Digital Learning Tools

Methodology in a Multimodal World

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Abstract

The aim of this study is to present teacher and student views on, and usage of, digital learning tools in the Swedish upper secondary English language classroom, as well their views on a comparison between digital and traditional learning tools. Digital learning tools have seen an increase in both usage and development, something that began as early as the 1990's, and has become a more common sight in Swedish upper secondary schools. Previous research conducted about digital learning tools and their application in both the general and the English language classroom is presented and used to both analyze and discuss empirical data; said data has been received through a qualitative methodology comprised of two focus group interviews with students and teachers. The empirical data is categorized according to each research question, with direct and translated quotes from the focus group interviews. The results of the study show that while digital learning tools viewed in a positive light and their usage is appreciated by some students, both groups primarily advocate variety in the English language classroom rather than relying exclusively on just one set of tools to create a learning environment that caters to all students rather than a select few.

Keywords

Digital learning tools, Traditional learning tools, English language learning, Upper secondary school, Multimodality

1. Background

1.1 Introduction

Teaching has seen plenty of change throughout the centuries. From an increase of commonly available subject-based information to centuries worth of educational reforms, teaching is hardly something that has remained fully static; instead, it has adapted to reflect the current academic and socio-cultural standards. With the changes made to the teaching process, it is of no surprise that there has also been a change in the learning tools used in the classroom; for the purposes of this essay, the focus of which is the English language learning classrooms.

With the dawn of a new technological age, learning tools have branched out from just written textbooks to also include digital mediums. The advent of the internet grants a teacher permission to utilize a wealth of information when teaching his or her subject; from various websites brimming with information, to electronic books on their specific subject. With more and more digital teaching tools being developed and brought into the classrooms, the variety of methods and tools a teacher can use to educate is steadily growing. From showing documentaries on VHS to fully equipped virtual classrooms; digital multimodality has developed at an astounding rate during the last two decades.

However, despite the advent of internet-supported learning, textbooks are still commonplace within an English language classroom, where they are viable tools which facilitate learning, as they have done throughout history. Despite the new educational environment, with more advanced tools such as laptops, tablets and Smartboards becoming more and more common, textbooks represent to many a tried and tested basis of either learning a new language or developing existing language skills.

The topic of digital multimodality is quite broad, with research having been done on various sub-topics such as the effect of digital learning tools on the learning process, the business aspects of the developing virtual classrooms, to teacher and pupil views on the subject matter. While not invented for the purpose of education, the World Wide Web can be seen as a common and effective digital learning tool, and made sure that digital methods of teaching and learning were available before the turn of the millennium; research was made into the application of technology in the English language classrooms for learning purposes as early as the 1990's, and research on the topic of digital multimodality as a whole has expanded in over twenty years time in conjunction with new and improved technology having been introduced into the English language classroom.

My interest for this particular section of the broader topic – digital learning tools in relation to both the learning process and printed learning tools, as well as the views on their practices – developed after having read an article published before the millennial shift, regarding the use of the World Wide Web in a classroom setting, and the effects it would have on the learning process. It argued that digital media would grow to become an integral part of classroom activities, in response to a growing cyber-culture. Today, where more and more classrooms are being equipped with computers and the World Wide Web is easily accessed from a wealth of devices, the cyber-culture dreamed of twenty years ago can become reality.

1.2 Steering documents

The steering document primarily used when teaching upper secondary English classes in Sweden is Lgy11, which is the official steering document for upper secondary school published by The Swedish National Agency for Education (Skolverket, 2012). When applicable, Lgy11 will be the steering document referred to in this thesis.

The official steering documents mention the following:

> Students should be given the opportunity to interact in speech and writing and producing spoken language and various texts on their own and with others, and with the support of various technologies and media. Teaching must take advantage of the outside world as a resource for contacts, information and learning and help students develop an understanding of how to research, evaluate, select, and acquire content from various sources of information, knowledge and experiences (Skolverket, 2012).

Utilizing digital learning tools can be seen as a method that would make it easier to reach the goals set by The Swedish National Agency for Education,

1.3 Study aim and Research Questions

The aim of this study is to examine teachers' and students' views, as well as practices, regarding the use of digital learning tools in relation to printed learning tools in upper secondary level English classes. This is done in order to further our understanding on the use of digital learning tools in relation to learning processes in English as a second language. Because this essay with examine the perspectives of two different groups, two sets of research questions were prepared.

1. What is the view and/or opinion of teachers on using digital learning tools in the upper secondary level English classes?

2. How is digital learning tools used by teachers in upper secondary level English classes in order to enhance the learning process?

3. What is the view of teachers on the difference between digital learning tools and printed learning tools in regards to the learning process in upper secondary level English classes?

1. What is the view and/or opinion of pupils on using digital learning tools in the upper secondary level English classes?

2. How is digital learning tools used by pupils in upper secondary level English classes in order to enhance the learning process?

3. What is the view of pupils on the difference between digital learning tools and printed learning tools in regards to the learning process in upper secondary level English classes?

2. Theoretical perspective

2.1 Previous research

2.1.1 Search criteria

When conducting a systematic search for previous research regarding the topic of this thesis, I chose to utilize only a few trusted databases. The reasoning behind if the databases in question were trusted or not were based on personal experiences from previous searches, as well as if they were officially recommended by Stockholm University. For this thesis, I used the Stockholm University library database, the Google Scholar database, the EBSCO database and the ERIC database, with the last one chosen particularly for its specialization in both teaching and learning. However, the very first search was conducted on the Google search engine, in order to familiarize myself with the topic.

The primary database which I utilized was the ERIC database, where I began a rudimentary search for articles on digital learning tools, using those precise keywords. Due to the overwhelming amount of results yielded by the search, with over ten thousand hits, I chose to add a touch of specificity to my search by first limiting the search to peer-reviewed articles and to articles that were available for use in the ERIC database.

While the results were indeed cut down to a third of the previous amount, I found that it was still far too many results, and very general. As this thesis is about digital learning tools in upper secondary English classes, I used appropriate keywords to limit my search to that particular criterion. This produced a drastically reduced number of results, which were then looked through to find appropriate articles.

When utilizing the secondary databases, complimentary searches were made, and thus they were not used as meticulously or extensively as the ERIC database.

2.1.2 Digital Learning Tools

The application of technology in education in the form of digital learning tools is hardly a recent phenomenon, rooted in the fact that the basic technology required to do so has been around for quite some time, starting out with a simple phonograph during the 1950's (Ahmad, 2012). While the traditional classroom setting is still greatly in use, an increase in the degree of digitalization in the English language classroom is becoming a reality. During the 1990's, research was made into the growing use of computers in an educational setting, with worries that the usage of digital learning tools – with a primary focus on computers – would create an isolated work environment where students would have had limited communication (Ganszauge *et al*., 1994). However, proponents of digital learning tools were quick to mention that the use of computers and the World Wide Web would lead to an increase in motivation and student self-esteem, as well as expose the student to a variety of learning styles (Spring Institute for International Studies & Arlington Education and Employment Program, 1999) and remove the boundaries of the physical classroom (McMillen et. al., 1997).

Despite the research into the usage of digital learning tools in education purposes, and the increase in actual usage of said tools, the software and hardware available at the time limited the

usefulness that it could possibly bring to the English language classroom, with the educational policy makers focusing on creating more access to new technologies with the purpose of increasing its use in classrooms settings (Cuban et. al., 2001). With today's advancement in computer technology, it begins to play a larger role in education, and can be seen as an effective tool to solve educational problems (Serin, 2011).

Worries lay within the thought that through an increase in digitalization of English language learning, teachers would become an unneeded resource; however, Finn & Fairchild (2012) mention that technology simply cannot replace a teacher, but rather help teachers reach more students and thus boost student achievement, as their roles in education are still vital.

> But teacher's role in learning process is still central. It is the teacher who gives proper guidelines as to how to make the best use of media technology for acquiring language skills (Ahmad, 2012).

Adding a digital component to English language education can, however, let the students have a bigger role in their own learning, as they are now a good method to actively gather information and learn how to handle learning through multimodal means.

> The use of Web 2.0 tools has also resulted in an increased emphasis on multimodal digital communication in allowing adolescents to readily mix images, video, music, and print texts. These experiences afford them new ways of understanding and producing digital texts. (Doering et. al., 2007)

As multimedia technology is quickly becoming a larger part of student lives, through both in-class and outside-of-class interactions, learning how to apply their usage in educational matters can be of great help to students and expand their learning experience (Sivakumaran et. al., 2012).

With computers and computer technology being a vital part in the development of digital learning tools, Padurean & Margan (2009) identifies various roles computers and computer technology may have in the English language classrooms:

- **Teacher role.**

The primary focus of using a computer as an educational tool in an English language classroom is to help the teacher teach the language. Being one of the primary access points to the World Wide Web, students are able to search for – and find – a wealth of English language texts in a variety of fields (Ashvini, 2012) as well as internet resources dedicated to teaching aspects of the English language, such as grammar or spelling. A recent method of utilizing computer technology to teach English is the use of what is known as a *flipped classroom*.

A common flipped classroom method utilizes video recording technology to record the instruction part of a lesson and then share the video with students online before meeting face-to-face so they can go through the concepts at their own pace; this is but one of the methods for the flipped classroom (Başal, 2012). By utilizing the flipped classroom method, more time can be given in class to discussions and engaging classroom activities (Başal, 2012). The importance of teachers is shown in his flipped classroom model, as they are responsible for not only relaying the lesson information through a recording, but also aiding the students in their understanding of that particular information through in-class group activities and working individually with students (Bergman & Sams, 2012).

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- **Tester role.**

Computer software can be used to test the language proficiency of students, through custom tests prepared by the teacher, or by using one of the many testing resources available on the internet or through educational organizations. While not always allowing students to develop and motivate their answers, due to the right-or-wrong approach of language tests, it can be seen as an engaging exercise for students to test their language skills and a method for teachers to assess student progress (Padurean & Margan, 2009).

- **Tool role.**

By utilizing the computer as an information retrieval tool via online - or even offline - search engines, teachers as well as students to acquire the tools to improve English language acquisition, ranging from video clips on video sharing websites such as YouTube to websites with a focus on grammar and exercises.

- **Data Source role.**

As the World Wide Web is vast and filled to the brim with information from a variety of academic and non-academic fields, it can be used by both teachers and students to gather relevant data for projects and presentations. However, due to the sheer size of information available on almost any topic that can come to mind, it is easy to lose focus and thus web surf aimlessly.

In addition to being overwhelmed by the vast amount of information at the users fingertips, the validity of said information is most always up for debate; to combat this, teachers can teach students a critical approach to handling online resources as well as prepare a set of valid resources for students to utilize for their educational needs, which can limit both search time and faulty data (Padurean & Margan, 2009).

- **Communication facilitator role.**

Communicating through computer technology is an easy feat today; due to the advancements in both instant messaging and blogging technology, computer technology allows teachers as well as students to access ways of quick and efficient communication. The concept of information and communications technology is built on the communicative aspects of

On social networking sites such as Facebook, Twitter or MySpace, teachers can create private accounts or groups for students to utilize in their English language learning. However, while social networking sites allow for communication in an education purpose, they can also lead to distractions; backlash has been received towards including social media in education due to the possibility of student not using it for schoolwork (Klopfer et. al., 2009; Fewkes & McCabe, 2012). However, the benefits of using social media in education, such as higher degree of collaboration, participation and communication (Fewkes & McCabe, 2012) has been recognized.

Teachers can utilize weblogging systems to create a website where English language students can "publish" their written works, collaborate with both their peers as well as the teachers, as well as develop their critical and analytical thinking prowess (Richardson, 2010). Here, teachers can directly communicate with their students through private or public

comments on their works, and build an effective personal learning environment for her students that can increase student motivation (Serin, 2011).

2.1.3 ICT

Information and Communications Technology (or ICT, for short) is an extended version of Information Technology (or IT, for short) which focuses on the unifying communicative aspects of IT.

ICT has seen an increased use in education as more tools and methods have been designed to facilitate both communication and the sharing of information. As we live in an age where digital learning tools are becoming more and more common, with pupils being exposed to new technology at what can be seen as an astounding rate, opportunities for the use of ICT in an educational setting has increased; Ahmad (2012) points out that technology has become commonplace in many homes, and that its influence is visible in most facets of our daily lives, thus also in the educational aspect. With the growing influence of ICT, refining the usage of it for educational purposes should be seen a viable option, and Viatonu & Kayode (2012) mentions that "it has become imperative for English Language teachers and learners to realize the fundamental role of information and communication technology as a catalyst in the advancement of the frontiers of knowledge in language acquisition". However, Raob *et. al* (2012) mentions that teachers tend to be ill-prepared to effectively utilize the various ICT tools to their maximum efficiency, owing to the fact that not enough time is given to instruct teachers on "the benefits, modes, and strategies for effective technology integration" (Raob et. al, 2012).

Padurean & Margan (2009) brings up *Hypermedia*, which is a new way of using ICT tools in education developed by the methodology of language learning. By providing both the language teacher and the language learners with the required multimedia resources, Hypermedia creates a varied and authentic learning environment which allows learners to learn the language at their own pace and allows for real-time communication between peer learners in both individual and joint projects (Padurean & Margan, 2009; Ahmad, 2012).

As mentioned previously, the computer has multiple roles in the English language classroom. When applied to ICT, computer technology allows for constant and instantaneous communication between two or more parties.

2.2 Central concepts

Digital learning tools:
Learning tools that utilize computer technology or the internet to aid in language learning, such as computers, mobile phones, tablet PCs, projectors or electronic books.

Traditional learning tools:
Non-digital learning tools that are commonly used in the English language classrooms, such as textbooks and other printed media.

Multimodality:
The mixture of several media types to create meaning. In education, refers to using multiple media types to teach language.

3. Method

In order to collect data for this particular study, a qualitative method was used in the form of face-to-face interviews with two different focus groups. This method was chosen due to both upper secondary English pupils as well as upper secondary English teachers being the main targets for data collection, and in order to get exhaustive answers that could be analyzed using the theoretical concepts outlined in the previous section (Johansson & Svedner, 2010). A quantitative method was not selected due to the focus of the study being on student and teacher practices and views, and a secondary method of data collection was forgone in order to focus on a single methodology. While the focus on a single method of data collection allowed for specificity, it imposed a limit on the data available and only catered to specific viewpoints of two different groups; according to Johansson & Svedner (2010), this can lead to a misrepresentation or exclusion of parts of the results.

3.1 Informants

For the interviews, I decided to form two focus groups; one group with six upper secondary English pupils and one group with three upper secondary English teachers. Both groups were in the same upper secondary school, a public school in the Stockholm region.

When selecting the participants for the focus groups, a non-probability based method was utilized; I decided to send an interview request to English teachers working in upper secondary schools with which I had previous contact though practice periods as a teacher trainee(knows as VFU), as well as schools which were more easily accessible. Bryman (2002) calls this a selection of convenience (orig. "bekvämlighetsurval"). However, because I only had limited contact with any teacher that was not my supervisor in the schools which I had worked at, and no contact with teachers in the other schools, this was not a *pure* selection of convenience (orig. "rent bekvämlighetsurval").

The participants in the teacher focus group were varied:

- One teacher had been teaching English at the same school for over fifteen years and had a non-native background.

- One teacher had been teaching English at the same school for over five years and, like the previous teacher, had a non-native background.

- One teacher had been teaching English at the same school for little over three years but was currently teaching Swedish, and had a native background.

Between them, they taught all levels of upper secondary English, but this was not a factor in the selection process.

The student focus group consisted of six students in their third year of upper secondary education. They were all from the same class, picked at random from a pool of students willing to participate after receiving my request for an interview. The reason behind selecting third-year students was that they were emancipated young adults, and due to this parental consent for an interview was not required.

3.2 Procedure

In order to secure interviews with the intended focus groups, I first sent out an interview request through e-mails to various English teachers at a few of the upper secondary schools in the Stockholm region (see Appendix 1). In these requests, the purpose of this essay as well as what the interview would be about was outlined, together with a suggestion of the time frame during which interviews could carried out. The request stated that both teachers and students would preferably be interviewed, and thus asking them for co-operation in securing a student focus group should my plea to the students be ineffective.

The interview questions were created to answer the research questions, with each question touching on a specific question:

1. Views on digital learning tools.

2. The usage of digital learning tools.

3. The opinion on digital learning tools in comparison to printed learning tools.

In addition to the main question, both groups were given a hypothetical scenario where one form of learning tools had been phased out of English language learning.

Because of the fact that I wanted both student and teacher perspectives on digital learning tools, the interview questions had to accommodate that particular ; therefore, I had two sets of question that touched upon the same topics, but were tailored to fit the specific groups (see Appendix 2).When the interviews had been secured, the interview questions were sent ahead of time to the teachers so that they could familiarize themselves with the questions, and thus prevent the interviews from running on too long; due to the limited time each teacher had, this was of utmost importance.

The interviews were conducted face-to-face and on-site. Interviewing the student group occurred during their lesson time in order to make sure that they indeed had time; the teacher group was harder to find a fitting timeslot for, due to the fact that their schedules didn't easily permit a collective timeslot for an interview. Before the student interview began, I let the participants take a look at the interview questions; as only the teachers had received them beforehand, the student group had not been able to formulate their answers ahead of time. Both groups were also informed that the interview would be recorded on my mobile phone to prevent data loss. The ethical considerations outlined by the Swedish Research Council (described in section 3.5) were repeated after the recording began to insure that it was on the record.

In order to ensure that all participants stayed on topic, they were informed that if they veered too far away, I would steer them back to the topic of discussion. I also pointed out to the participants they were free to speak their minds regarding the topic, as well as discuss their answers.

When the interviews were finished and had been recorded, they were meticulously transcribed (see Appendix 2). All participants received pseudonyms to conceal their identity, as per the ethical considerations.

3.3 Material and methods of analysis

The data gathered through the interviews was saved on the recording device used, and then transcribed fully on the computer. Because all participants were to remain anonymous, I assigned a group name and number to all of them (such as S1 or T2) and used basic gender-specific pronouns when the participant's answers mentioned non-participants. The transcriptions of the student answers which were quoted in the description and analysis of data were translated from Swedish to English, as faithfully as possible to the original text. Thus, while all speech pauses as well as incorrect uses of grammar have been corrected at my discretion, the transcriptions accurately depict what had been said during the interviews. Data has been described using select quotes from both interviews, and followed up with summarizing comments about what the participants has said.

The original Swedish quotes from the student interviews are presented in Appendix 3 in order of appearance in the main body of this thesis; the full transcription of both interviews are not included as an appendix, but is instead available at request to the author.

The data has been divided according to previously mentioned thematic categories, and as both the description as well as an analysis of the data is aimed at answering the research questions, they will be structured in such a manner that each research question becomes a subsection (Johansson & Svedner, 2010).

3.4 Validity and reliability

To ensure the validity and reliability of the interviews conducted, certain measures were taken with advice from Johanson & Svedner (2010) in mind.

To ensure reliability, both interviews were carried out in the same fashion as described in section 3.2, with the same recording equipment used to record the data. As mentioned previously, while the interview questions were worded differently to better fit the target group and their perspective on the topic, they remained similar in that they were linked to the same research questions. They were asked in a similar manner to retain as much reliability as possible. Disruptions to the flow of the interviews were limited, as they were both carried out in private rooms; while a mobile phone was used as a recording device, it had been programmed beforehand to ensure no disruptions during the interview.

To ensure validity, the prepared interview questions for both groups were linked directly to the research questions of this thesis. As mentioned previously, the interview questions had been sent to the teachers ahead of time to ensure that they had the opportunity of knowing the full scope of this study. However, as the questions were not sent out to the student group in advance and only shown a few minutes before the interview, validity can possible be seen as slightly compromised due to the fact that they were not able to prepare for the interviews like the teachers did.

The choice of a focus-group method to gather data was based on gathering the large amount of participants needed for this thesis into manageable groups. Due to the fact that interviewing each individual participant would require much time and effort which would be unaffordable during the time frame allotted for this thesis, as well as the chance of reducing validity by having miniscule differences in procedure, interviewing all participants of a target demographic

at once made sure that there were no changes in procedure. However, by using a focus group methodology, there has been a possibility of limiting student replies through peer pressure.

3.5 Ethical Considerations

When conducting the interviews, all informants were informed of the ethical guidelines of the Swedish Research Council (Vetenskapsrådet, 2002). They are summarized as follows:

- Both the schools and informants received full anonymity upon participation. While a confidentiality clause was not signed prior to any interviews, confidentiality was granted immediately. The recordings of the various interviews were kept safe from the public, and could only be accessed by relevant parties. Any and all names of students, teachers and/or establishments were removed from the transcriptions if and when they occurred.

- Any data gathered would not be used for any commercial or non-scientific purpose, and would only be used in this study whenever needed. The data was not made public.

- At any time, the informants were given the option of rescinding their participation; if such an event occurred, all relevant data would be permanently removed from transcriptions, the study and the recording device to prevent the inadvertent usage of said data.

The informants were informed of these ethical guidelines when requesting an interview, as well as mentioned in the beginning of every recording in order to ensure that they were understood and in effect.

Because the students were of age, no need for parental consent arose at any point during the interview process. This was the primary reason for choosing third-year upper secondary students.

4. Results

The data gathered through interviews with both the teacher and student focus groups will be presented and analyzed in this section. In both following subsections, the data will be broken up into three categories, as outlined in subsection 3.1

1. Views on digital learning tools.

2. The usage of digital learning tools.

3. The opinion on digital learning tools in comparison to printed learning tools.

Subsection 4.1 will present the data in a neutral form in order to display the answers to each question, while section 4.2 will contain the analysis of said data. Both the teacher and student perspectives will be seamlessly presented in each subsection, and will utilize quotes from both interviews. As the students answered their questions in Swedish rather than English, they will be translated before being presented, and a full transcript of the original quotes can be found in the Appendix section.

4.1 Description of data

4.1.1 Views on digital learning tools in ELT

When asked, all three teachers found that using digital learning tools when teaching English was a positive thing, one which could easily remove the physical boundaries of the classroom in order to make it expand into an almost global setting.

> T1: I can start. I think it's only positive, I mean, if you have the technique and you can use it I don't see any negative – negative way, it can only be positive in my opinion. It makes the lessons more…you can have more variation in your lessons.

Teacher #1 brings up the variation that digital learning tools can bring to English lessons, and also that to make it a positive addition, the appropriate multimodal techniques required to efficiently utilize digital learning tools would be needed, something that is accessible at this school, at least at a base level:

> T1: […] we have the technique here, for instance – I know other schools that do not have it, so we're lucky to have it, but I think we can make it even better […] So unless you have the technique it's hard to develop, you can do so much more than we do now, I think. So it depends on the technique as well. […]

The technology and techniques required to teach at a multimodal level may not be available at all schools, and even when they are the amount of technology and techniques present in the upper secondary schools vary. Certain schools have the basic set-up of one computer per classroom, while other schools utilize digital learning tools such as laptops or iPads in class by letting their students borrow a school-issued tool during the school year, and thus can be argued to have a full technological integration.

T2: I agree, and I especially like the fact that all classrooms, or almost all the classrooms, are equipped with a computer and a big computer screen so that you can show Youtube video clips that are…only day old news broadcasts that happen around the world, very fresh. You can use it easily, to show…and also to use for- I've learned from my colleagues here to use TedTalks, which is a great thing to show the class. And then you have the audio sound and videos so it gets more interesting to watch.

Teacher #2 brings up the usefulness of that a majority of the English language classrooms are equipped with digital learning tools that a teacher can utilize to use a multimodal method of teaching English. As mentioned previously, the amount of options available and the level of integration of them is varied amongst schools.

T3: Yes, exactly. And that it, um, you take away the walls of the classroom that way, students are totally in what's happening to the world and that's so very important; to integrate English teaching with what's happening in the world. The board of education wants us to do that, that we show so-called "realia" and that we give the students authentic language issues. So it makes teaching more real, more concrete…more in touch with what's happening in the world.

Teacher #3 brings up the expansion of the classroom setting that comes from utilizing digital learning tools; by letting students access news in the English around the world, a real world component is added to English language teaching.

S1: Personally it has helped me a lot, at least when it comes to – for example, you can show video clips on YouTube, you can go visit websites yourself or the teacher can show you websites that are just for teaching English. It has helped me a lot when it comes to viewing video clips and such.

S2: Yeah, I agree. The thing is, with PowerPoint and the like the teacher can show something to everyone at the same time instead of just handing out a bunch of papers, it becomes easier when everyone goes through the same thing. Everyone can join in and I find that it becomes easier for the teacher as well.

Students #1 and #2 bring up their common ways of utilizing digital learning tools in English language lessons, using video clips and PowerPoint presentations, and mention their opinions on the use of digital learning tools; the students agreed that using them could make it easier for teachers to share their knowledge with the whole class, while making sure not to overload on traditional ways of sharing information, such as handing out papers.

S5: I agree to a certain part, it ends up being a lot of play, but there are also plenty of websites that help, that the teacher shows for you or you have to, like, find yourself. But it's just like S4 says, you end up spending a lot of time playing.

Students #4 and #5 mentioned that when individually using computers for educational purposes, the chance of getting off track and thus focusing on something else was a common problem. Due to the existence of computer gaming and social media, students find that they can lose concentration and instead spend their time playing games or chatting with their friends on social media sites.

S3: If we're thinking of teaching, then it has for me, personally it hasn't benefitted me that much, but I'm one of those people who can lose concentration easily and just play around,

which I think happens to many others here as well. If I have a thing in front of me, I'll be in the classroom while I'm still here to check it out – when it's really silent in the classroom I'll sit quietly and listen, but that's how it is for me, some might have it differently, I have concentration issues but I still try to sit and listen.

When asked if the use of digital learning tools had affected their English language learning, student #3 mentioned that while their use made learning comfortable, it did not have the same success rate when it came to helping the student learn the English language. Another student mentioned that it using digital learning tools made learning English easier on the basis that they were familiar with them because they came in contact with the tools outside of class as well.

4.1.2 Usage of digital learning tools in ELT

When asked, the teacher group had plenty to say on the matter of their use of digital learning tools in the English language classroom. The teachers had basic access to the schools own computer technology, but also opted to utilize their own tools in an educational setting.

> T1: I know us Swedish teachers, we have – I have just learnt this, when the students have their oral presentations, I can film them with my iPad and then I have an account on Youtube, from there I can sort of give comments directly in the video, so that when I sit with a student – first of all, I can send it, and they can go into that account; no one else can, it's a closed account, they can go in and watch it themselves. Later we're going to sit together and look at the comments, because then they can see themselves, but we can also talk about the positive and less positive parts of the oral presentations.[...]

Teacher #1 described her use of both an iPad and the popular video sharing website Youtube in a manner reminiscent of flipped classrooms, by recording student performances and then leaving feedback to each individual student through video comments. Teachers #2 and #3 did not use this particular digital method of assessing oral presentations, but rather doing it in a more traditional style by giving written or oral feedback to students

Teacher #3 mentioned that she had utilized weblogs in an educational setting, although she had stopped doing so at the time of this interview.

> T3: Yeah, I did Wordpress blogging a couple of years ago with a group, we were discussing opinions about some event. Also PowerPoint presentations, I do Millennium goals, teaching social studies in English, and the students make a PowerPoint presentation, for example, that takes goal number one, "eradicating poverty in the world", and the students will research different spots of the world; one student will take Bombay, Mumbai, another student will take New York, and they go and research what it's like for teenagers to live in a slum area, and they make a PowerPoint presentation with facts and photographs and discuss in front of the class. It's lovely.

One thing that came up during the interview was that the teachers found that the time they were given to find and develop new ways of using digital learning tools in the English language classroom was limited; they were often forced to spend the valuable time that could be used to develop new methodology on other projects, and they were forced to devote off-hours time to develop new methodology, something which they did not always have.

T3: If you want to find a new technique or something or initiate something you have to do it on your own time, and after teaching you're kind of exhausted.

T1: I think that's the major problem for us teachers, we want to develop and do other things, but I find it hard to find the time and we always have to these obnoxious things-

The student group had very straightforward answers to this interview question, recounting the ways that they used digital learning tools both in and outside of their English language classroom.

S3: For example, if I get some writing assignments in English, I'll have to use the computer…if we get a writing assignment, like for instance writing an argumentative text, I can go and search on Google for an example of an argumentative text so that I can take a little bit from that and make it my own.

S2: In our English lessons we tend to use the projector, where she [the teacher] shows us PowerPoint presentations and shows us a lot of video clips from YouTube and other websites, or lectures in English, she shows us examples of web pages that we can access ourselves, a lot of things like that.

S1: Computers…it becomes a way of – it becomes an opportunity to search and look at other works when you're supposed to write your own text, and that is something you need when it comes to English texts. You can look for more inspiration from other texts, basically more information.

The primary focus of their answers, and thus their usage of digital learning tools, involved using translation tools like Google Translate and search engines like Google to find pre-written English texts in order to help them write their own assignments and translation of tricky words; or, as student #2 also mentioned, make use of video sharing sites such as YouTube to look at certain video clips in English that were selected in advance by their teacher and then working with assignments based on what they have seen.

A few of the students also touched upon how using digital learning tools made it easier for them in terms of handing in their assignments, as there were no longer forced to search for their teacher and hand in their works in person, but could instead do it at their own paces and guarantee that their assignments would be received by the teacher. Their observations can allude to that the possibility of digital learning tools removing the boundaries and confinements of the traditional classroom setting by allowing students to learn at their own pace and place of choosing.

4.1.3 Comparison of digital and traditional learning tools

This was the biggest question in terms of answers and therefore took the longest time for both groups to fully answer, due to the argumentative nature of the question.

All three teachers touched upon how digital learning tools gave students a way of easily accessing a wealth of information that traditional learning tools could not always provide, and how it would eventually make students get used to finding "quick fixes" to their assignments.

T3: I can think of some practical things in the classroom, I mean, you put a question to the students, not necessarily a factual question, maybe something to do with history for example, and they'll immediately find one of the answers, which makes the teacher rephrase the question so that they use their minds in a different way. So the question here is, um, you have to use internet in the classroom, but you have to perhaps rearrange or rethink the traditional learning methods. More open questions, more rhetorical, more discussions. It's quite good that they have access to so many things; on the other hand, the teacher has to be one step ahead too, ask further questions.

T1: Yeah, but also, when it comes to that, the problem with internet is that we lose also, even though the traditional way of teaching is important to keep in a sense where you need to look things up in a book. As soon as they have a task, they run to Google, and I feel that sometimes, that is a problem when they use the internet in such a, I don't know, because it's quick, it's a quick fix, everything has to be quick, so they need to stop and think sometimes also, and what they do now is that they use the internet to find quick answers and they never look behind. That's something we should work more on, and it's a demand for us teachers to develop how to make them, and we do that all the time of course.

Adapting their teaching styles to better suit the increasing digitalization of English language education was something that all three teachers agreed upon; to make sure it helps develop both the students' critical and analytical thinking, to make sure that while digital learning tools remain of great use to students, the teachers will always be one step ahead to guide them.

T1: [...] it's easier if we have a computer where they can cut and paste and alter, and also when it comes to spelling and grammar it is so much easier with a computer, but on the other hand they also need to learn to write on their own – we need both. I don't wanna use only the digital way of teaching, because I think we'll lose quite a lot. We can still use the writing process, where they are actually supposed to look at their text two or three times, and it's impossible to ask them to rewrite something hand written.

Here, teacher #1 stressed on that while the use of digital learning tools could make writing assignments easier to complete, students still had to learn how to utilize a traditional writing process.

Teacher #3 felt that students had indeed become more critical due to the access they had to multiple viewpoints through the World Wide Web; by allowing students access to the world beyond their classroom or even their own country, they could develop their ability to critically compare and analyze.

T3: I sort of have reflected a lot on it, just during the past few years. The students, I feel, are much more critical, and they are critical about everything, because they can compare now; they know how it's like in other countries and school, they have a much more critical stance, which I think is more positive. So they can not only criticize what is happening in the world and what is happening at school, but also maybe where they are. So maybe there is a note of self-reflection that comes in, that was missing a couple of years ago. [...]

One of the primary worries regarding the advancement of computer technology is that once it is fully adapted to educational use, teachers will become obsolete. Teacher #2 stressed the importance of teachers in the English language classroom. While students are used to dealing with computer technology, not everyone knows how to use it for educational purposes, and that

is where teachers come in; to help students with utilizing digital learning tools that they simply do not know how to use.

> T2: [...] they can find so much information, but I think we as teachers are more important now than ever, as we need to show them. You'd think they were all good at using computers and the internet, but not all of them know how to find the information, they Google everything and use Google Translate instead of looking at dictionaries, and sometimes you need to teach them how to find the information and how to do it in other way. Obviously, they use Facebook and things like that, but maybe we use the internet in a slightly different way than they do.

The student group had varied opinions on the comparison between digital learning tools and traditional learning tools. While some found that digital learning tools enhanced their learning and made it more fun, some thought that using traditional learning tools in class helped them learn the language more easily.

> S3: Like, I find that – it's good to show things on the big screen via computers and all, but sometimes I think it goes a bit too fast, you can't always keep up. I think it's easier with books, then everyone has their own book and you can read it at your own pace. But the downside of using a computer is that everyone has to watch the same presentation, and some people need more time to learn, everyone doesn't learn at the same pace. It has both upsides and downsides. I think it's easier with books.

> S5: [...] an upside can be that you know that when the teacher has prepared something, you know it's something you should utilize, this particular text, but when you're online you have so much more to choose from, you don't know if you can or should use what you find. It becomes more open, but less safe, if I can put it that way.

> S3: I feel that I learn more from traditional learning tools, I don't know why, I think it's more comfortable to be taught using digital learning tools, but I feel like I don't learn as much. My social studies and history teacher is very traditional, he writes on the board and hands out papers and study questions, compared to my English teacher who might show us video clips and then give us an assignment about the video clip. So it doesn't feel as if I am learning as much as I am when using the traditional way, but I think it's more comfortable, might just be me.

The topic of "comfort" in relation to digital learning tools had been brought up previously, where both the students and teachers found that using digital learning tools when preparing written assignments made it easier for the students to complete their tasks, as well as go back to their written work and make edits based on the teachers comments, which can be more easily given when the written assignment is prepared and handed in digitally.

When both groups were presented with the hypothetical scenario of digital learning tools completely replacing traditional learning tools in the English language classroom, or vice versa, all three teachers were quick to express their displeasure with such a scenario becoming reality.

> T3: I don't really prefer such a scenario, because as mentioned earlier, teachers and traditional teaching are important, going back to Socrates.

T2: The only positive thing I can think of…a colleague and I did look at a course where everything was digital and they used eBooks, and we could see the possibilities to use these as well as the actual books, especially for students with different disabilities or learning hindrances. I think a combination – I wouldn't want everything to be digitalized, really.

T1: We come back to the quick fix thing. The smallest children, they would never learn how to write, and not develop the motor skills needed for writing. I think there is a huge problem with our students today – I think one part of it is that they don't know how to write, *actually* write. I think traditional writing is very important, I might be wrong, but I think that it's not good to not use any traditional tools.

The teachers argued that while an increase in the digitalization of English language resources, such as textbooks to eBooks, weren't seen as a negative but rather as something that could make sure more students were able to enter a more efficient learning environment, a case of full digitalization where traditional learning tools were fully phased out would be detrimental as students would possibly not develop "traditional learning skills".

The students were more focused how a complete phasing out of either digital learning tools or traditional learning tools would affect their understanding, the way the lessons were planned as well as how interesting those lessons would be in comparison to if both types of learning tools were used in tandem with each other.

S1: It's like what they are saying, you have to find a variation, a balance between both. What I think is that if you use PowerPoint presentations so much that it becomes boring you stop listening, then the teacher has to wake our interest and come up with something else, maybe show a funny video or something, maybe give us questions that we can answer.

S5: We're more used to it, think it's more natural to write by hand, but those who come after us will maybe think differently, they have grown up with projectors, iPads, computers and everything like that. I think it's good to add variety to teaching, you get to experience more perspectives from the teacher. There are digital learning tools, paper, it's good that it's so varied, you learn new things all the time and it's a good way to learn.

S2: I don't think you should remove – that you won't be able to choose between one or the other, when digital learning tools are effective you go with that. Now I'm not just talking about English lessons, but more general, we have teachers who only use PowerPoint presentations, and those have been someone of the most boring lessons I have had; and we have teachers who only use traditional learning tools, and that has been really boring as well.

Much like teachers, they mentioned that they needed to develop traditional learning skills, and that the current generation of millenials was more used to the use of digital learning tools as they had grown up in the digital age.

Variation was the main point of their answers and arguments for this question; both groups agreed that adding variety to the English language lessons would be better than forgoing one or the other, as it would cater to more students and their learning skills.

4.2 Analysis of data

The data gathered through focus-group interviews will be presented though a theoretical analysis of the interviews; while quotes were heavily used in the presentation of the gathered data, they will not be used the following section; instead, the content will refer to the answers given by the focus group as needed. The data has been categorized into themes based on which interview question they answered; the interview questions, in turn, each represent one of the research questions.

4.2.1 Views on digital learning tools in ELT

The views on digital learning tools in an educational setting have generally been positive, considering the various functions that it serves in an upper secondary English language classroom. By removing the physical walls of the classroom, students are exposed to what can be seen as the magic of the digital age: the world being at their fingertips.

The teacher group had a very positive outlook in the inclusion of digital learning tools, stemming from their own experiences with their usage. Using digital learning tools in the English language classroom allowed them to teach in new and different ways, although their digital repertoire was limited by the fact that they did not have the time to develop new techniques and ways of using the digital learning tools to their full potential. The problem can lie in that teacher are simply not given enough time to deal with the ever growing digitalization of the language classroom effectively, forced instead to deal with the myriad of other tasks that await them. The teacher group was vocal in their argument that once the school day had ended for them, they simply had no time or energy left to learn how to implement techniques to handle the growing need for e-learning. While research into the usage of digital multimodality has helped to develop a variety of methods for educational use over the past decades, actually implementing those methods into their lessons requires teachers to be familiar with the basics of computer technology used as well as know its limitations.

Students have less of a problem with knowing how digital learning tools are supposed to be integrated in class; because they are not in charge of how it is implemented, their focus is on how to use it effectively and help them complete their assignments efficiently. Students can be seen as constantly "online", having their smartphones, laptops and other portable devices that allow them access to the World Wide Web. Here, they can use digital media with something akin to reckless abandon, finding relevant information through websites and video clips with the touch of a button. For students, computers have more of a communication facilitor and tool role, erasing the boundaries of the classroom for easy access to communicative methods in the form of social media and access to an online library of information regarding almost everything under the sun through dedicated search engines. The problem for students lies within the fact that because of all the options that computer technology offers, it is easy for students to end up using it much like they have the option of doing outside of class, in their own spare time: completely non-educational and focused more on entertainment.

In here, the teacher's role as an intermediary of sorts becomes apparent, as they can act as a link between students and digital learning tools, by educating students in the usage of computer

technology for English language learning so that they will become aware of which resources are of use when using digital learning tools to complete tasks.

While the notion that the growing usage of digital learning tools will eventually replace teachers, the importance of instructions given by the teacher should never be underestimated. While the use of digital learning tools can give students the freedom of constructing their own learning environments and a degree of independence when it comes to assignments, teachers retain their status quo as the instructors and guides, giving students the help they need to flourish.

4.2.2 Usage of digital learning tools in ELT

The usage of digital learning tools in an English language classroom can be quite expansive, especially due to the diverse functions they serve within a language classroom. What can constitute a digital learning tool is also up for debate, but it should generally be able to be defined as a product of computer technology that can be used in an educational setting to enhance learning.

The computer "role" classifications proposed by Padurean & Margan (2009) can be seen as different methods of utilizing computer technology and, thus, digital learning tools. The various roles can be applied to both teachers and students, although the priority of usage differs between the two groups.

Students utilize digital learning tools primarily in the Toll and Data Source roles, using them as means to find information and finish assignments. The interviewed students mentioned that they used digital learning tools in order to find and retrieve information and assignment examples in order to finish their own assignments, primarily writing assignments.

Teachers tend to utilize digital learning tools in all roles, primarily the Teacher and Communication facilitator roles. The use of computer technology in an educational setting allows for teachers to add variety to their language lessons and to easily communicate with their students outside the walls of the classroom, especially in the form of assignment feedback. Two methods that were mentioned by the teacher group were weblogging and the flipped classroom.

Weblogging would have an opportunity to act as a tool for students to upload their texts – or for teachers to receive student assignments and upload them on their weblog – and receive direct feedback from their teacher or their peers. Weblogging also incorporates the Teacher role, due to the option of adding elements of multimodality, and the Data Source role, where a teacher can compile a list of trusted web pages for student use during an assignment. Students can also have their own school-sanctioned blogs where they can upload their texts and let their teacher add her feedback in the comment section.

The flipped classroom setting mentioned in by T1 during the interview can be seen as a relatively new way of innovating the teaching process, to flip it around as the name suggests by making the information sharing part of the lesson exist outside of the classroom while allowing the post-class work to be done within a classroom setting.

This particular method can have both positive and negative effects on English language learning, due to the somewhat unorthodox way of handling a lesson. For teachers, recording their lessons and sharing the videos online allows them to cut down on the time that would have

been spent going through the language concepts in class and instead devote that time to actively help their student understand said concepts. Condensing an entire lesson into a much shorter video clip might not always be easy for a teacher, which is why more time should be given for teachers to devote to learning and applying new methods of using digital learning tools.

For students, having their English language lessons in a flipped classroom setting can be beneficial. Firstly, it would allow the students to learn at their own pace, something the interviewed student group focused on. By having a recording of a lesson, students can go though the language concepts at whichever pace they wish, and multiple times if needed. Because of the fact that personal video clips uploaded to the internet will remain there until the uploading party chooses to remove it, students can either download the clip or watch it online whenever they feel that they need to. Using the classroom time to work on the recorded language concepts allows the teacher to devote more effort into making sure her students have grasped the concepts, and utilize engaging classroom activities that promote learning and increase student motivation.

One of the problems that using a flipped classroom method can lead to is that students will be required to spend their post-class hours on studies which would be taken care of inside the classroom, which not all students might find agreeable. However, the teacher can make sure that this particular action is considered to be homework, and stress that students carry their own responsibility in being prepared for their flipped lessons.

4.2.3 Comparison of digital and traditional learning tools

The answers given by both the teacher group and the student group showed that when digital learning tools were compared to printed learning tools, neither were unanimously seen as better than the other.

When asking students about their opinions on digital learning tools in comparison to the traditional learning tools, they were divided on the issues, with a portion of the student group mentioning that they found the traditional learning tools more effective, whereas the rest argued for digital learning tools on the grounds that they found it to make learning more comfortable and effective. One way of looking at it is that students are familiar with the technology that digital learning tools are comprised of, but that they also have a familiarity with the traditional learning tools that have been a common staple in the school system for centuries. The reliability of digital resources was questioned; teacher-prepared resources tend to be seen as more reliable. However, despite the fact that digital learning tools can help in creating a comfortable learning environment for students, some are unable to learn effectively through the use of digital learning tools. PowerPoint presentations and short attention spans were given as an example of when digital learning tools can be detrimental rather than beneficial to learning; as presentations require students to be alert, students with attention deficiencies would find themselves confused and having missed much of the displayed content.

When the teacher group was asked this question, they all agreed on that both digital and traditional learning tools were of equal importance, especially with respect to the increasing advancement in educational technology. While digital learning tools would allow for teachers to give more efficient feedback and add an increased multimodal variety to their English language lessons, it could also make the teachers have to deal with the possibility of their students

adopting a passive stance to English language learning. With word processing programs having built-in spellchecking and grammar correcting functions, students can develop a need for quick and easy fixes, letting their learning of grammar, spelling and syntax to suffer as the information they need is readily handed to them. When giving lessons or preparing assignments using traditional learning tools, students are placed in a situation where they are forced to take an active stance to learning, as their mistakes will not be automatically corrected or highlighted as they are writing. With the advancement in computer technology, most students are in an "always online" state thanks to portable devices that access the World Wide Web; by having almost all the information in the world at their fingertips with increasingly speedy access, students are able to quickly get the answers to their questions with the minimum amount of effort required, leading to the students becoming lazy and unable to handle traditional research methodology. However, in removing the digital learning tools, students risk losing out on their connection to the wealth of information so readily available for usage.

Both groups, when presented with the hypothetical scenario of one set of learning tools being phased out of language education, agreed that variation in the English language classroom was beneficial because it catered to multiple personal learning environments, allowing all students to learn in a way that they were comfortable with. If traditional learning tools were to be phased out of the English language classroom in favor of a full implementation of digital learning tools, difficulties would arise for teachers as they would have to forgo all their previous experiences on how to use traditional learning tools which have received decade's worth of research and method development, and then require the time needed to train in using digital learning tools effectively. With the need of such required time already being an issue, retaining the use of traditional learning tools allows teachers to have a safety net to fall back on, one that has been developed over a long period of time.

5. Discussion

In this section, the previously presented and analyzed results will be discussed with previous research on the topic in mind. The discussion will be presented according to the research questions, and end with a summarizing discussion of the results as a whole.

5.1 Conclusion

5.1.1 Views on digital learning tools in ELT

On the whole, neither the students nor the teachers saw using digital learning tools as a detriment in the English language classroom, but there were a few divided opinions on exactly how helpful digital learning tools were. A few students found that white digital learning tools did help with their language learning, it also led to frequent distractions; other students found that digital learning tools were not as effective as traditional learning tools. The teachers remarked that using digital learning tools removed the physical boundaries of the classroom and allowed them to incorporate a "real world" component.

The question raises is how effective digital learning tools are in the English language classroom, if not all students see it as helpful to their language learning. Of course, an argument can be made that some students feel the same way about traditional learning tools. Effectively it boils down to each individual student having his or her own learning style, but the topic of distractions available in digital learning tools has been discussed (Klopfer et. al., 2009; Fewkes & McCabe, 2012). Yet the teachers do not reflect in their answers upon the distractions that digital learning tools can present to students; while most likely aware of social media and other distractions, they did not express any opinion of it.

It was quite apparent that while digital learning tools have the possibility of becoming effective tools in English language learning there are still a few – such as students – that prefer the traditional tools, either though a sense of familiarity or because they provide little distraction.

5.1.2 Usage of digital learning tools in ELT

The teacher group presented varied methods for using digital learning tools in the classroom, including a flipped classroom method as well as a weblogging method. The students followed most of these methods and then added their own, such as using their mobile phones to access translation tools or writing assignments using computers. The answers given touched upon most of the roles that had been proposed by Padurean & Margan (2009), and I found that their answers displayed the versatility of digital learning tools can have in the English language classroom.

The application of ICT to language education could potentially have a positive effect on how students handle their assignments, and allows for teachers to easily communicate with their students. In more digitalized schools, where all students are temporarily given tools such as a

laptop or tablet PC, communication between both students and teachers can be made much easier. This, however, could feed into the fear that computer technology and ICT would make either make the teacher or a classroom setting obsolete, because if communication could occur from any given location there would possibly no longer be a need for students to attend class. While this is the case for most distance courses on a tertiary level, it might not be as effective on an upper secondary level. However, as stated by Finn & Fairchild (2012), we can view the role of a teacher as central, regardless of method used. Using ICT in the form of the flipped classroom method requires a classroom setting as well, and the teachers did not express an opinion on a possible removal of the classroom setting. It can be argued the classroom setting is just as integral as teachers during the upper secondary English education.

5.1.3 Comparison of digital and traditional learning tools

The reigning consensus amongst both groups were that over relying on either digital or traditional learning tools could lead to lessons that are uniform and unappealing to some, and that shifting between both sets of tools were the better option. Here, both groups mentioned that they were not as "media-savvy" as the current generation, and that the younger students and/or teachers would be more comfortable with using digital learning tools.

Of course, both socio-cultural and economic factors tend to play a role in how familiar students are with the computer technology that comprises most digital learning tools, as well as their availability. If a full digitalization would be introduced, it could alienate students with fewer economic resources who simply cannot afford the technology, unless the school provides tools for use outside of class as well.

A cause for worry that was brought up by the teacher group was that over relying on digital learning tools would deprive the newer student generation of basic skills: how to work with traditional learning tools, and developing fine motor skills that are both basis and acquisition of traditional composing. It can be argued that there is a very small possibility of such an event occurring, primarily because students are taught how to read and write using traditional learning tools in during primary education. But with even toddlers now having access to tools such as tablet PCs , it's not beyond the realm of possibility.

Finally, there is also the possibility of creating a "lazy" learning environment fueled by the world being at your fingertips due to computer technology and internet. Whether it is spellchecking or an online encyclopedia, students have access to processes that creates a passive form of learning that can be tempting – if the answer is given to you without having to make an effort, why not use it? By allowing lessons to have variety, teachers can motivate their students to have an active approach to not just English language learning, but also learning in general.

With both digital learning tools and traditional learning tools being important in the modern English language classroom, they can only be fairly compared on how they are utilized and how they aid English language learning; but they are both equally viable methods of teaching the English language. Adapting the teaching styles to fit the toolset of choice is what will make them viable and highly effective options, both for teachers and students.

5.1.4 Summary

Digital learning tools are not seen as a detriment, but rather a means of opportunity for teachers to add variety to their lessons and motivate students who do not respond well to traditional learning tools. The results clearly show that while digital learning tools is not necessary the oil that keeps the educational machine running, their usage allows for a more multimodal approach to English language learning as well as a global one.

Traditional learning tools still serve an important role in education as something tried and tested, and while digital learning tools have been developed for a few decades they are still not a complete replacement. Based on the results from both perspectives, the more successful option would be to utilize both in tandem to create a learning environment that promotes communication between peers and motivates students to create their own learning styles based on what works best for them.

The importance of this study lies in that it shows the views and usage of digital learning tools in Swedish upper secondary schools, particularly in the English language classroom, from both teacher and student perspectives.

5.2 Final thoughts

One of the bigger difficulties that I faced when writing this thesis was to limit the scope of the research questions, in order for the thesis to be a plausible project during the limited amount of time given to finish it. The research questions had to be reworked several times, and the decision to have separate-yet-equal questions for both focus groups was made to show a clear separation in perspectives. Another difficulty was finding available interview subjects, especially since the thesis is based on both student and teacher perspectives. Because of the limited time I had to conduct the interviews as well as the format of the interviews, it was difficult to find participants.

If more time had been given to writing this essay, I would primarily have tried to get more participants; more than one focus group per perspective, and perhaps bigger groups for more varied opinions, particularly a bigger teacher focus group. I would also have tried to find participants from schools that had a bigger degree of "digitalization", such as schools where students received a laptop or a tablet computer for their studies. As the participants were in a school where the rate of digitalization was low, their perspectives and/or views can be perhaps seen as not as fully developed due to their possibly limited experience with digital learning tools.

Because of the above, additional research can be done on how teachers and students in more digitalized schools view and handle digital learning tools both in and out of the English language classroom. How do students in more digitalized schools handle the lack of traditional or printed learning tools? How are teachers in more digitalized schools able to form lesson plans without having to rely on traditional textbooks? In a more digitalized school, what are the student and teacher views on digital learning tools? The scope could also be expanded to include more than just English language teaching through digital learning tools; how are digital learning tools used in other subjects?

In this essay, I set out to research how teacher and students view and utilize digital learning tools, and I find that the data gathered through the focus group interviews gave an adequate answer to my research questions. While I began the study with preconceptions regarding how teachers and students viewed and used digital learning tools, the data gathered did not always conform to my pre-existing views on the topic. More comprehensive answers could possibly have been received if the interviews were conducted with participants from more digitalized schools, but I find that the data gathered is enough to answer the research questions as well as give a good view on teacher/student perspectives regarding digital multimodality.

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Appendix 1: Interview Request

Dear English teachers,

My name is Emre Dogan, and I am a teacher trainee at Stockholm University. I am currently writing my thesis in Didactics. The aim of my thesis is to examine practices of - and views on - digital learning tools in relation to the learning process, as well in comparison to printed learning tools, from both upper secondary English teacher and pupil perspectives. The focus of my thesis is to get an understanding of how the learning process is affected by digital learning tools being used.

Therefore, to collect data, I am going to interview both English teachers and 2nd-3rd year pupils, and will do so in the form of two focus groups (which are interviews with more than one person during one session); one for the teachers and on for the pupils. In order to get pupil participation, I would gladly be present to ask them in person, or if needed prepare a similar document for the pupils.

The interviews are estimated to take between one and one and a half hour; my estimation is that it will take at least an hour to complete.

For my focus groups, I would require no less than three (3) teachers and six (6) students.

I will follow the Science Council's (Vetenskapsrådet) ethical guidelines, and as such:

> *- The interview will be recorded at the consent of the interviewee. This is mainly to simplify the process of transcribing and referencing.*
>
> *- The school, as well as all interviewees, will be granted full anonymity upon request.*
>
> *- The data gathered during these interviews will only be used for my essay, and nothing else.*
>
> *- If the interviewees at any time chooses to rescind the participation, please contact me and I will make sure to remove the interview and relevant data.*

I hope that you are able to give me a moment of your time for an interview, as it would help my project tremendously, as this is my primary method of data gathering. My time for conducting these face-to-face interviews with focus groups are during the following days: **6/12, 9/12, 10/12, 11/12, 12/12 and 13/12**. The interview can be in Swedish or English at the interviewee's choice, although Swedish is preferred when interviewing students.

Thank you for taking the time to read this, and I hope that I will able to secure the required interviews. I can be contacted through this email address, or through my phone number: […]

Kindest regards,

Emre Dogan.

Appendix 2: Interview Questions

Interview questions for teachers:

1. What are your opinions on the use of digital learning tools in the English language classroom?
2. How do you utilize digital learning tools in the classroom in order to enhance the learning process? Can you give an example?
3. How has your teaching experience (process/styles) been affected by the use of digital learning tools, especially in comparison to traditional learning tools?

Interview questions for pupils:

1. Vad är era åsikter gällande användningen av digitala läromedel i engelskaundervisningen?
2. Hur brukar ni använda digitala läromedel i engelska undervisningen?
3. Hur tycker ni att det påverkar ert lärande att använda digitala läromedel, särskilt i jämförelse med tryckta läromedel ?

Appendix 3: Transcript Excerpts

All quotes are in order of appearance in the main body of text.

S1: Personligen så har det hjälpt mig ganska mycket i alla fall när det kommer till, till exempel man kan visa videoklipp från Youtube, man kan gå in på hemsidor själv eller så kan läraren visa hemsidor som är just till för engelskaundervisning. Det har hjälpt mig ganska mycket när det gäller att visa videoklipp och sånt.

S2: Aaa, jag håller med. Grejen är, med powerpoint och liknande så kan läraren visa något för alla samtidigt istället för att bara dela ut massa papper, det blir enklare när alla går igenom samma ställe. Alla hänger med och det blir enklare för läraren också, känner jag.

S5: Jag håller med till en viss del, det blir väldigt mycket lek, men det finns också väldigt mycket hemsidor som hjälper, som läraren visar eller som man måste typ hitta själv. Men det är som S4 säger, det blir mycket lek.

S3: Om vi tänker lärande, då har det för min del, personligen har det inte varit till stora fördelen, men jag är en sån som kan tappa koncentrationen enkelt och leka med massa annat, vilket jag tror även händer många andra. Har jag en grej framför mig, sitter jag på lektionen då är jag ändå här för att kolla – när det är dödstyst i klassrummet sitter jag och lyssnar, men det är så för mig, vissa kanske har det annorlunda, jag har koncentrationsproblem, men jag försöker fortfarande sitta och lyssna.

S3: Till exempel, om jag får någon uppgift i engelska, jag ska använda datorn…om vi får någon skrivuppgift, till exempel att skriva en argumenterande text så kan jag typ gå in och söka på Google, på något exempel av en argumenterande text så kan jag ta lite från det och göra det till mitt eget.

S2: På våran engelskaundervisning brukar vi använda projektorn där hon visar Powerpointpresentationer och visar väldigt många klipp från youtube och andra hemsidor, föreläsningar på engelska, hon visar oss exempel på hemsidor vi kan gå in på själva, väldigt mycket sånt.

S1: Datorer…det blir ett sätt att- det blir en möjlighet att söka på andra arbeten när du ska skriva eget arbete, och det behöver du ju när det gäller engelska texter. Du kan söka efter mer inspiration från andra texter, alltså mer information.

S3: Asså jag tycker, det är bra genom datorer när man visar på duken och allt sånt där, men ibland så går det lite för fort, man hinner inte hänga med riktigt. Jag tycker det lättare med böcker, då har alla sin egen bok och man kan läsa i sitt eget tempo. Men nackdelen med en dator är att alla måste kolla på samma redovisning, och vissa behöver mer tid för att lära sig, alla är

inte lika snabba på att lära sig. Det har sina fördelar och nackdelar. Jag tycker det är lite enklare med böcker.

S5: [...] fördelen kan ju vara att när läraren har tagit ut så vet man att har klart för sig att det här är något man ska arbeta med, just den här texten, men om du är på nätet så har du mer att välja emellan, men du vet inte om det är något du kan eller ska använda dig utav. Det blir fritt, men inte lika safe, om man kan säga så.

S1: Man kan också komma på fel spår när man använder datorn, man kanske kan välja fel information och källkritik, tycker jag. Men vissa lärare är ganska stränga med det, till exempel på religionen, om vi ska lämna in en skrivuppgift så säger läraren att vi får gå in på vissa hemsidor och ta källkritik därifrån, det är redan bestämt, så att vi inte tar källkritik från, till exempel, Flashback.

S3: Jag känner att jag lär mig mer med tradionella läromedel, jag vet inte varför, jag tycker det är bekvämare att bli undervisad med digitala läromedel, men jag känner att jag inte lär mig lika mycket. Min samhälls- och historialärare är väldigt traditionell, han skriver på tavlan och delar ut papper och instuderingsfrågor, jämfört med min engelskalärare som kanske visar oss videoklipp och sen ger oss en uppgift på det videoklippet. Så känns det inte som om jag lär mig lika mycket som på det tradionella viset, men jag tycker det är bekvämare, kanske det är bara jag-

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S5: Vi är mer vana, tycker det är mer naturligare att skriva för hand, men de som kommer efter oss kanske kommer tycka annorlunda, de har växt upp med projektorer, iPads, datorer, allting sånt. Jag tycker det är bra att variera med lärandet, man får flera perspektiv på själva läraren. Det finns digitala läromedel, papper, det är bra att det är varierat, man lär sig nya saker hela tiden och det är ett bra sätt att lära sig.

S2: Jag tycker inte att man ska ta bort – att man inte ska välja mellan det ena och det andra, när det går med digitala läromedel så kör man på med det. Nu pratar jag inte bara om engelska, men mer generellt, vi har lärare som bara använt sig av powerpoints, det har varit några av dem tråkigaste lektionerna jag har haft, och vi har lärare som bara använder sig av tradionella medel och det har också varit jättetråkigt.

S1: Det är som de säger, måste hitta en variation, en balans mellan båda. Det jag tycker är att om man använder powerpoints så mycket att det blir tråkigt och man slutar lyssna, så måste läraren väcka intresset och hitta på något annat, kanske visa någon rolig video eller nåt, kanske visa frågor som man kan svara på.