\) In Swedish upper secondary school, English 6 is the second of three levels of English studies available to students (English 5, 6, and 7). In order to study English 6, you must first study English 5, as English 6 is an extension of this course. Similarly, you must first study English 5 and 6 before studying English 7.
classroom. Furthermore, ICT within the English subject might even be used to a wider extent than in many other subjects, based on the core content mentioned above. Thus, being knowledgeable within the field of ICT as an EFL teacher is of great importance in order to succeed.

The research will be done through a qualitative study, using a questionnaire mainly based on a previous research design; Digitala läromedel: tillgång eller börda? (2016) by the National Union of Teachers (Lärarnas Riksförbund, LR), which will be thoroughly explained in the theoretical framework section. Importantly, this essay will not be a repetition of this study, but will differentiate in terms of what questions and variables are being used. Using parts of a previous research design consequently provides the advantage of being able to compare certain results. Thus, it will be possible to spot similarities as well as differences in the answers, and based on that analyze the progress of ICT work among secondary/upper secondary school EFL teachers in Sweden.

1.1 Aim and research questions

The aim of this study is to investigate the attitude towards, expectations of, and competence regarding ICT and digital learning tools amongst EFL teachers in Swedish secondary/upper secondary schools. In addition, how they acquire their ICT skills will be investigated as well. Through comparisons to earlier research and specific studies, identifying ICT trends within the Swedish educational system as well as their cause is also included in the aim of this study. Specifically, the main research questions that will be investigated in this study are:

- To what extent are EFL teachers in Swedish secondary/upper secondary schools given time and opportunity to learn and practice ICT before including it in their teaching?
- What are teachers’ attitudes towards and expectations of ICT and the use of digital learning tools?

This essay is structured in the following way: In section 2 the contextual frame will be presented. This includes a review of the current climate in Swedish secondary/upper secondary school with regard to ICT and the use of digital learning tools. Moreover, the theoretical frame contains previous research within this subject, both from an
international as well as a Swedish point of view. In section 3, method and data will follow. This section includes a presentation of how the survey, which is the core of this essay, was conducted. In addition, a discussion concerning validity, reliability, and limitations is included. The main part of this essay can then be found in section 4, which includes the results and analysis of the conducted empirical study. Finally, the conclusions of the research will be presented in section 5, as well as final thoughts and reflections.

2 Contextual and theoretical background

In this section, the current state of ICT in Swedish schools will be reviewed, including concrete examples and explanations of how schools are implementing the 1:1 computer system. Moreover, previous research regarding ICT relevant to this study will be discussed in order to paint a picture of ICT research, within the scope of this study, at this point in time. Thus, this section as a whole is intended to describe the foundation of what this essay is based upon, from the current situation in Sweden to what is being researched around the world regarding ICT and digital learning tools.

2.1 The 1:1 computer system in Swedish schools

As stated in the introduction, the Swedish Government decided that changes to the current curriculum shall be made in order to ensure and enhance the digital competence amongst Swedish students (Regeringskansliet 2017). A major part of this change, in the concrete school environment, is the introduction and successive implementation of computers, laptops, and tablets being available to students as well as teachers. This phenomena is often referred to as having a 1:1 computer system, meaning every student should have access to a computer at all times. The most common way of implementing this system is handing out either a laptop or a tablet to each student of which they are held responsible to maintain and bring with them to every class. In the article En lärares förhållningssätt till 1-1-datorer by Christoffersen (2013), a teacher in a school where this system was implemented as early as 2007 is interviewed. During the interview, both advantages and disadvantages are discussed, and the teacher interviewee states that the computer is an amazing pedagogical tool, but that it is the teacher’s responsibility to help and make sure that the students do not get distracted by other things (Christoffersen 2013). These other things include social media as Facebook and YouTube, as well as news sites and basically everything that is not the topic of that
specific lesson (Christoffersen 2013). In this particular case, the school has established a set of ground rules concerning the use of computers, where, if the rules are broken, the computer is seized and can be collected at the principal's office at the end of the day (Christoffersen 2013). With that said, every school choosing to implement the 1:1 computer system has their own way of dealing with how to use and control the devices. Hence, depending on what school, or even teacher, being asked, the answers regarding the 1:1 system and ICT as whole could vary significantly.

One article discussing this matter is *Världsbäst på att dela ut datorer - sämst på att använda dem* by Jelmini and Brandel (2014), where they highlight the fact that Swedish schools are very good at handing out computers to their students, but insufficient in implementing them as educational tools. In the article, they refer to an investigation conducted by *Digitaliseringskommissionen*, which is a committee appointed by the Swedish Government with the purpose of encouraging and analyzing what needs to be done in order to reach the IT political goal of Sweden being world leading in utilizing the opportunities of digital advancement (*Digitaliseringskommissionen* 2016:17). To summarize the results, where the scales vary from bad, to average, to good, Sweden falls under the criteria of bad in four out of seven categories (Jelmini and Brandel 2014). One of these bad categories is teachers’ use of equipment during the lessons, where 20% of the teachers asked regard ICT and computers as an intrusion towards their teaching (Jelmini and Brandel 2014). Furthermore, Jelmini and Brandel stress the fact that it is up to each and every teacher to include ICT in their teaching, which could result in a negative attitude towards digital equipment if the school itself does not provide an environment which promotes ICT development (2014).

Consequently, as a result of the Swedish educational system working towards mandatory implementation of ICT in schools, studies of the kind this essay provides are vital in order to observe and analyze in what direction this work is heading. As previously stated, this essay will target EFL teachers teaching at a secondary/upper secondary school level, with the purpose of obtaining a holistic view of the teachers’ attitude towards and everyday exposure to ICT.

2.2 Previous research

This section will describe previous research within the field of ICT and digital learning tools relevant for this study. Technological advancements are happening on a global
scale and every educational system are facing these changes for the first time. As a result of this, research has been gathered from different countries, providing a more holistic point of view while at the same time compensating for the lack of previous research within the Swedish educational system.

First of all, the importance of ICT research is discussed in the article *Att stödja och utforska lärande med hjälp av digitala läromedel* (2014) by Gulz and Haake. They argue that in order to create sufficient digital learning tools, research and development within the field of ICT is required (Gulz and Haake 2014:65). By assembling a compilation of previous research, they conclude that the deeper levels of knowledge reachable through the research of digital learning tools can be used to develop actual pedagogical tools, which in turn can be used in further research (Gulz and Haake 2014:61). Hence, the research within ICT and the actual use of digital learning tools in a school environment are working in symbiosis, as both directly depend upon each other in order to make progress.

As mentioned previously, ICT is becoming a more and more valued and utilized feature within education. This trend can be seen not only in Sweden, but all over the world. In their article *ESL Teacher and ICT: Teachers’ Perception* (2012), Lin and Yunus investigates ESL teachers’ perceptions towards the use of ICT in Kuala Terengganu (2012:119). They conclude that the overall attitude towards ICT amongst teachers is positive, but many choose not to use it due to inadequate ICT skills (Lin and Yunus 2012:127). Their study in itself is very similar to the research design suggested in this essay, pointing towards the same issues.

In *School networks to promote ICT competences among teachers. Case study in intercultural schools*, Butter et al. explore whether or not teachers develop ICT competences through using visual platforms through school networks (2013:443). Through a quantitative study including 51 teachers from five different schools in the Bío-Bío and Araucanía regions in Chile, they developed a shared network where the participants could share ideas and ask questions regarding ICT (Butter et al. 2013:442). The result of this study led them to conclude and suggest the following:

> Potentiate ICT allow teachers to achieve and/or develop competences not only in a technologic use of tools, but also to be able to integrate them in a natural and permanent way to activities in the classroom, so they can be a real contribution to the teaching-learning processes of the students. (Butter et al. 2013:450)
In other words, they conclude that encouraging and helping teachers to develop their ICT skills through school networks and platforms would facilitate the integration of ICT in the classroom.

In addition to investigations and research regarding teachers’ work with and attitude towards ICT and digital learning tools, different models with the purpose of categorizing teachers’ ICT skills are evolving. In *Pedagogy * technology: A two-dimensional model for teachers’ ICT integration* (2012) by Lin et al., one of these models can be found.

This two-dimensional model can serve both as an evaluation tool and as a guiding tool. In terms of evaluation, a teacher may refer to the description of each level, both technology-wise and pedagogy-wise, to determine his or her current status of ICT integration. (Lin et al. 2012:103).

In short, the model is designed to categorize teachers’ technological as well as pedagogical levels in the same assessment. This is done through a two axis chart where one axis accounts for pedagogical competence (A-D) and the second axis accounts for the technological competency (1-7). Thus, if a teacher has high pedagogical competence and low technological competence, the model will e.g. categorize the teacher as (D, 2), and then highlight what that teacher needs to develop in order to reach high competence in both axes. The model was tested in case studies with three Chinese language arts teachers\(^2\) with 7, 18, and 19 years of teaching experience respectively (Lin et al. 2012:103). Through the use of this model, the three participating teachers could identify where they were on “The pedagogy * technology model”, adapt their ICT use accordingly and then use it to develop their ICT skills, which they all did (Lin et al. 2012:105). However, they also claim that further studies will be required to corroborate the model (Lin et al. 2012:107), which is concurrent with a great deal of research regarding ICT at this time. However, being aware of and realizing that ICT skills amongst teachers vary immensely, as discussed by Lin et al. (2012:99), is crucial when conducting an empirical study such as this one. To summarize, Lin et al. argue that every teacher has to be categorized and thereafter met on their current ICT skill level in order to make progress regarding ICT integration (2012:106-107).

\(^2\) In the discussed article, a language arts teacher is the same as a language teacher. The addition of ‘arts’ is most likely included to emphasize the fact that the interviewed teachers are not only Chinese language teachers, but Chinese teachers teaching the Chinese language.
Another important aspect to consider when doing this kind of research is to look at the teacher's role in each respective educational system, and what is included in their job description. *ICT Teachers’ Assigned Roles and Expectations from Them* (2012) by Göktaş and Topu from Atatürk University in Turkey discusses and analyzes this potential issue. How much work can we expect teachers to do outside the classroom, considering everything from administration to being able to solve both hardware and software problems regarding ICT? Set over three different phases, Göktaş and Topu interviewed a total of 44 teachers from different branches, some being ICT teachers and some not (2012:473). The first stage was a focus group interview, followed in the second stage by a pilot study of the interview format used in the third and final phase, which was face-to-face interviews (Göktaş and Topu 2012:473). They conclude that the majority of ICT teachers feel as if the expectations on them are too high as a result of “the lack of knowledge about their actual duties and responsibilities, and ICT teachers highlight that they are confused with ICT formator teachers” (2012:476). Thus, when investigating the perception as well as attitude towards ICT, analyzing the perceived ICT competence amongst the participating teachers, as well as how they receive ICT practice and training is important as it might affect the teachers’ perceptions and attitudes.

Finally, *Digitala läromedel: tillgång eller börda?* by the Swedish National Union of Teachers Lärarnas Riksförbund (2016) is a study upon which this essay is partly based. Through reaching out to 2000 teachers all over Sweden and getting responses from 691 out of these, Lärarnas Riksförbund was able to obtain an overall point of view towards ICT amongst Swedish teachers (2016). In their conclusion, they stated, among other things, that:

- Close to half of the teachers in Sweden completely lack access to digital learning tools.
- More than half of the teachers produce their own digital learning tools.
- Half of the teachers have obtained their ICT knowledge through their own efforts and interest towards digital learning tools.
- Only 1 out of 10 teachers asked considers their digital learning tools to be of high quality.

---

3 In the discussed article, ICT teachers are teachers using ICT as part of their teacher practice (Göktaş and Topu 2012:473).
4 In the discussed article, ICT formator teachers are teachers with specific ICT training, who often have an overall responsibility for all ICT at their school (Göktaş and Topu 2012:474).
5 My translation
By using this study as a base, it will be possible to find and analyze different tendencies, positive or negative. Moreover, being able to compare these tendencies provides the opportunity to see where the implementations of ICT in Swedish schools are heading, and also, if EFL teachers in any way differ from a group of teachers teaching all the available subjects.

3 Method and Data

As mentioned in the introduction, the focus group of this study will be EFL teachers working in secondary/upper secondary school. In addition, the method of choice in this research will be a quantitative one, and the major part of the data was gathered through a questionnaire (Appendix A). The main reason for using this method is based on the aim of the study, which is getting an overall point of view regarding ICT and whether or not teachers are given enough time to learn and practice new features before implementing them in their work. Thus, reaching out to as many teachers as possible is essential in order to establish a reliable result. In addition, using this form of measurement ensures the possibility to discover small differences within the sample group. It also provides a tool to measure these differences, which in turn provides a solid base on which it is possible to conduct more exact approximations and analyses (Bryman 2011:155-156).

3.1 Data

The questionnaire (see Appendix A and B) was sent out to two Facebook groups through Google Forms, targeting EFL teachers in secondary/upper secondary school. After sharing the questionnaire in the first group, containing 2130 members, 48 replies were received over the course of one week. An important note regarding the first group is that it consisted of English teachers on every level within the Swedish educational system. However, it was made clear when the questionnaire was shared that the study focused on secondary/upper secondary school teachers only. Hence, EFL teachers on other levels could ignore the request to participate. After this, the questionnaire was sent out a second time, to a group containing 1563 members consisting of upper secondary

---

6 The questionnaire was sent out containing the Swedish version of the questions only
school teachers in English and/or Swedish, producing another 19 answers over one
week’s time. In total, answers from a total of 67 informants were collected and
analyzed. Both groups are considered active on the basis of their activity on Facebook,
since discussions and sharing of material regarding English teaching are displayed on a
daily basis.

Furthermore, the questionnaire was sent together with information (Appendix B)
explaining the purpose of the survey, that participation is voluntary, that they have
complete anonymity, and the fact that the information gathered will solely be used in
this research, all of which, according to Bryman, are fundamental ethical considerations
(2011:131-132). Finally, as the research design focuses on teachers, no ethical
consideration regarding age had to be taken.

3.2 Validity and Reliability

A quantitative study could be defined as a study where “valid and reliable measures are
required and where generalizability from the sample to the population is the aim”
reliability means that the results would be consistent if the study is replicated and
validity concerns the ability of an instrument to measure what it is intended to measure.
Starting with validity, the questionnaire approach provides this test with solid validity in
terms of avoiding open questions as well as focusing a great deal on designing the
questionnaire according to a scale system, which in turn consequently improves its
accuracy. This will be done by using unbiased and specific questions, leaving
practically no room for personal interpretation that could otherwise generate biased
answers. In addition, limiting the answers to one out of several predetermined options
eliminates the personal interpretations in the answers as well.

Reliability, on the other hand, is secured through reaching a very large and varied
sample group, which in turn reduces the possibilities of receiving biased answers due to
participants being homogeneous. Moreover, the fact that the same questionnaire is used
combined with the use of a scale system ensures the consistency of this research.
Therefore, this study will give sufficiently reliable results due to the nature of the
questionnaire and the make-up of the respondent group, although it should be made
clear that the results are likely to vary over time due to the ever-changing nature of the
rapidly developing phenomenon that this study sets out to explore.
3.3 Problems and limitations

One of the risks when using a questionnaire to collect data is not reaching enough participants to compile a reliable analysis. Furthermore, not being in complete control regarding sample variation could result in a sampling error (Bryman 2011:200). Likewise, errors can occur in the design of, as well as regarding the information surrounding the questionnaire, consequently making the participants unable to answer the questions, e.g. due to a lack of clarity or vague descriptions (Bryman 2011:200). Bryman also raises concerns regarding the use of the data, after it has been collected, as it is up to the person responsible for the survey to ensure correct interpretations of the answers (2011:200). In conclusion, making sure that the questionnaire is held to a high standard from the start is of great importance since a poorly designed one could be devastating to all the work that follows it. Hence, clear instructions before participating (Appendix B), combined with designing questions that could be answered using either a scale or have alternative answers are applied in this research.

3.3.1 Non-response analysis

As previously mentioned, the questionnaire was sent out and shared through Facebook and Google Forms, reaching a total of 3693 members in two groups consisting of English teachers. Based on the descriptions of the group pages, the intention of these groups are similar to the school networks discussed in School networks to promote ICT competences among teachers. Case study in intercultural schools (2013) by Butter et al. in section 2.2. Out of these 3693 members, 67 teachers participated in this study, which makes up for a response rate of approximately 2%. Hence, the number of participants in the study has to be considered lower than expected. There can be several reasons as to why this is, one being both groups primarily consisting of inactive members. However, the only statistic available on Facebook is that of the group as an entity, where both groups, as mentioned in the method section, are considered active due to daily posts and discussions. Hence, no regard is taken in this matter as to whether or not it is a small percentage of the group members producing the majority of content, or if all the members contribute. Thus, assuming a large percentage being passive members is no more than a speculation based on two weeks of observation.

Moreover, another reason for the low participation could also be the questionnaire moving further down amongst the groups’ discussions as new content were continuously added. In other words, two or three days after the questionnaire was shared
in a group, one would have to scroll down through a number of new topics in order to see the questionnaire at all. Thus, only being on Facebook every other day, or less, could result in that member simply not seeing the questionnaire.

Lastly, due to the daily activity in both groups, it is not unreasonable to assume that a majority of the group members turn off the notifications from these groups, as they would approximately receive between two and five every day, possibly making it a nuisance rather than rewarding. Clearly, this could be connected to the first reason stated, arguing a majority of these groups consist of passive members, using these groups when they are in need of help and in search of information rather than using it as an open, ongoing forum. With that said, it is important to note that all of these reasons are speculative given the lack of available statistics.

4 Results and Analysis

This section will present and analyze the answers received from the 67 participants, as well as compare those results to the previous study by Lärarnas Riksförbund (2016). First of all, section 4.1 will discuss and explain important factors regarding the participation demographic that have to be taken into consideration when interpreting the results of the study. In section 4.2, the answers concerning the use of ICT and digital learning tools in EFL teaching will be analyzed as well as connected and compared to previous research discussed in section 2.1. Finally, section 4.3 compiles the current state of ICT competence amongst Swedish EFL teachers in secondary/upper secondary school as well as discusses in-service teacher training and its part in ICT development.

4.1 Participation demographic

In this section, a presentation of the participating teachers will be made. This will be done through using the information they provided in the questionnaire combined with an observation of the Facebook groups used to spread the questionnaire. Variables that will be discussed are differences in gender, age, experience, and at what level they teach.

Out of the 67 participants of this study, 65 chose to fill in their age, resulting in an age span between 23 and 64 years, with an average age of 38,8 years (Figure 1).
Figure 1: Age of the participants

As can be seen in Figure 1, the majority of the participants can be found on the left side of this diagram, i.e. amongst the younger part of the age spectrum. Also, due to the fact that this questionnaire was spread through Facebook, all participants could be considered as active on social media, and therefore arguably being more positive towards computers and digital learning tools. This is something that will be discussed and taken into consideration when analyzing the answers regarding ICT and digital learning tools further into this section.

Furthermore, 73.1% (49/67) of the participants were female, 25.4% (17/67) were male and 1.5% (1/67) identified as agender. Again, given the limits of available statistics regarding these Facebook groups, it is hard to analyze whether or not this representation is accurately matching the gender demographic of these groups. However, an observation shows that more than 90% of new members in both groups, since the questionnaire was sent out, are female. This, combined with another overall view of both groups, suggests that a majority of the members are female. Thus, a majority of female participants in this case could be expected.

In addition, 58.2% (39/67) of the participants are teaching upper secondary school level English, while the other 41.8% (28/67) teach secondary school English. This difference in teaching level is most likely due to the fact that the second group solely consisted of upper secondary school teachers, as mentioned in section 3. Thus, there is a slightly higher participation amongst upper secondary school teachers.

---

7 Agender describes a person with no gender identity. An agender person feels like they are neither a woman nor a man.
Finally, the participants’ working experience as English teachers is summarized in Figure 2 below, varying from 1-5 years (year = år, in Swedish) to more than 25 years of experience (more than = mer än, in Swedish).

Figure 2: Years of experience as an English teacher.
(1-5 = 21, 6-10 = 18, 11-15 = 13, 16-20 = 5, 21-25 = 4, more than 25 = 6.)

4.2 The use of ICT and digital learning tools in EFL teaching

The first part of the questionnaire (questions 1-11) was designed with the purpose of investigating to what extent the participants incorporate ICT and digital learning tools in their everyday teaching. The second part (questions 12-21) consisted of statements with the purpose of investigating the participants attitudes towards ICT and digital learning tools. These attitudes included to what degree participating teachers believe they master the digital learning tools available to them, as well as the quality of, and access to digital learning tools.

In order to achieve a clear structure, ICT and digital learning tools will be discussed separately in this section, focusing on specific questions from the questionnaire (Appendix A) depending on the topic that is being discussed. The first part revolves around the answers from questions concerning ICT. In the second part, digital learning tools will be the focus. Furthermore, as mentioned in the previous research section (section 2.2), the answers from all these questions will be compared to the previous study by Lärarnas Riksförbund (2016) in order to analyze and discuss the results.

4.2.1 The use of ICT

In this section, answers from questions 2 and 7 from the questionnaire (Appendix A), concerning ICT, will be discussed. Consequently, the analysis of this section will include the general attitudes amongst teachers towards ICT, including how much they
use it and if there has been an increase since the previous study (Lärarnas Riksförbund 2016).

As shown in Figure 3, the participating teachers answered the question “To what percentage of your total English teaching do you use digital learning tools?” (Appendix A). Clearly, the biggest category are the teachers using digital learning tools during more than 40% of their English lessons, making up a total of 50.7% (34/67) amongst the participants. Looking at the lower percentiles, 0% and 1-19%, they make up approximately 20% (14/67). Similarly, this could be connected to the result found by Jelmini and Brandel (2014) in their article, where they claimed that 20% of teachers regard ICT and computers as an intrusion towards their teaching (see section 2). Clearly, it is important to note that this study does not claim that the 14 participating teachers answering either 0% or 1-19% regard ICT as an intrusion, but merely that there could be a connection to the results of Jelmini and Brandel (2014). With that said, the possibility that approximately 20% of teachers are against ICT and digital learning tools could be further strengthened when looking at the answers to question 7 (Figure 4).
Out of all participants, only 6% (4/67) worked at a school where this system had not yet been implemented. Hence, comparing to Figure 3, there is a 3% overlap where teachers, despite having the opportunity to use computers due to the 1:1 system, choose to include 0% digital learning tools in their teaching. Consequently, the 11.9% (8/67) (Figure 3) using digital learning tools during only 1–19% of their total teaching could also be considered negative towards ICT and using computers, applying the same reasoning, choosing to barely use ICT despite the opportunity to do so due to the 1:1 computer system.

On the other hand, focusing again on the 50.7% (34/67) using digital learning tools in 40% or more of their teaching, this shows an improvement compared to the answers on the same question in the survey conducted by Lärarnas Riksförbund (2016), which can be seen in Figure 5.
Obviously, the variables differentiate from this study, varying from less than 25%, 25–49%, 50–74% and 75% or more. However, the most noticeable difference between the two is that the biggest part in the previous study, 59%, answered that they use digital learning tools in less than 25% of their teaching. Comparing that result to the result of this study (Figure 3), despite incohesive variables, it is clear that the use of digital learning tools in teaching has increased slightly. It is also important to take into consideration that the respondent group in the study by Lärarnas Riksförbund (2016) consisted of teachers spread over all different levels and subjects within the school system, thus adding another differentiating variable. Again, comparing the two studies and the different variables, the most noticeable increase would be a total of 18% (Figure 4) using digital learning tools in 50% or more of their teaching (2016) while, as stated previously, 50.7% (34/67) of the participants in this study use digital learning tools in 40% or more of their teaching. With that said, it cannot be stated with absolute certainty where the increases in the use of digital learning tools have occurred, due to the different variables, just that there has been an increase.

4.2.2 The use of digital learning tools

This section concerns the answers regarding digital learning tools. More specifically, the focus in this section of the analysis will be the answers given in questions 10, 18, and 20 from the questionnaire (Appendix A), looking at the availability, as well as quality, of the digital learning tools the participating teachers have access to.

First of all, the study by Lärarnas Riksförbund (2016) included teachers of all levels within the Swedish educational system, as well as teachers teaching other subjects than English. Moreover, as mentioned in subsection 4.1.2, the participants of this study could be considered as more positive towards, as well as more used to, computers and digital learning tools due to being active on social media, all of which should be taken into consideration when analyzing. Nevertheless, there has undoubtedly been an increase in the use of digital learning tools when comparing these results. The most reasonable variable to consider after such an increase would be teachers’ attitude towards ICT and digital learning tools. However, again comparing the two studies, the answers to statement 20 in the questionnaire, repeated here: “Digital learning tools should be used more in school” (Appendix A) are practically identical, as shown in Figure 6 and 7 below.
Clearly, the attitude towards ICT and digital learning tools amongst teachers, in general, is approximately the same now as it was in 2016. The difference between this study and the other one is the possibility to pick a more neutral alternative, not leaning towards positive nor negative attitudes regarding digital learning tools. As shown in Figure 6, this was the alternative most participants chose, implicating these teachers are satisfied with things as they are.

Consequently, the reason for the increased use of ICT and digital learning tools might instead be explained by another variable: the quality of the digital learning tools available. In this study, as well as in the study by Lärarnas Riksförbund (2016), the participants were asked to rank the following statement: “18: The digital learning tools I know of and use are of high quality” (my translation) (Appendix A). The results can be seen in Figure 8 and 9 below.
Obviously, the most noticeable difference between these two studies is the category of participants that completely agreed with the statement, increasing from 10% to 17.9% (12/67). Furthermore, instead of placing themselves in the category of disagreeing to some extent, 38.8% (26/67) answered a 3 on the 1‒5 scale in this study. Indeed, it would be possible to argue that if this option would have been available in the study by Lärarnas Riksförbund (2016), many teachers might have chosen this alternative over disagreeing to some extent. However, while a total of 32% of the teachers were negative in the study by Lärarnas Riksförbund (2016), as can be seen in Figure 9, only 9% (3/67) were negative towards the quality of digital learning tools in this study, as 3% (1/67) chose rank 2 and 6% (2/67) chose rank 1 (Figure 8). Thus, the attitude towards ICT and digital learning tools has become more positive, and a higher percentage having access to high quality digital learning tools was the only statement with remarkable differences when comparing the results. Therefore, the increased quality of digital learning tools is most likely the reason for more teachers having a positive attitude towards digital learning tools.

4.2.2.1 What defines high quality digital learning tools?

As the results implicated, the increase in positive attitude towards ICT and digital learning tools can be related to teachers having access to digital learning tools of a higher quality. The next natural step is to investigate what defines high quality digital learning tools. In this study, all participants were asked to rank five attributes regarding digital learning tools, from most important to least important, which is presented in Figure 10 below:
Figure 10: What demands do you have regarding digital learning tools? Rank the following five attributes from 1-5, where 1 = least important and 5 = most important. 66/67 of the participating teachers answered this question.

Obviously, there is really only one attribute standing out from the rest: “replaces traditional study material”, as the majority of participants ranked this as the least important attribute of a digital learning tool. To clarify, only one attribute could receive the rank 1 to 5 in each answer, thus forcing the participants to rank the alternatives. Hence, the one attribute the majority regards as least important is replacing traditional study material. Other than that, the rest of the attributes are ranked rather similarly to each other, where the attribute “user friendly” is ranked as most important by most participants with a slight margin.

Furthermore, it should also be noted that the participants had no option to suggest attributes and/or demands of their own. Hence, further research should be done before assigning these attributes as core features. However, it is safe to assume that the expected quality of digital learning tools is very high amongst the teachers including it in their everyday work, as they consider four out of the five alternatives in the table above (Figure 10) being almost equally important. Thus, as this study argues in subsection 4.2.1, the importance of high quality digital learning tools is vital in order to have a positive increase in attitude towards ICT and digital learning tools. This was also suggested by Gulz and Haake (2014), discussed in section 2.1.
4.3 ICT competence and in-service teacher training

As mentioned by Lin and Yunus (2012), many teachers choose not to use ICT due to inadequate skills (2012:127). Furthermore, Göktaş and Topu (2012) argue that the majority of ICT teachers feel as if the expectations on them are too high as a result of “the lack of knowledge about their actual duties and responsibilities, and ICT teachers highlight that they are confused with ICT formator teachers” (2012:476). Thus, investigating the ICT competence amongst the participating teachers, as well as how they receive ICT practice and training will be the focus of this section.

First of all, as can be seen in Figure 11 and 12 below, the participants were asked to answer two questions regarding their general training and competence of ICT and digital learning tools. In these two questions, the participants had the opportunity to propose their own alternatives, resulting in very unique answers, displayed as the very small pieces of each diagram above. However, no real trend amongst these answers could be found, as they were seemingly very personal opinions and experiences for each and every teacher choosing this option. Therefore, the focus in this analysis will be the larger parts of data collected through the predetermined alternatives.

Looking at Figure 11, 26.9% (18/67) of the participants have received regular ICT training over the last three years, 22.4% (15/67) received training when the digital tools

---

8 In the discussed article, ICT formator teachers are teachers with specific ICT training, who often have an overall responsibility for all ICT at their school (Göktaş and Topu 2012:474), and ICT teachers are teachers using ICT as part of their teacher practice (Göktaş and Topu 2012:473).
were introduced, and 37.3% (25/67) have received no ICT training at all. Undoubtedly, this explains the results in Figure 12, where 82.1% (55/67) of the participants stated that they have primarily gained their ICT competence through their own interest and initiative. In addition, only 10.4% (7/67) answered that the ICT in-service teacher training provided by their school is their main source of ICT competence. In other words, a majority of teachers does not get regular ICT in-service teacher training, and even if they do, they still learn more on their own.

The claim that teachers learn more and better on their own at this point in time is further strengthened through the result from the statement in Figure 13 below, where a majority of the participants stated that they do not need more in-service teacher training, as rank 1-2 makes up 52.3% (35/67), combined with another 22.4% (15/67) being indifferent to the statement.

Moreover, it is clear from Figure 14 and 15 below that participants of this study are generally satisfied with the digital learning tools they have available, as well as the number of digital learning tools available to them.

---

**Figure 13:** I need more in-service teacher training regarding ICT and digital learning tools (Participants were asked to rank the statement from a scale from 1-5, where 5 = Completely agree and 1 = Completely disagree)

**Figure 14:** I master the digital learning tools available to me (Participants were asked to rank the statement from a scale from 1-5, where 1 = Completely disagree and 5 = Completely agree)
Indeed, this is a very positive response, especially when again comparing these answers to a similar question asked by *Lärarnas Riksförbund* (2016), displayed in Figure 16 below. The amount of teachers claiming they need more competence regarding ICT and digital learning tools was then 30%, see Figure 16. This could be compared to the results presented in in Figure 14 in this study, where only 4.5% (1/66) claim that they do not master the digital learning tools available to them.

![Figure 16](image-url)  
*Figure 16: How have you mainly gained your competence regarding ICT and digital learning tools? (Lärarnas Riksförbund 2016:8) (Swedish-English translation: Eget intresse = Own interest, Ansver mig behöva mer kompetens = I need more competence, Fortbildning = Training through the school, Annat = Other, Vet ej = Don’t know)*

### 4.3.1 Current state of ICT competence amongst EFL teachers

As previously mentioned, the answers received in this study regarding teachers mastering the digital learning tools available to them are to be considered very positive
compared to those in the study by *Lärarnas Riksförbund* (2016). Looking at and comparing the differences between the two studies, one variable stands out from the rest regarding how the participants work with ICT: the freedom to use whatever digital learning tool they desire. As shown in Figure 17 and 18 below, it is clear that the participating teachers of this study get to choose what digital learning tools to use and what ICT to incorporate in their teaching to a much larger extent, compared to the participating teachers in the study from 2016. Hence, it is reasonable to argue that teachers having the opportunity to choose what digital learning tools to use increase their will to learn it, resulting in them mastering the tools they use to a higher degree.

Furthermore, this can be connected to the model discussed by Lin et al. (2012). They made the claim that every teacher has to be categorized and thereafter met on their current ICT skill level in order to make progress regarding ICT integration (2012:106-107). Thus, the results displayed in Figure 17 and 18 can arguably be connected to these arguments, as the participating teachers in this study are not forced into using digital learning tools they are not comfortable with. Consequently, they have the opportunity to incorporate ICT and digital learning tools suitable to their own individual level.
4.4 Attitudes towards ICT and digital learning tools

As briefly mentioned in subsection 4.2.1, when comparing this study to the study by Lärarnas Riksförbund (2016), the attitudes towards ICT and digital learning tools seem to remain the same amongst the participating teachers. Meanwhile, as discussed in subsection 4.1.2, it is possible to argue that the participants of this study are more positive towards ICT and digital learning tools. Specifically, being active on social media implies slightly higher technological competence, which in turn arguably implies a more positive attitude towards ICT and digital learning tools. Consequently, the purpose if this section is to analyze why there has not been any significant difference regarding the teachers’ attitudes towards ICT and digital learning tools, positive or negative, despite there being an increase in both use (section 4.2) and competence (section 4.3).

Hence, Figure 19-21 below show the results from statements 14, 19, and 21 from the questionnaire, all of them asking about attitudes towards ICT and digital learning tools (see Appendix A and B). Participants were asked to rank these statements on a scale from 1-5, where 1 = Completely disagree and 5 = Completely agree.

Figure 19: I wish I had access to more digital learning tools
Looking at Figure 19 first of all, 38.8% (26/67) completely agree with the statement suggesting a wish for access to more digital learning tools, while another 16.4% (11/67) agree to some extent. This makes up for a total of 55.2% (37/67) of the participants wishing they had access to more learning tools. On the other hand, looking back at Figure 15 in section 4.3, 62.7% (42/67) completely disagreed with the statement that there is a lack of digital learning tools connected to their subject (English). Moreover, another 14.9% (10/67) disagreed to some extent with that statement, resulting in a total of 77.6% (52/67) disagreeing. Undoubtedly, this creates an interesting contradiction, as the participating teachers on the one hand consider themselves having enough digital learning tools within the English subject, but on the other they generally want access to more digital learning tools.
Thus, to find the reason behind this contradictory result, a more profound analysis of the teachers’ attitude towards ICT and digital learning tools is needed. In other words, analyzing more results besides those presented and briefly discussed in subsection 4.2.2 (Figure 6), which suggested that a majority of the participants were neutral to the statement of digital learning tools should be used more in school. Specifically, we look at the results presented in Figure 20 above: “Digital learning tools are better than other types of teaching tools”. As seen in Figure 20, the results are not overwhelming towards a single rank or side. Instead, 38.8% (26/67) were on the disagreeing side of the statement (rank 1-2), 26.9% (18/67) were on the agreeing side (rank 4-5) and finally, 34.3% (23/67) were neither agreeing or disagreeing with the statement that digital learning tools are better (rank 3).

Moreover, the results presented in Figure 21 above, show that 52.2% (35/67) completely agreed with the statement that a combination of traditional and digital learning tools are the best. Thus, it is possible to argue that teachers do not rank digital learning tools as superior to traditional learning tools, but as equally important. Consequently, it is reasonable that the general attitude towards ICT and digital learning tools have remained the same, and that the increase in use and competence is a result of teachers’ increased ability to include ICT and digital learning tools in their teaching. Clearly, the majority of the participating teachers in this study strive to reach a balance between digital and traditional learning tools, rather than aiming at replacing all traditional learning tools with digital counterparts.

To summarize the analysis of the teachers’ attitudes towards ICT and digital learning tools, the attitude is overwhelmingly positive even if there has not been a significant increase since the study made by Lärarnas Riksförbund (2016), as discussed in subsection 4.2.1. Furthermore, it is also clear that the teachers participating in this study want access to more digital learning tools, while at the same time being satisfied with the number of digital learning tools within their subject (section 4.4). Finally, despite the positive attitude towards ICT and digital learning tools, combined with wanting more access, the participating teachers still do not rank digital learning tools over traditional ones. Needless to say, the results of this study further highlight the depth and complexity of integrating ICT and digital learning tools in the Swedish educational system.
4.4.1 What would facilitate the work with digital learning tools?

This part gives a summary of the answers given by the teachers on this final and only open question of the questionnaire: “What do you think would facilitate the work with digital learning tools?” (Appendix A). It should be noted that only 59.7% (40/67) of the participating teachers chose to answer this question. Nonetheless, 27.5% (11/40) out of those who chose to answer did in some way wish for the same thing, specifically, a more synchronized and/or standardized ICT system. Admittedly, the answers varied from wanting to synchronize with other teachers within the same subject, to wanting a standardized system for the entire municipality. However, they all wished for synchronization and/or standardization of ICT and digital learning tools in some shape or form. This, in turn, could explain the contradiction discussed in section 4.4, where the participating teachers want access to more digital learning tools, while at the same time being satisfied with the number of digital learning tools within their subject. According to the answers the open question, the teachers do not wish for more subject specific digital learning tools, but instead ways to synchronize everything they use in a convenient way. In other words, they want to be able to share and access all of their work with digital learning tools through a centralized system, making it available and useful to more teachers, as well as students. Moreover, many highlight the importance of every teacher being part of the same system within either the same subject, school, and/or municipal, thus standardizing the ICT rather than every teacher approaching it on their own. Obviously, this will be a very challenging problem to approach, since most teachers have established ways to work with ICT and digital learning tools, but also wish for synchronized working methods.

Finally, 20% (8/40) wanted more high quality in-service teacher training (Appendix C). This correlates with the discussion in section 4.3 and Figure 12, where 82.1% (55/67) of the participants stated that they have primarily gained their ICT competence through their own interest and initiative. Essentially, even if teachers receive in-service teacher training at this time, it is often of such a low quality that they still have to learn the new digital learning tools on their own. In addition, besides these tendencies in the answers of the final question, the majority of those who chose to answer struggle with technological handicaps, such as unstable wifi and not having access to computers and/or tablets. Thus, the obvious improvement in those cases would be improving the technological infrastructure at those specific schools, e.g. through implementing the 1:1 computer system discussed in section 2.1.
5 Conclusion

The aim of this quantitative study was to investigate the attitude towards, expectations of, and competence regarding ICT and digital learning tools amongst Swedish EFL teachers in secondary/upper secondary school. As stated in the introduction, the main questions that were investigated in this study are:

- To what extent are EFL teachers in Swedish secondary/upper secondary schools given time and opportunity to learn and practice ICT before including it in their teaching?
- What are teachers’ attitudes towards and expectations of ICT and the use of digital learning tools?

Firstly, it can be concluded through this study that the overall attitude towards ICT and digital learning tools in Sweden is positive, as discussed in subsection 4.2.1 and 4.2.2. Furthermore, comparing the results of this study to a similar previous study (Lärarnas Riksförbund 2016), there has definitely been an increase in the use of ICT and digital learning tools amongst teachers. According to this study, the main reason for this change is the increased access to high quality digital learning tools, discussed in subsection 4.2.2.1. Undoubtedly, this study shows a direct correlation between the quality of ICT and digital learning tools and the teachers’ will to incorporate it in their teaching. Thus, in order to further increase the use of ICT and digital learning tools amongst teachers, this study argues that the quality of digital learning tools must then continue to increase as well. Similarly, this concurs with the findings by Gulz and Haake in section 2.1, as they too argue that in order to create sufficient digital learning tools, research and development within the field of ICT is required (2014:61).

Secondly, as discussed in section 4.3, the amount of teachers stating that they master all of the digital learning tools they use have increased rapidly compared to the previous study by Lärarnas Riksförbund (2016). According to this study, the reason for this change can be attributed to the teachers’ increased ability to choose what kind of digital learning tools to incorporate in the classroom. Arguably, this result can be compared to the arguments of Lin et al., claiming that every teacher has to be categorized and thereafter met on their current ICT skill level in order to make progress regarding ICT integration (2012:106-107). Hence, in order to develop their ICT skills,
this study argues that teachers must be allowed to choose their own digital learning tools to a higher degree.

Thirdly, in section 4.4, the attitude towards ICT and digital learning tools amongst Swedish EFL teachers in secondary/upper secondary school is analyzed. This resulted in an interesting discussion regarding what the teachers want to facilitate concerning the work with digital learning tools. In fact, the analysis of the last question in subsection 4.4.1 to some extent contradicts the claims made in section 4.3. Specifically, teachers want freedom to choose what digital learning tool to use themselves (section 4.3). At the same time they wish for more synchronization and even standardization of ICT and digital learning tools (section 4.4.1). Also, it is clear that teachers in general do not regard ICT and digital learning tools as a replacement for all traditional learning tools (section 4.4). Instead, this study shows that most teachers strive to find a balance between digital and traditional learning tools. Consequently, one is not ranked above the other. Moreover, based on the results of the final question discussed in section 4.4, this study argues that in-service teacher training must increase in quality in order to make it a viable source of information. Since, as this study clearly shows, the majority of teachers today receive most part of their ICT knowledge through learning themselves.

To conclude, this study argues that the overall positive attitude towards ICT amongst EFL teachers remains high, as well as the expectations of it. Moreover, compared to previous studies, the level of ICT use and skill are consistently increasing amongst EFL teachers in secondary/upper secondary school, mainly due to the increasing quality of digital learning tools. This, in turn, can be connected to teachers’ expectations of ICT and digital learning tools. Furthermore, regarding time and opportunity to learn and practice ICT and digital learning tools before including it in their teaching, this study argues that higher quality in-service teacher training is essential in order to make it viable, thus complementing the skills the teachers acquire on their own.

Finally, the contradiction amongst the wishes of the participating teachers in this study discussed in subsection 4.4.1 would make an interesting topic for further research. On the other hand, the lack of high quality in-service teacher training combined with teachers wishing for synchronized and/or standardized systems regarding ICT and digital learning tools revealed in this study is something the Swedish National Agency (Skolverket) ought to recognize. Hence, an online platform available to all teachers with
the ability to create, find, and share tips and in-service teacher training regarding ICT and digital learning tools is something they could possibly look into, develop, and provide.
References


Appendix

Appendix A Questionnaire

GENERAL INFORMATION

- Man/Man, Woman/Kvinna, Other/Annat
- Age
- Secondary school/Högstadie, Upper secondary school/Gymnasie

QUESTIONS

1. Years of experience as an English teacher/Hur många års yrkeserfarenhet har du som engelsklärare?
   - 1-5
   - 6-10
   - 11-15
   - 16-20
   - 21-25
   - More than/Mer än 25

2. To what percentage of your total English teaching do you use digital learning tools/I hur stor andel av din undervisning använder du digitala läromedel?
   - 0%
   - 1-19%
   - 20-39%
   - 40% or more/eller mer
   - Don’t know/Vet ej

3. How many hours (per week) do you use to prepare digital learning tools/Hur mycket tid (per vecka) lägger du på att förbereda digitala läromedel?
   - 0
   - 1-4
   - 5-9
   - 10-14
   - 15 or more/eller mer
   - Don’t know/Vet ej

4. How many hours (per week) do you use computers in your English teaching/Hur många timmar (per vecka) använder du datorer/läsplattor i din engelskundervisning?
   - Less than/Mindre än 2
   - 2-4
   - More than/Mer än 4
   - Don’t know/Vet ej

5. How many hours (per week) do you use computers/tablets on your spare time/Hur många timmar (per vecka) använder du datorer/läsplattor på din fritid?
   - Less than/Mindre än 2
   - 2-4
6. How have you mainly gained your competence regarding ICT and digital learning tools? Hur har du huvudsakligen utvecklat din kompetens i digitala läromedel?
   • Own interest/Eget intresse
   • Training through the school/Fortbildning
   • Other/Annat

7. When did your school implement the 1:1 computer system? När infördes användning av 1:1 dator i undervisningen på din skola?
   • Before/Före 2010
   • 2011-2012
   • 2013-2014
   • 2015-2016
   • 2017-2018
   • Have not yet been implemented/Har ej införts än
   • Don’t know/Vet ej

8. How much in-service teacher training have you got regarding ICT and digital learning tools over the last three years? Hur mycket fortbildning har du fått gällande användning av digitala läromedel de senaste tre åren?
   • Regularly/regelbundet
   • When the digital learning tool was first introduced/Vid introduktion
   • None/Ingen
   • Other/Annat

9. How do you get access to digital learning tools? (Possible to pick several options) Hur får du tillgång till digitala läromedel? (Möjligt att välja flera alternativ)
   • School management decides and buys it for the school/Skolledningen avgör och köper in till skolan
   • I order digital learning tools myself (through companies/websites)/Jag beställer själv (via företag/hemsidor)
   • Borrow (through e.g. AV-Media/Lånar (via ex. AV-Media)
   • I receive offers through the Internet/Jag får erbjudanden via nätet
   • Colleagues recommend/Kollegor rekommenderar

10. What demands do you have regarding digital learning tools? Rank the following five attributes from 1-5, where 1 = least important and 5 = most important/Vilka krav ställer du på ett digitalt läromedel? Rangordna svaren utifrån det du anser vara viktigast (1 = minst viktigt, 5 = mest viktigt)
    • User friendly/Användarvänligt
    • Follows the syllabus/Följer läroplanen
    • Possibility to adapt to students with special needs/Möjlighet att anpassa till elever med särskilda behov
    • Can be used individually as well as in whole class/Kan användas i både helklass och självständigt arbete
    • Replaces traditional study material/ Ersätter traditionella läromedel
STATEMENTS

Participants were asked to rank the statement from a scale from 1-5, where 1 = Completely disagree and 5 = Completely agree/Deltagar blev omedd att ranka följande påstående på en skala 1-5, där 1 = Stämmer mycket bra och 5 = Stämmer mycket bra.

11. I have good access to digital learning tools/Jag har god tillgång till digitala läromedel
12. I can choose what kind of tools to include in my teaching, both traditional and digital/Jag kan välja vilken typ av läromedel jag använder i min undervisning
13. I master the digital learning tools available to me/Jag känner att jag behärskar de digitala läromedel jag har tillgång till
14. I wish I had access to more digital learning tools/Jag önskar jag haft fler digitala läromedel att tillgå
15. I produce my own digital learning tools/Jag producerar mina egna digitala läromedel
16. There is a lack of digital learning tools connected to my subject (English)/Jag saknar digitala läromedel i mitt ämne (Engelska)
17. I need more in-service teacher training regarding ICT and digital learning tools/Jag känner att jag hade behövt mer fortbildning inom digitala läromedel
18. The digital learning tools I know of and use are of high quality/De digitala läromedel jag känner till håller hög kvalitet
19. Digital learning tools are better than other types of teaching tools/Digitala läromedel är bättre än andra typer av läromedel
20. Digital learning tools should be used more in school/Digitala läromedel bör användas mer i skolan
21. A combination of traditional and digital learning tools are the best/Jag tycker att en kombination av traditionella och digitala läromedel är bäst

OPEN QUESTION

What do you think would facilitate the work with digital learning tools?/Vad anser du skulle underlätta arbetet med digitala läromedel?

Appendix B Cover Letter

Hej, jag heter Anton Nilsson och läser till Ämneslärare i engelska på Linnéuniversitet i Växjö. Jag skriver just nu min C-uppsats vars fokus är IKT och användning av digitala läromedel bland gymnasie- och högstadielärare i engelska. Så om du är lärare i engelska på gymnasie- eller högstadienivå hade jag varit väldigt tacksam om du kunde besvara min enkät. Det tar 10-15 minuter och deltagande sker helt anonymt. Skulle det finnas frågor angående undersökningen kan ni kontakta mig eller min handledare på följande e-mail adresser:

Anton Nilsson
an222qi@student.lnu.se

Christina Rosén (handledare)
christina.rosen@lnu.se
Appendix C Complete answer sheet

LINK:
https://docs.google.com/spreadsheets/d/1zAdBvDWDJicfU6E4n2xKkeOzMXC2WQPm_E76WNVwbhE/edit?usp=sharing