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Teacher Perceptions of Digital Literacy in an L2 Classroom

Läraruppfattning av digital läsförståelse i ett L2 klassrum

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Abstract

This qualitative case study investigates L2-teachers' perceptions and integration of digital literacy. Two qualitative semi-structured interviews were conducted, one group interview with two participants, and one interview with a single participant. The aim of the interviews was to find out about teachers' pedagogical choices regarding digital literacy, practicality on digital issues, and the perception of the curriculum with digitality as an aspect and consideration. To answer these formulations three themes were adopted, these were pedagogy, practicality and curriculum. There was an indication that teachers were divided between different ideologies which affected them in their classroom regarding technology use. These ideological issues consequently affected factors such as beliefs, explicitness, responsibility of work, creativity and criticality, which were factors dividing the teachers apart concerning their view of digital literacy.

Key words: Digital literacy, Bloom's digital taxonomy, Web 2.0 tools, ICT

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Introduction

Digital literacy caught my interest last year and since then the subject has only been growing on me. It is very fascinating because of two things, the sheer complexity and the fact that it is relatively new for educators around the world. ICT (Information and Communication Technology) is starting to affect many different areas in the educational setting. One of these areas is the understanding and perception of digital literacy, however, it is still a relatively new concept which Swedish schools have recently been introduced to. My degree project, therefore, seeks to find and establish teachers' expectations and applications of digital literacy in the classroom. There are some difficult questions that need to be addressed: what are the educational challenges involved in using digital tools? What considerations do teachers make? How do teachers facilitate students' understanding and conception of digital literacy? That is why there will be three themes considering these types of questions; they are pedagogy, practicality and curriculum. It will also be important to consider learner autonomy and self-efficacy regarding digital literacy to see the effects of different learning strategies. Lastly, how and what ideologies affect teachers' decision and way of work.

Unfortunately, there are no specific descriptions of digital literacy in the Swedish curriculum (Lgy11, 2011). This is the only quote that refers mildly to something resembling digitality "to produce spoken language and texts of different kinds, both on their own and together with others, using different aids and media." (Lgy11, 2011) This was taken from the syllabus "Aim of the subject". This makes teachers' understanding of the curriculum one of the areas of inquiry in this project. Another area and theme is the practical applications of digital media, what are the challenges for teachers and students but also different advantages and disadvantages of digital tools. The possibilities for teachers working with digitality is sadly encumbered because the most practical and time-consuming aspect happened to be documentations, sometimes diminishing creative inputs. The last theme is about how pedagogical choices are made, what considerations do teachers make to increase students' understanding of digital literacy, and lastly, how do teachers facilitate autonomy and self-efficacy using different digital tools. I will therefore analyze the interviews according to these three themes, pedagogy, practicality and curriculum.

Digital literacy is the concept of knowledge and skills acquired through different digital media (Ilomäki, 2014). It is a concept that becomes multi-layered as several perspectives and

different literacies fuse into a complex phenomenon. When the term is being used in this project, it presupposes an educational setting. In this paper, the interest in research is within how digital literacy is being interpreted and how teachers work with digital literacy. Other interesting points are if teachers are using digital tools diversely, if they are encouraging digital writing creatively, and lastly promoting self-reliance through digital literacy.

If we search for the concept "digital literacy" we will get numerous definitions, such as the following, from the Cornell University website: "Digital Literacy is... the ability to find, evaluate, utilize, share, and create content using information technologies and the Internet" (2009). At Cornell, they also pursue the "The Digital Literacy Project" since 2009 which helps students with finding information about research, copyright and plagiarism. Another definition from Wikipedia states that "Digital literacy is the set of competencies required for full participation in a knowledge society. It includes knowledge, skills, and behaviors involving the effective use of digital devices such as smartphones, tablets, laptops and desktop PCs for purposes of communication, expression, collaboration and advocacy." These definitions imply a dichotomous stance between knowledge and competency while in actual practice it is much harder to pinpoint, especially in an educational setting. Teachers are neither backed up by the curriculum or the pedagogy surrounding this phenomenon.

Pangrazio (2016) delineate the importance of critical digital design and how multi-faceted digital literacy could be interpreted as. The definitions of digital literacy are pertinent to create a foothold in which the researchers must differentiate between critical design and technical design. The digital practice is not interchangeable between definitions and competencies but rather through the importance of a critical disposition towards different digital forms and media. This article is not a case study but explains the intricacies about the problematic nature of digital literacy.

After learning the basics of ICT (Information and Communication Technology), Web 2.0 tools (Facebook, Twitter, Instagram, blogs etc.), visual literacy and digital composition, students are only beginning to scrape the surface of digitalization while their competencies are quickly ever-changing. Shin (2014) argues that students acquire more interdependent and interpersonal language using Web 2.0 tools. Further analysis conclude that different and varying semiotic resources are beneficial in learning and extending academic language through digital setting. Another significant point was that current research is concerned with computers' effect on learning, and the focus of research is purposefully on this matter alone

while Shin (2014) mentions that learning for language is more important, especially with understanding instructions within context-dependent practices.

Investigating teachers' way of work is a good way to get a grasp of what the phenomenon behaves as in real life. The drive behind this paper lies in gathering new insights on different outlooks and ways of teaching. The research used in this project is relevant for either highlighting or identifying concepts related to digital literacy, with the most prominent concept being Bloom's taxonomy. The hierarchical point of view, within the taxonomy, is easily related to the set of competencies of digital literacy and the calibration of higher and lower order thinking, connected to knowledge and competency. Other interesting concepts are Web 2.0 tools, digital composition and visual literacy.

Purpose

The focus of this paper is to explore and investigate teachers' perception and incorporation of digital literacy. There are two sub-questions that are the main foci of my purpose in this thesis, mainly to find out whether teachers use diverse digital tools and how/if these tools are realizing student self-efficacy, autonomy and creativity.

Research question

How do teachers integrate digital literacy in an L2 classroom?

Sub-questions

- **1.** What decisions are made by teachers in their incorporation of digital literacy to realize self-efficacy and student autonomy?
- **2.** Do teachers use diverse digital tools in their incorporation of digital literacy to realize creativity?

1.0 Theoretical background

The theoretical background lays a foundation for understanding the terms and definitions that are to be used and how these relate to the overall outcome. Firstly, there are several definitions and concepts here that one must know to be able to comprehend the paper, terms like digital literacy, digital composition, visual literacy and Web 2.0 tools are explained. Secondly, the research presented here is linked to digital literacy in several ways, shedding light on why and how competencies differ, how to navigate the digital jungle safely and how to use and understand digital tools for improving all round language skills. Finally, a socioconstructivist perspective informs the work on a more general level.

Students of today need to both practice their competencies and increase their knowledge within digitality. Tang and Chaw (2016) look at effective learning in blended environment among Malaysian university students. They use two different models or rather theories, specifically Bawden's digital literacy components and Huber's knowledge acquisition processes. Their findings suggest that learners of today must be digitally literate to be able to comprehend digital tools and reuse their digital competencies as basic skills. In a blended environment, learners must be proficient at self-directed learning to increase their skills in digital literacy. The gap between competence and knowledge must be balanced for students to develop further.

Another aspect that is important when researching educational context is the one which teachers and students act in, the socio-constructivist perspective. In accordance with socio-constructivism, Bhatt (2012) suggests that digital literacy practice must be congruent with social practices in school. In his research, he argues that the concept of literacy must be contextualized and that learners need a more considered support for digital literacies. The pedagogies of the social practices must adhere to a more individualized approach and not only satisfy basic skills from the curricula. Bhatt explains it very well, "Allowing learners' personal digital literacy practices to be mobilised as resources" (p.298), as to say that students need to engage and interact with digital tools in a more personalized manner.

1.1 Digital literacy

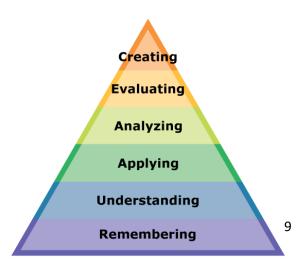
Digital literacy as explained earlier in the introduction are the skills and competencies used in ICT. This definition "Digital Literacy is... the ability to find, evaluate, utilize, share, and create content using information technologies and the Internet" (Cornell University, 2009) is probably the most straightforward and easiest to implement and think of when mentioned in the paper. Bloom's digital taxonomy will apply accordingly to digital literacy to showcase teacher perception of student autonomy, self-efficacy and creativity.

The concept of autonomy is very broad in different disciplines, however in this paper I am referring to students' responsibility in different educational contexts. What do teachers digitally do to help students with self-governance? The concept of self-efficacy, which is basically your own belief in succeeding in specific situations, is applied in the paper because digitality is difficult and teachers must help students with the challenges that occur. Lastly, the concept of creativity used in the paper refers to how much creative teachers are with digitality. Creative being curious, inventive and open to new ideas regarding digital literacy.

In their article about flow on effects of digital learning, Prior et al. (2016) state that digital literacy in fact improve students' learning management study (LMS) and self-efficacy. Their study examines the effects of attitude and digital literacy on self-efficacy and to assess the effects of self-efficacy on three online learning behaviors: peer engagement, LMS interaction and convener interaction. The results of the study were that digital literacy positively contributes to self-efficacy. It is however important to showcase here that their methodology was surveys through online courses, limiting their study as they had only a 40 % response rate. Next in line is the concept of Bloom's taxonomy and how it could it be applied in various areas regarding digital literacy.

1.2 Bloom's digital taxonomy

Bloom's taxonomy is a hierarchical conceptual mapping of different cognitive processes such as thinking, learning and understanding. Krathwohl et al. (2002) later revised these concepts, transforming them



into actions instead. The digital taxonomy is valid for application regarding digital literacy since there are competencies where many of these actions are done in the classroom. Concepts such as evaluating, creating and analyzing are higher-order skills, while applying, understanding and remembering are lower-order skills. I have used the taxonomy to show what affects students' competencies in a somewhat speculative manner. This is of course limited only between Blooms' taxonomy and digital literacy.

The definition of digital literacy is described as working with several skills and competencies regarding ICT (information and communication technology). There are longer complex definitions because the phenomenon involves many cognitive processes. These cognitive processes could be divided into lower-order skills and higher-order skills according to Bloom's taxonomy (1956). The revised taxonomy by Krathwohl et al. (2002) is applicable towards digital literacy as educators have created the newly Bloom's digital taxonomy. Each set of descriptions that changed into actions, such as create, analyze and evaluate, enable a sense of interaction between the users and the tools. This interaction involved the same lower-order skills and higher-order skills from Bloom's taxonomy. Krathwohl et al. (2002) shows us that the hierarchal taxonomy is a scheme for e.g. classifying educational goals, and that digital literacy is perfectly applicable here. The remaining concepts are important for answering parts of the research question, such as self-efficacy, student autonomy and creativity.

1.3 Visual literacy

The concept of visual literacy is explained very thoroughly as being a critical consumer of pictures and information in our digital world. Farren et al. (2013 p.97-116) indicate in their article about learners adapting and becoming better at evaluating visual literacy and how much visual information we process daily. Concepts such as identification, labelling and narratives must be taught, and teachers themselves must be confident in their own digital literacy. To be able to understand and evaluate visual and verbal content, learners must be attentive and critical thinkers. Farren et al. (2013) state that different discourses would affect visual literacies depending on factors aligned with interpersonal objectives. It is therefore important to enlighten and facilitate new knowledge to make both learners and teachers aware and motivated for self-reflection. This concept helps the student in thinking more critically while the next concept helps them being more creative with digital tools.

1.4 Digital composition

Mckee-Waddell (2015) argues for the re-education of the teacher, by fully and completely shifting towards newer technologies regarding digital writing. With a comprehensive list of 45 different digital tools on how to re-shape and re-define the writing processes for learners, she aims to change teachers' conception of digital writing. This type of writing, called digital composition, is already in function around the globalized worlds' different schools.

Concretizing this conception through teachers' understanding that digital writing is more than basic writing, it also enhances learners' critical thinking, utilizing collaborative writing with peers, and increasing teachers' instructional strategies. Digital composition is currently happening; however, teachers need to be more aware and specific of how writing is perceived. Concerns such as plagiarism, copyright and the need to be creative implies teachers showing good understanding of digital literacy and digital writing. There is a difficulty with being all too progressive as well, students need time to adapt. The next concept shows that the social part of education is still valid in the digital world.

1.5 Web 2.0 tools

Shin (2014) emphasizes the need to re-conceptualize digital literacies and literacy development since learners are bound to resources which helps them with facilitating interpersonal function of the target language. Using Web 2.0 tools, i.e. blogs, students often feel that their social collaboration increasing, however, the lack of material resources, expertise in digital technologies, technical support, and distrust among administrators, the effects become harder to analyze. It is concluded, however, according to Shin (2014) that the tools used and the content created should in fact align with the purpose of language facilitation and critical view of linguistic choices made by the students.

Turkey (2016) emphasizes the need of socio-collaboration when using Web 2.0 tools to further increase the interaction between students leading to a greater learning outcome, both digitally but also actively in between lower self-efficacy students and higher self-efficacy students.

2.0 Method

The choice of method were interviews with a semi-structured style. Qualitative research techniques according to Kvale, such as interviews, are often criticized for being too individualistic, too idealistic and credulous (Kvale, 2008). It was therefore important to create an environment where understanding and clarity is of paramount to the interviewee. To be able to create this environment, earlier access to information about the subject for the interviewee is reassuring. Another point was using an interview guide for easier access to themes and questions. The third point was working with guidelines according to ethical principles. These principles are fundamental when researching in accordance with the Swedish Research Council's recommendations also giving credibility to the newfound information as valid. According to the Swedish Research Council there are several principles, however, I will only mention Merton's CUDOS norms as my guideline to ethical research and above all the participant's agreement, resolve, choice of setting and finally signature for complying to the interview (2011, p.17). The norms of CUDOS stands for universalism, communalism, disinterestedness, and organized skepticism.

The interviews were conducted according to different themes: these were pedagogy, practicality and curriculum. The reason why I chose these as themes was to answer questions regarding pedagogical choices, practical issues and curricular limitations. It is important when asking questions regarding these themes to consider the interviewees' experiences and understanding of digital literacy, as it will differ from person to person because of the concept's ambiguous definition. One way of ascertaining validity in interviews is through "contexts of interpretations and communities of validation" (Kvale, 2008 p. 124). However, I believe that subjectivity is a precondition in qualitative research, the constructed world we create and see as true becomes valid as a context of interpretation.

I deemed it to be very important to decide what phenomenon to study, and prepared accordingly. Savin-Baden and Major (2013) mentions that researchers must adapt a so called "researcher lens" to be able to see the phenomenon through different paradigms and approaches. This is made to be able to not only to find new knowledge but also how to evaluate data, analyses, methodologies and frameworks. That is why my approach can be

characterized as pragmatic qualitative research (Savin-Baden and Major, 2013). Three important aspects of pragmatic research are being implemented here:

- 1. Reduce and display data
- 2. Draw conclusions
- 3. Confirm the results

From a theoretical standpoint, the study employs the interpretive viewpoint of a qualitative case study. To reduce preconceptions, coding the themes of the interview and data to generalize and draw conclusions. Digital composition, Web 2.0 tools and ICT are some of the concepts needed to be able to create a foundation for the data, later to understand the interpretations of the interviews. The socio-constructive approach will presuppose the issues of self-efficacy and autonomy, and how they are perceived and interpreted. The study must have background in some form of literature and the theoretical context brings forth some of the bias but also the credibility and validity of data.

I will be using semi-structured interviews in my research because of the need to be neither too open-ended or close-ended, as semi-structured interviews often have a balance to the weight of the questions. Another point is that of digital research methods often refers to socioconstructivism and its benefits. Since the research will be about how students interact with digital learning, not just through the computer but also in the classroom and at home, the best approach is to interview the teachers whose responsibility is to decide how this digital learning is being accommodated. I had three teachers as my participants, one group interview with two teachers and one specialized teacher in digital tools. The group interview is much harder to interpret and collect data from. However, Kvale (1996, p. 293) mentions that the interpersonal dynamic of group interviews could benefit this type of study. The single interview is easier to interpret, especially the perspectives of digital tools, and analyzing teachers' decision of instructional vs. action-oriented tasks.

The interviews will be semi-structured in nature, as Kvale recommends, giving the sense of a more open-interpreted discussion format where dialogues between the interviewer and the interviewee is seen something dynamic and more insightful (Kvale, 2008). There will be an extensive interview guide, beginning with the definition of digital literacy, and then later asking questions and follow-up questions as the interview progresses. The interview will be recorded through a digital voice recorder, in the beginning every aspect of anonymity and

security was reassured and that the paper will be sent to the corresponding participant if wanted. Lastly, the interviews will be transcribed partly, meaning the most interesting and valid parts will be used in the research. After the interviews are transcribed it will be condensed to the material used in the results section.

2.1 Setting

The setting of the interviews was left to be decided by the interviewees, mostly out of practicality of the situation. Both the interviews were done in their respective schools. The participants, which are coded X, Y, and Z, were not inclined towards any specific environment, but instead had a rather spontaneous attitude about choosing the setting. The group interview with participants X and Y picked a room connected to an ordinary classroom where there was an ongoing class. Some noise originated from the classroom and outside of our room, however, nothing of disturbance to the actual interview. The participant Z picked a room connected to the hall where teachers sat down for coffee breaks. Both interviews had comfortable environments, with table and chairs provided, and recording was successful in both cases. Both interviews were vis a vis.

2.2 Participants

The interviewees were all female, ages ranging around thirties and forties. They all had national teaching certification and a full compatible teacher's degree for English. The participants for the group interview, X and Y, were in high school and worked in a school with seven to nine graders. The participant Z works in an upper secondary school and has for the last year been working on both acquiring a better grasp of digital literacy and literacy development through the project called "Läslyftet" which is provided through the Swedish national agency. The participant said that this helped her significantly with planning her lessons according to literacy development, both digitally and critically.

2.3 Segments of analysis

Kvale (1996) mentions several different ways of analyzing interviews. This being a qualitative case study with both pragmatic and socio-constructivist perspective, I have chosen to generate meaning through "meaning condensation" (Kvale, 1996). Meaning condensation is interpretation through condensation of the information created during the interviews. The recordings were then broken down into shorter quotations according to the themes used in the interviews. These quotes will give information about what was said by the interviewees. This information is then interpreted by me, and connected to my theoretical research frame. Kvale (1996) explains the importance of generalizability and validity when researching, therefore I have adopted a naturalistic generalizability and communicative validity framework, encompassing further theoretical descriptions and explanations to satisfy the researching community in the construct of validity. The naturalistic generalizability aids the person on an experiential level. The personal expectations are tacit knowledge at first, later developing into explicit propositional knowledge.

Merriam (2009) points to the fact that socio-constructivism and interpretivism has been a leading factor for many of the qualitative case studies made in different social science circles. There are three main aspects to consider when analyzing and interpreting interviewees:

- 1. How people interpret their experiences
- 2. How they construct their worlds
- 3. What meaning they attribute to their experiences.

It is important to realize here that, experiences are constructed consequentially, according to interviewees' right and feeling, during their transformation of becoming a teacher. My experiences as a teacher student is far below compared to teachers who have worked several years. They later attribute these experiences accordingly, giving meaning to not only themselves but also at the same time to the world around them. This is mainly the way I have chosen to interpret their words, through quoting them and presenting their thoughts as the core for the discussion made between teacher to become and a full-fledged teacher. After collecting a reasonable number of quotes from the transcriptions, they will be used in the

upcoming section together anchored with theoretical context. Kvale (1996) mention that the interviewer is either a miner or a traveler, and in my interviews, I have chosen to become the traveler. The traveler metaphor suggest that the interviewer is on a journey of knowledge, partaking in conversations that reconstructs new stories and narratives. That is why the next two sections, the results and the discussion have been combined into one section, considering quotes and themes according to the traveler's newfound, qualitative ways of self-understanding.

3.0 Results & Discussion

As described earlier this section will analyze what the interviewees has been experiencing and perceiving regarding digital literacy in the classroom. This is done through selection of quotes with relevance to the three themes used in the interviews. After the selection is made, I will interconnect the quotes to relevant research used in the paper. Finally, having the outlook of socio-constructivism and digital literacy, I will mostly refer to research connected to these terms.

The first questions aimed at investigating teachers' definition of digital literacy. Participants, X and Y, in the group interview both defined digital literacy rather simply, saying "Instead of reading in a physical book, you read stuff on the Internet, for example, you can do exercises on the Internet," and "Knowing how to deal with the techniques of today". The participant Z had a more well-defined answer, stating "Mainly about understanding and handling digital tools, information and being critical," and suggesting that digital literacy involves competencies which are more dynamic, e.g. regarding the use of digital media, especially visual literacy and critical literacy. Why is it important to define digital literacy? Because the perception and understanding of it is crucial for how it is incorporated in the classroom. We have already established the obscure nature of the phenomenon, and there is a difficulty for teachers to incorporate all of it seamlessly. Consequently, teachers must be critical regarding evaluation of policy-related documents and the definitions therein, as to easier integrate digital literacy in their classroom.

3.1 Theme: Pedagogy

Pedagogy is the backbone of teaching. Whatever the teacher decides, will affect the student. The issues involved in pedagogy were regarding student autonomy and self-efficacy. The theme of pedagogy was chosen because pedagogical choices are crucial for students' progression within different departments regarding i.e. digital literacy. I have also chosen to analyze this through Bloom's digital taxonomy. However, there are other factors that decide the specific choices teachers ultimately make. Things like school culture, ideology and teacher personality are also affecting these decisions. Participant X said, "They don't always open the videos or the power point presentations, it doesn't matter if its digital or on paper," suggesting that the problem is student laziness. According to Bloom's digital taxonomy for students to reach higher-order skills they should recognize lower-order skills first. Therefore, teachers need to be explicit and clear with instructions regarding digital competencies.

Another significant matter is how the participants tried realizing autonomy and self-efficacy through digital literacy. The interviewees had different answers regarding the incorporation of this. The participants X and Y had difficulties understanding and answering, eventually saying "I still need to guide them and teach them, I am not their supervisor," suggesting that autonomy for students in high school is more problematic. Participant Z stated, "Reflecting and what they thought about the topic or content in today's class" suggests that self-efficacy is mostly apparent when she gives them so-called exit-tickets on the computer. Exit-tickets are smaller questions after class which they answer on their computers. The participant said that the exit-tickets helped the learners to reflect to the contents of each class, however not all students were pleased with this concept. According to Bloom's digital taxonomy, this is one way of transcending procedural knowledge to metacognitive knowledge. One apparent issue in both cases are students' participation.

Puapan (2014) argues that Bloom's digital taxonomy shows the evaluation in-between students as the highest skill priority to achieve regarding digital competence. Participant Z said, "They work on their level, and they will pass, because they are aware of what they need to do" claiming that students always try to evaluate, however that they are in different levels regarding evaluation. This can also be seen in previous mentioned exit-ticket where not all students felt that they needed to reflect and evaluate, the skill becomes more meta-cognitive

and a higher-order skill in Bloom's taxonomy. These cognitive processes are difficult to measure and we can only speculate. However, there are students which do take the time to do the exit-tickets. These students are also more autonomous, require more challenge and often feel that the content is too easy for them.

According to concepts such as instruction-based tasks, management and explicitness, teachers were sometimes adapting to manage the conditions of the classroom. All the teachers agreed that students must have an individual responsibility and influence on their own learning, they often mentioned that students find it convenient to blame the teacher and the school when things were difficult. Participant X said, "We have interactive textbooks, but they do not take responsibility" inclined to the fact there is a strong belief within teachers that students must have a reliable grasp of responsibility. Participant Y stated, "I need to be explicit, especially on how to use the programs or on critical literacy" suggesting that there might be a problem with teachers that are instructionally too indirect. The interviewee mentioned critical literacy several times during the interview suggesting that there might be a peripheral belief according to the perception of criticality. Participant Z said, "It comes with the job, you are supposed to carry it out, and learn the technicalities around it," regarding the issues of being explicit and well-educated with digital literacy. We see yet again that teacher beliefs regarding student responsibility is a core belief, while explicitness and criticality were regarded as peripheral beliefs.

In a general sense, the interviewees seem to agree that adaptability is much needed when students need help with digital media. It is easier to have that mobility through the different areas of interaction and production. Sometimes the students have problems with writing, they could instead easily get help accessing the Internet. For example, improving their listening through YouTube, or working with grammar exercises in Digilär, actions that are possible with a computer. This easy access and connectivity with both the environment and the teacher is important to highlight as 'negotiation of meaning' as the teacher will be able to find the learners in different contexts. Wake et al. (2007) mentions this as something positive and describes teacher roles in this perspective as 'mentors' that must support the learner in both a socio-cultural environment but also regarding digital literacy practices. This socio-cultural environment is a prerequisite according to many researchers such as, Bhatt (2012), Shin

(2014), Turkey (2016) and Wake (2007), especially regarding digital literacy and Web 2.0 tools.

3.2 Theme: Curriculum

The main reason for this theme is the lack of guidelines in the curricula about digital literacy and the response to this by the teachers. Other issues that were brought up; restriction of resources, other materials used, institutional restrictions and interpreting the curriculum.

The idea of having a theme connected to the curricular issue is both in agreement with the definition of digital literacy and how the descriptions of technology and digitalization is being perceived in policy-related documents. All the participants deemed that it is mostly up to the teacher to interpret this. This could, however, sometimes harm the outcome of digital practice. The following three descriptions, "new technologies", "modern technologies" and "technological development" are extracted within the documents by the national agency (Lgy11, 2011), determining the perception of digitalization. There are a couple of more but in its entirety very little is said about the specifics of digitalization. Another interesting fact, there is not a single guideline for teachers regarding digital practices or goals.

Another matter which is problematic is how they define these outcomes, the words "modern", "new" and "development" are descriptions which are too strict, Ilomäki et al. (2014) suggests that policy-related documents should adapt in accordance with society. The use of technology should not be specific to the "content", rather it should have a didactic approach. Ilomäki et al. (2014) propose that the definitions should not be too narrow either, giving a false identity regarding if competencies could be measured or not. The first quote from the curriculum guidelines mentions very briefly "changes in working life, new technologies..."

(Lgy11) inclining that knowledge and ways of working with technology is changing, which is apparent in todays' society. There are no specific demands on how to perceive this as a teacher, except that it has a huge impact in the school today.

The second quote is regarding student goals, and yet again we see very brief suggestions on what to think of according digital literacy or competence: the teacher "can use books, library resources and modern technology as a tool in the search for knowledge, communication, creativity and learning" (Lgy11, p. 9). There is an inclination though that the tools should be used in a manner where creativity and learning is the outcome, however the wording of "modern technology" is something interpreted by the teacher, thus adding complexities to the perception of digital literacy. The last quote, "are aware that all professional areas are

changing in relation to technological development" (p.12), is rather redundant as teachers should already showcase this in their framework.

Another important aspect with the evaluation of digital literacy is to show conceptually how different digital practices can be. While some teachers, participants X and Y, tended to focus on the accessibility and adaptability of digital literacy, they often forgot to mention things like creativity and critical thinking. This could be because of the knowledge gap between 7-9 grades and upper-secondary school. It is also important here to acknowledge the fact that the teachers did not have a consensus of the definition, however they were able to interpret their own conception of it, which was often close to the definition from Cornell university. Ilomäki et al. (2014) delineates the problematic nature of terms used in policy education contexts, such as digital literacy and digital competence. This is because policy-makers themselves have trouble defining the concepts and terms, as they are not standardized or clearly defined in policy-related documents. Ilomäki et al. (2014) mentions the "boundary concept" which was coined by Löwy (1992):

objects which are both plastic enough to adapt to local needs and the constraints of the several parties employing them, yet robust enough to maintain a common identity across sites.

(p.656)

Ilomäki et al. (2014) argues that digital literacy is a boundary concept since it has a common identity in educational settings, however it acts outside of this commonality as well. There is a schism here between the reality of teachers and the practical application of the concept. That is why the interviewees know what the concept is but have a harder time pinpointing what positive changes could be made.

For the participant X, maintaining status quo was deliberately instructed by the interviewees' use of control, saying "Use your own words when writing, do not use Wikipedia" suggesting that plagiarism is common and that students which get caught, could suffer academic consequences. Participant Y said, "It's a better way to introduce them to the real world and society" suggesting that digitalization is a gateway to adulthood. Participant Z implied, "People need to come to the classroom and take instructions, to develop and understand these literacies and technologies" suggesting that attendance is the key to developing anything at

all. All teachers have a different outlook on digital literacy which makes their practices take different shapes according to their beliefs and perception of the world. Participant X expressed views of, "I am very critical of Swedish students' language improvement, they should be much more proficient but they are not," adding the fact that the curriculum might need changing. Participant Y said, "All of the teachers have ways to interpret the curriculum," and added, "I think there should be better descriptions also the demands should be clearer" regarding the goals and guidelines in the curriculum. Participant Z said, "Laws considering personal integrity should be more explicit for the students" suggesting that there should be laws protecting the students' rights and more information regarding ICT.

3.3 Theme: Practicality

The idea behind having practicality as a theme was mainly done for the researcher to see what teachers deemed as necessary when working digitally. Issues such as, types of technology, different ideologies, attendance issues, participation in class and engagement were highlighted in this theme.

Some drawbacks to digital tools are network issues and difficulty to read from screens, as told by students, however participant Z says that "The most important aspect is that they do not swallow everything on the internet, criticality of sources is very serious and important", and "Teachers need to be proficient, and even more to teach students to function outside the world". These quotes are important as Bhatt (2012) mentions in his article that pupils' everyday life is coming closer as digital literacies are interconnected through social practices in class and as resources that gives support to learning. Turkey (2016) mentions the effects of Web 2.0 tools enhancing self-efficacy in students referring to the social practices in Facebook giving students a personal outlook to their writing, discussions and feedback. Participant Z have used several Web 2.0 tools with great success and will move on to newer tools used in digital writing. Reynolds (2016) also mentions the need of practicality of newer technologies and focusing on how practical solutions generates easier implementation of assessing students' evaluation of material and meaning of information. In this theoretical framework learners needs to adapt, through socio-constructivist approach, and engage with other students to increase both in-school and home activity.

In the group interview the teachers had a clash of ideologies, discussing about how school cultures define the status quo, and arguing about conservative vs. liberal perspectives. Participant Y implied, "Quite the conservative school, there is a reluctance from teachers here" while participant X said, "Teachers are very conservative, it is very difficult for teachers to change the way they teach" suggesting that beliefs surrounding teachers are in fact very important to understand and be aware of. These beliefs according to Phipps and Borg (2009) are core beliefs which are harder to change during teachers' time as educators. Phipps et al. have divided teacher beliefs into two separate systems, core beliefs and peripheral beliefs. These beliefs constitute a system where all teachers develop a sense of awareness which permeates the very core of teacher identity. Phipps and Borg (2009) emphasize how teacher beliefs are deeply rooted and hard to change. Phipps et al. also mentions that teachers'

pedagogical choices are also rooted in core and peripheral beliefs, a system where tensions and contextual factors sometimes change depending on how the teacher reacts and behaves.

Teachers' ideological beliefs often construed the idea that students themselves should have responsibility to realize self-efficacy and autonomy; if teachers felt that learners were responsible enough, they usually found no negative tendencies with their pedagogical choices. Participants X and Y said, "I need to be explicit, especially on how to use the programs or on critical literacy," and "They are not immigrants, like I am, they are natives of the digital world," suggesting that even though students might be proficient in their own personal acquired technology, school-related technology is another matter of issue. Bhatt (2012) emphasizes the need for personalizing and individualizing the digital practices according to the needs of our students. This "personalizing" aspect made participant Z have an insight, explaining that "It is not personal, when it is personal it is fun, that is why writing blogs and discussing books, it becomes more interesting," regarding digital writing. Personalizing and individualizing are important factors, especially regarding digital writing, as Mckee-Waddell (2015) mentions that digital composition should incorporate tools which students feel are personal and interesting. This in return will increase competency regarding digital literacy.

The participants, X and Y, in the group interview felt that their students did not participate in the activities given to them, this could mean that the level gap between high school and upper secondary is indeed far away from each other, even though the curriculum only differs marginally. The participant Z said, "There is a big difference between learning how to navigate the platforms and using the tools," implying that being pragmatic and at the same time creative could indeed infringe upon some of the beliefs teachers have. Explicit and implicit instructions is another important matter, where interviewees felt that being too explicit made them lose their concentration. Participant Y stated, "I need to be explicit, especially on how to use the programs or on critical literacy," suggesting that the insight to this thought came from how students sometimes have difficulty with listening to instructions. Criticality and the digital practices often concern plagiarism, copyright and infringement issues, where students need to be more skeptical towards digital sources, where pictures are taken and many other digital information from the Internet.

Web 2.0 tools like Facebook and blogs felt more professional according to participant Z. The interviewee Z had clear thoughts about teachers as the forefront for digitalization, saying that the main benefits of digital literacy is "The versatility and accessibility of digitalization" and

that it is "Time saving and individualizing" which is positive in many ways, especially according to research. Another interesting quote from the same participant regarding the pedagogical choices was "The student demands it today, they are used to the fast accessibility and information" suggesting that students are learning, however, they must develop even further to catch up with the rest of the world.

Realizing autonomy and self-efficacy through digital literacy is tricky. There are a lot of factors which, through the participants, seem to slow down the processes. Things like time management, lack of technical equipment, lack of support from school, old equipment and being educated enough to use it without hesitation are some of the factors stopping teachers from realizing this type of education. Participant Y said, "The teacher needs to level up on competency here, we need to be educated continuously" referring to the ongoing education for teachers and saying, "What restricts me in this school, is the lack of equipment, also the colleagues are against digitalization" adding more complex issues to an already complex phenomenon. Students are sensitive to their environment but also impacted by the inadequacies that comes with lack of equipment, self-motivation and self-realization.

Digital writing and reading was another topic discussed with the participants, especially about how students' participation in the classroom is affecting their learning. This led on to another topic about how difficulties of speech anxiety and dyslexia were easier to combat due to digital tools. The group interviewees had a specific focus on the matters of dyslexia, stating "We have students with dyslexia, and they can listen to the text, or have bigger letters, you know, adjusting the content". The teachers also felt, unanimously, that digital tools being updated regularly, being able to access, adapt the content on the go, and lastly give feedback instantly, are all perks of digitalization. This is an argument for the immediacy of digital tools and how much better it is than paper for instance. However, Rice (1991) argues for paper having higher comprehension levels according to finding and highlighting, as there are different cognitive aspects to the process. A counterargument for this is de facto that many benefits of digitalization are already in practice and progressing, not only concerning speech anxieties and dyslexia, but also the many perks regarding accessibility, adaptability, educating digital competence for future jobs etc. The cognitive aspects could also be reconsidered if teachers would apply Bloom's digital taxonomy to easier detect skills in need of improvement.

Conclusion

This paper originally sought after a very difficult question; how do teachers work with digital literacy? The implications found were many, however there are two major findings that are pertinent for teachers around the world. The first finding is that personal, social and individual qualities regarding digital literacy, are in fact beneficial for students. The research behind this is staggering and the interviewees pointed to this as something they were striving for. The second finding is linked to the Swedish educational policy system. As I was writing this paper in the spring of 2017, the Swedish national education agency (Skolverket) revised their upper secondary curricula (Lgy11). In their new revised version, they have incorporated both digital competence in several areas and mentions of digitalization. These guidelines will help both students and teachers in Sweden to better grasp the concept of digital literacy. Another interesting thought or question is why it took so long for its implementation. The new revised version will be implemented next fall 2018. Now according to the new curriculum, teachers will have a defined concept and unified policy around the phenomenon.

There are four important aspects highlighted within the themes. Firstly, the fact that guidelines are lacking for teachers and that criticality is lacking regarding digitality. Secondly, personal beliefs hindering student autonomy and different degrees of explicitness causing issues with digital use. Thirdly, the impact of different ideologies coloring teachers' perception. Lastly, the importance of personalizing technology to further student engagement with digital literacy.

- 1. Critical thinking integrated in digital literacy and the curriculum.
- 2. Teachers' beliefs regarding student autonomy and explicitness.
- 3. Ideological issues regarding school culture and teacher identity.
- 4. Personalizing and individualizing through digital means.

I wrote about visual literacy since I thought it was important to this project, however the interviewees did not have much to say about the concept except that information through visual aid is often limited to PowerPoint and such. It was not a thing that was pursued, however, the points made are still valid to this project but sizzled out towards the end.

Teachers must consider many things to implement digital literacy successfully in their teaching. The first issue to consider is how explicit one can be in one's instructions without losing too much time on delivering "specificity" without the appropriate content. This issue is quite delicate since the format and the tools in which the content is delivered should be in balance. Another issue is the one between conservative and liberal ideologies and how school cultures are fostered in these different environments. The participants from the group interview were in the same school, yet they had different opinions on how technical one should be and what the money should be invested in. Participant Z had a more liberal perspective, looking at the quotes and her knowledge regarding digital literacy. The interviewee felt much more comfortable talking about the topic and had tested things like digital composition and web 2.0 tools.

High self-efficacy and autonomy were often inherently within those students that wanted to learn more about digitalization. As any other subject, the autonomous student will take responsibility of the work done, and evaluate their work. All participants said that students did not always participate and because of that they happened to ignore them. The same problem lies in the way digital literacy is portrayed as, a complex phenomenon that only needs a simple explanation. Self-efficacy issues are not explicit to digital literacy but to all literacies and discourses since the means to advance is usually within the self.

The era of digitalization has only begun and teachers are only scraping on the surface of digital literacy. Meanwhile, policy-makers are divided between whether to include or separate the many definitions and terms regarding digital competence. The continued research for digital literacy and digital competence is very important and I hope that this paper shed some light into the topic at the least. All the participants were positive about the suitability of digital tools for students struggling with dyslexia and speech anxiety issues. Another important fact is the socio-constructivist approach, especially the participants thoughts about how personalizing and individualizing processes are needed within digital practices. Lastly, I would like to mention that teachers' beliefs and ideologies are certainly factors in deciding pedagogical choices. Finally, that Bloom's digital taxonomy should be incorporated in either the curriculum or as guidelines for teachers regarding digital literacy and competencies acquired through this medium.

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Appendix

Interview guide

My research question will be the following statement:

How do some teachers integrate digital literacy in a L2 classroom?

General questions	
In your own words try to	How important is the
describe digital literacy;	theoretical application of
what do you think of?	different literacies? What
	level of conceptual
	knowledge is needed by the
	student?
What digital tools do you	Why do you use specifically
use?	those tools? How so?
What would you say are the	Could you elaborate on that
main benefits of	idea? Could you care to
digitalization in the	clarify some more? Could
classroom today?	you see some positive or
_	negative trends in that?

Themes	Questions	Follow up Q's
	For you as a teacher, what is	Could you elaborate on that
*Pedagogy	the single most important	idea? Could you care to
	aspect of digital literacy?	clarify some more?
	Are there any pedagogically	How so? Why?
Continuation of P*	digital tools which you	
	consider to be good/bad?	
	Do you feel that you have a	Why do you think that is?
	balance between all digital	Have you tried context-
Continuation of P*	practices?	dependent tasks?
	Would you consider using	What limits are there? Could
Continuation of P*	different digital media to	you see some positive or
	encourage student	negative trends in that?
	autonomy?	
	Would you consider using	Could you elaborate on that
Continuation of P*	different digital media to see	idea? Could you care to
	the effects of student self-	clarify some more? Could
	efficacy?	you see some positive or
		negative trends in that?

Themes	Questions	Follow up Q's
*Curricular issues	When we look at the	Do you feel that this is a
	common guidelines in the	problem? Have you found
	curriculum there are goals	any reliable way to
	for the students to reach.	circumvent this issue?
	Why is there no guideline	
	for teachers?	
	Do you use resources from	How good were they?
Continuation of C*	the Swedish National	Would you like to further
	Agency?	expand on those thoughts?
	Are there any hindrance,	Do you feel that this is a
Continuation of C*	from an institutional	problem? Have you found
	perspective, on what digital	any reliable way to
	tools you can use?	circumvent this issue?
	Are there any restrictions to	Financial? Age issues?
Continuation of C*	resources used in the	Environmental?
	classroom?	
	Digitalization is new for	Could you elaborate on that
	everyone, as a teacher, do	idea? Could you care to
Continuation of C*	you feel that the curriculum	clarify some more? Could
	is lacking in its descriptions	you see some positive or
	of new technologies?	negative trends in that?

Themes	Questions	Follow up Q's
*Practicality	As a teacher, have you ever	Did this have any impact in
	felt "out of touch" with	your career? Do you think
	technology?	that being digitally literate is
		important?
Continuation of P*	How do you determine what	Conceptually speaking what
	parts of digital literacy is	is more crucial for the
	important?	students to understand?
Continuation of P*	Do you feel that technology	Is it more evident nowadays
	has divided some of the	compared to before? What
	students?	kind of tendencies do you
		often see in students?
Continuation of P*	What accommodations	Are they using it out of
	would you say are the most	necessity? Are they thinking
	important for students	critically or creatively?
	regarding digital media?	
Continuation of P*	Students are proficient in	What differences are there?
	their own use of digital	Do you feel this can be
	technology, why not school	changed?
	related technology?	