DIGITALIZE IT:

Upper secondary school students' views on the digitalized matriculation examination

Bachelor's Thesis Jenna Savolainen

> University of Jyväskylä Department of Language and Communication studies English April 2017

JYVÄSKYLÄN YLIOPISTO

Tiedekunta – Faculty Humanistis-yhteiskuntatieteellinen tiedekunta	Laitos – Department Kieli- ja viestintätieteiden laitos	
Tekijä – Author Jenna Savolainen		
Työn nimi – Title		
Digitalize it: Upper Secondary School Students' Views on the Digitalized Matriculation Examination		
Oppiaine – Subject Englannin kieli	Työn laji – Level Kandidaatintutkielma	
Aika – Month and year	Sivumäärä – Number of pages 23 + 1 liite	

Tiivistelmä – Abstract

Suomalainen ylioppilastutkinto on käymässä läpi merkittävää muutosta, sillä vuoteen 2019 mennessä kaikki ylioppilastutkintoon kuuluvat kokeet tehdään sähköisessä muodossa. Kannettavalla tietokoneella tehtävän ylioppilaskokeen nähdään sopivan paremmin tämän päivän lukiolaisille, sillä nuoret käyttävät teknologiaa arjessaan enemmän kuin koskaan. Sähköisten kokeiden tekemiseen käytetty Abitti-järjestelmä mahdollistaa myös monipuolisempien koetehtävien luomisen, sillä nyt niissä voidaan hyödyntää ääntä, kuvia tai videoita.

Sähköisten kokeiden suunnitteluun keskittyvän ja muutosprosessia johtavan Digabi-projektin työryhmä koostuu alan asiantuntijoista, jotka etsivät parhaita ratkaisuja niin kokeissa käytettävään teknologiaan kuin itse koesisältöihinkin liittyen. Tämän tutkimuksen tavoitteena oli kuitenkin keskittyä lukiolaisten näkökulmaan ja selvittää heidän mielipiteitään sähkoistä ylioppilaskoetta kohtaan.

Tutkimuksen aineistonkeruumenetelmänä hyödynnettiin haastatteluja. Neljän haastattelutuokion aikana yhdeksää ensimmäisen vuoden lukiolaista haastateltiin pareittain tai kolmen hengen ryhmissä. Tulokset osoittavat, että lukiolaisten mielipiteet olivat odotettua neutraalimpia, sillä kukaan haastateltavista ei osoittanut selvää kielteisyyttä sähköistyvää ylioppilastutkintoa kohtaan. Teknologiaan liittyvät kysymykset ja näppäimistöllä kirjoittaessa tapahtuvat virheet olivat huolenaiheita, jotka toistuivat vastauksissa, mutta toisaalta teknologian nähtiin myös nopeuttavan kirjoittamista ja esimerkiksi poistavan huonon käsialan vaikutuksen koesuoritukseen. Opiskelijat olivat selvästi jo tottuneet ajatukseen sähköisestä ylioppilastutkinnosta, mutta toivoivat teknologisten kysymysten selviävän ajan ja harjoituksen myötä.

Asiasanat – Keywords ylioppilastutkinto, sähköiset ylioppilaskirjoitukset, kielitaidon arviointi

Säilytyspaikka – Depository

Muita tietoja – Additional information

TABLE OF CONTENTS

1	INT	TRODUCTION	
2	2 BACKGROUND		
	2.1	The Finnish matriculation examination5	
	2.2	Digitalization of the matriculation examination	
	2.3	Reasons for digitalization	
	2.4 exam	Previous studies on students' opinions on the digitalization of the matriculation ination	
3	PR	ESENT STUDY10	
	3.1	Research aim and questions10	
	3.2	Data collection10	
	3.3	Method of analysis11	
4 UPPER SECONDARY SCHOOL STUDENTS' OPINIONS ON THE DIGITALIZED MATRICULATION EXAMINATION			
	4.1	Students' experiences and expectations of electronic exams	
	4.2	Positive and negative sides of the digitalized matriculation examination15	
	4.3	Opinions on having an oral section in the examination17	
5	DIS	SCUSSION AND CONCLUSION19	
В	IBLIC	OGRAPHY	
APPENDIX			
	Interview questions		

1 INTRODUCTION

The Finnish matriculation examination is going through a process of digitalization. Matriculation examinations on paper are gradually abandoned, and in the near future, in 2019, all exam subjects will be taken in digital form using a laptop. The digitalization process is completed in stages to facilitate the adaptation of the new system. The first digitalized examinations in geography, philosophy and German were held in the autumn of 2016, and English, the focus of this study, will be held in digital form in the spring of 2018.

It is said that the new exam platform is more in line with the requirements that society has for today's upper secondary school students', since it requires skills in information technology in addition to content knowledge. The new electronic exam system also enables the creative use of sound, images and videos in exam exercises. Thus, the new digital form allows test-makers to explore new exercise types and create vast, versatile entities for assessment. In theory, there are a large number of reasons to abandon pen-on-paper exams, but it remains unclear, how upper secondary school students themselves feel about the reform.

The phenomenon of digitalizing the matriculation examination is rather new, since the project was initially created in 2013, when the need for modernizing was acknowledged. Because the examination is in constant change and is being developed continually, research on the topic has been scarce. The fact that the emergence of this topic has been so recent is one of the limitations regarding the study of the Finnish matriculation examination. It has not been possible to study the real digital English exam situation yet, since it will take place in 2018, but it is useful to hear future exam-takers' opinions and thoughts on the matter. In the Matriculation Examination Board, there is a competent team of teachers, researchers and experts that are in charge of producing the tasks and the assessment of the examinations. However, the most important party, the students, are often ignored in the modernization process and the development of the Finnish matriculation examination. The evolution of high-stakes examinations is often seen from the perspective of the experts involved, but the point-of-view of the students who will sit the examination is important as well.

This study aims to shed light on the opinions of students regarding the new examination and to bridge the gap between the students and the digitalization process. First, the theoretical background of this study is presented, and the structure and characteristics of the Finnish matriculation examination and the main reasons for the digitalization process are explained. In addition, previous research results on the subject are reported. Second, the data collection process and the methods of analysis are presented. In the third section, the results and analysis are illustrated. Finally, the results of the present study are discussed in comparison with previous research.

2 BACKGROUND

2.1 The Finnish matriculation examination

The history of the Finnish matriculation examination began in 1852, when it was adopted as an entrance exam for the University of Helsinki. Thus far, the examination has served as a way to demonstrate the candidate's general knowledge and overall eligibility for higher education. Today, the matriculation examination is still highly valued, but is often used alongside separate entrance exams for universities, and is rather a way to prove that the candidate has reached a certain level in the skills and knowledge required in the curriculum (Ylioppilastutkintolautakunta 2017a). The exam sessions are usually organized twice a year, in the spring and in the autumn. Since 1994, students have been able to take their exams in three consecutive sessions instead of, for example, sitting the whole examination in one spring term (Ylioppilastutkintolautakunta 2017a).

The Finnish upper secondary school can usually be completed in three or four years and in that time students take obligatory courses and, in addition, gather other courses according to their interests. It is advised that students start planning their course choices during the first or second year of school, since they must have passed the required number of courses to take part in an examination of a certain subject. The only subject that is obligatory for all candidates is a test in the candidate's mother tongue, which, in Finland means that, depending on their mother tongue, students take the exam in either Finnish, Swedish or Sami. Since the examination consists of a minimum of four tests, candidates must choose at least three other exams. The options include a foreign language test, a mathematics test, a test in the second national language and one test in general studies, that include a variety of subjects such as psychology or history (Ylioppilastutkintolautakunta 2017b). The foreign language test of advanced English is one of the most popular subjects in the matriculation examination. In the spring of 2016, 51,4 % of all the candidates registered for the advanced English exam (Ylioppilastutkintolautakunta 2016).

2.2 Digitalization of the matriculation examination

Digitalized exams have been in use in a number of European countries, such as Denmark and the Netherlands (Lahti et al. 2013), and now Finland is following their lead. Until the autumn of 2016, the Finnish matriculation examination was in paper form. In 2013, a project called Digabi, administered by the Finnish Matriculation Examination Board was established. The project is in charge of the development of the digitalized matriculation examination and the designing of the new examination. A system for creating electronic course exams was also launched, and the exam platform called Abitti is now used by upper secondary school teachers as well as in the actual matriculation examination. Now that the examination has been digitalized, each candidate takes his or her exams on a laptop. The candidates are given a USB stick, from which the test platform can be booted. Through a restricted connection, every candidate's answers are saved on a server, from which the exams can be accessed for assessment. The candidates do not have access to internet or to the original operating system of the laptop, which makes cheating very difficult.

The duration of the tests in languages is six hours, and the listening comprehension section of the matriculation examination of English is now integrated into the six hours of the total exam instead of it being organized on a separate exam date. Candidates are able to proceed at their own pace, and can choose the order in which they wish to finish the exam tasks. The listening comprehension section will consist of videos and audio files, and the videos can be watched as many times as it is necessary, but the audio files can be listened to only once (Lattu 2017). In addition to changes in the listening comprehension section, some steps towards adding an oral section in the examination have been taken. A project called Digitala is currently examining and developing new ways of assessing speaking via computer programs (Digitala 2017), but so far, no concrete plans have been made for the actual implementation of an oral test.

2.3 Reasons for digitalization

In Finland, the National core curriculum for upper secondary schools establishes the basic guidelines and goals for upper secondary school teaching and learning. It is stated in the core curriculum that Information Technology skills are to be integrated into everyday learning environments (Lukion opetussuunnitelman perusteet 2015). According to Von Zansen (2014), the emphasis on IT skills was one of the main incentives for the modernization process and the establishment of Digabi. Von Zansen (2014) states that the new platform allows test-makers to utilize various kinds of source material that can be in audio, video, visual or textual form. According to Juurakko-Paavola (2015), the model for the digitalized matriculation examinations of languages comes from other high-stakes tests such as TOEFL or IELTS.

Young adults constantly encounter different media content in all forms, which is why the electronic matriculation examination is thought to be suitable for this generation of upper secondary school students. In a study by Hurme et al. (2013), it was discovered that students used internet and technology for a variety of purposes: to seek information, share media content and communicate with their peers. Nevertheless, the amount of time used on IT in their free time exceeded the time spent with it in the school context, which means that in 2013, the use of technology for learning purposes was still modest (Hurme et al. 2013). Lakkala and Ilomäki (2013) found similar results, and the students that they interviewed stated that young people rarely have issues with their basic IT skills or using text editors. The fact that there are no obligatory courses in IT skills in upper secondary school means that students' interests and hobbies in their leisure time determine the development of their skills in using technology (Lakkala and Ilomäki 2013).

A large number of studies suggest that IT should be integrated into school life more extensively. Hurme et al. (2013) say that in addition to the content knowledge of a certain subject, teaching should include activities that enhance students' skills in media literacy, co-operation and information technology. Lakkala and Ilomäki (2013) state that the difference between upper secondary school students' activities in their leisure time and at school is drastic, and that students' informal skills could be made use of in the school context more extensively. Young adults know a great deal about using digital contexts for sharing information and as a tool for self-expression, and Lakkala and Ilomäki (2013) claim that teachers and institutions could learn from them. Juurakko-Paavola (2015) declared a need for additional training for teachers, which would provide teachers with tools for using technology in language learning. Sankila (2015) suggests that *Information technology* as the old-fashioned name of the school subject be replaced with a new name, such as *Skills in the use and application of information technology*. As early as in comprehensive school, students should learn to apply their IT skills to their studies and learning (Sankila 2015). This would be useful later in life, too.

It is evident that the skills gained in upper secondary school teaching should match the skills required in the matriculation examination, since the two are closely linked. Hurme et al. (2013) discovered that the better a student's technological skills were, the more willing he or she was to take exams in digital form, which means that it would be beneficial to concentrate on IT skills in upper secondary school teaching to prepare students for the high-stakes test. On the other hand, Tarvainen (2014) did not perceive any connection between students' skills in IT and their eagerness to take exams in digital form, so perhaps some people are in general more adaptable to changes or more prepared to use technology.

2.4 Previous studies on students' opinions on the digitalization of the matriculation examination

There has been some research on the topic of the digitalized matriculation examination and the opinions that school staff and students have on it. In their study based on interviews and surveys conducted in two Finnish schools, Lakkala and Ilomäki (2013) discovered that in general, the school staff and the students had positive attitudes towards the digitalization process. In 2013, the digitalization of the matriculation examination had only just begun, so there was not much information on the actual implementation or examples of exam exercises, but they seemed to have trust in the Matriculation Examination Board, and thought that all the possible technical issues would be resolved in time (Lakkala and Ilomäki 2013). Tarvainen (2014) studied the attitudes and opinions that upper secondary school students had towards the digital matriculation examination. After having tested a prototype of the digital matriculation examination of English, 52% of the respondents stated that they would not prefer to take their matriculation examination in a digitalized format. Harju (2015) found similar results, and most of the upper secondary school students that participated in her study would have liked to retain the on-paper exam due to the fact that they felt unprepared for it. The respondents of Tarvainen's study (2014) were asked questions about the prototype platform, and their answers showed that they hoped for a logical, straight-forward test that they could complete in their preferred order. 40% of the students considered the test platform to be reliable, but thought that it would be useful if the program made it more difficult to commit errors, for example, by typing the wrong key (Tarvainen 2014). The teachers that were interviewed for Lakkala and Ilomäki's study (2013) suggested that the new platform should bring something more to the exams instead of just repeating exactly the same formula and the same type of exercises that have been prominent in onpaper exams.

3 PRESENT STUDY

3.1 Research aim and questions

The aim of this study is to gain insight into the thoughts that upper secondary school students have on the digitalized matriculation examination by interviewing them. Based on previous opinion surveys on the subject (Harju 2015, Tarvainen 2014) the assumption before conducting the interviews was that the students would have negative attitudes towards the digitalization process and that they would seem worried about it. On the other hand, it would be likely that the students have more knowledge on the examination now, in 2017, than at the time of the previous studies. The research question that the interviews were based on is as follows:

- What opinions do first-year upper secondary school students have on the digitalized matriculation examination of English?

The point-of-view of this study is qualitative, and for that reason the research question is intentionally rather broad. The goal of this study is to give students the opportunity to freely share their thoughts on the subject of the digitalized matriculation examination. The results of this study can be used in the designing of exams and the results can be used as a reference point for future studies on the topic.

3.2 Data collection

To gather a comprehensive understanding of upper secondary school student's opinions on the digitalized Matriculation Examination, interviewing was chosen as the data collection method for the present study. The way interviews are organized varies, and they can be extremely structured and questionnaire-like or completely unstructured and only formed around a specific theme. For the present study, a list of approximately ten questions was created to guide the interviews, so the interviews were at least semi-structured. In semi-structured interviews, the questions are the same for each participant, but the interviewer can change their order and form as the interview proceeds (Fielding 1993, 136). The participants' answers are not bound to a certain answer option (Eskola and Suoranta 1998). Questionnaires would not have sufficed, because the aim of this study was not to gather generalizable data, but to employ the interview procedure as a way to discover what kind of

opinions the respondents expressed when they were asked questions concerning the matriculation examination of English. After each question, the researcher was able to encourage each respondent to elaborate on their answers, which would not have been possible in questionnaires. As Holstein and Gubrium (1995: 7) state, the aim of qualitative research is to view participants as producers of knowledge instead of vessels of information. The interviewer "activates narrative production" (Holstein and Gubrium 1995: 40).

The method of group interviews was chosen for the data collection process. A group interview is often a rather free occasion where the interviewer addresses all participants at once, but can also direct a question at a certain group member. A pair interview is a subcategory of a group interview. Group interviews allow the interviewer to gather the views of many individuals simultaneously, which can reduce the amount of time used on interviewing. (Hirsjärvi and Hurme 2008). Pair interviews can relief possible anxiety related to the interview situation as individuals can have support from each other and encourage each other (Eskola and Suoranta 1998).

My research data consists of four interviews with nine respondents in total. The informants were all first-year students, so they had started upper secondary school in the fall of 2016. There was one group of three boys, two pairs of girls and one boy-girl pair. I began the data collection process by contacting the group leaders of first year students at a upper secondary school in the Jyväskylä region by email and then, with the help of one group leader, gathered six participants from one class. The date, time, and location of each interview was arranged via email with the students. As there were only six volunteers in the beginning, I contacted another teacher at the same upper secondary school and arranged one interview with three participants. The interviews were held at the students' school in various locations: one in a classroom, another in the hallway and two in a small conference room. For practical reasons, the length of each interview was less than fifteen minutes. It was less difficult to arrange shorter interviews that could be finished during a 15-minute break than long interviews that would take more of the students' and the interviewer's time.

3.3 Method of analysis

Content analysis was chosen for the method of analysis for the present study. Content analysis, as opposed to discourse analysis, focuses on what is said instead of how it is said (Tuomi and Sarajärvi

2009: 103-104). After the data collection process, the interviews were transcribed orthographically. The answers to each interview question were grouped, respectively, which aided the comparison of the answers. The classification, analysis and interpretation are three tasks that are important in analyzing interviews (Ruusuvuori et al 2010), and they were employed also in the analysis of the data of the present study.

4 UPPER SECONDARY SCHOOL STUDENTS' OPINIONS ON THE DIGITALIZED MATRICULATION EXAMINATION

The purpose of this study was to better understand what opinions first-year upper secondary school students have on the digitalized matriculation examination by interviewing nine students on the subject. In this chapter, the findings of this present study are presented.

4.1 Students' experiences and expectations of electronic exams

All nine students had already participated in electronic course tests in subjects such as English, French, mathematics and chemistry, so they had some experience in both on-paper and electronic exams. When they were asked to describe their previous experiences with electronic exams, the respondents' comments were varied. To some of them it did not matter whether the exam was on paper or in electronic form. Some students enjoyed the fact that electronic exams can be finished quicker and that writing and correcting one's own errors is more effortless on computer. Nevertheless, some participants had been in exam situations where some technical difficulties had occurred, for example, when a classmate had accidentally removed his or her USB-stick from the USB-port, and the test situation had had to be postponed while they restarted the computer. Because of the technical aspect of electronic exams, some respondents felt that on-paper exams had required less adjustment and preparation than exams in digital form. In addition to facing some challenges with computers, some students also criticized the fact that computer software is often programmed to only accept one right answer in exercises in which they have to, for example, translate a sentence or a word into English or fill in a missing word. The students in question were not aware whether teachers were able to later correct exam answers that were already deemed incorrect by the computer software, and thus take into account the fact that sometimes there are multiple suitable answers to a question. In Example 1, a student describes the feeling of disappointment, when she had translated a word correctly in a sense, but the program required another term for the word:

Example 1: Et se hyväksy vaan sen tietyn sanan vaikka jollekin sanalle voi olla niinku kaks sanaa tavallaan englannin kielessä. Niin sitte se hyväksy vaan sen toisen. Sen oikeen, vaikka olin laittanu, vaikka... Mulle tuli mieleen "takki" et siinäkin on ne monta vaihtoehtoa.

Nii mä olin laittanu että "jacket", mut sit se oli niinku "coat".

That it only accepted a certain word even though there can be like sort of two words in English. Then it only accepted the other one. The right one, even though I'd put... I thought of "takki" that it has multiple options. So I had written "jacket" but then it was like "coat"

The example above shows that the interviewee felt that sometimes a computer program can be stricter in assessing exam answers, because unlike humans, computers usually cannot make exceptions or accept answers that include a tiny typing error, for instance. Perhaps the strictness of computer programs' evaluation standards cause anxiety for some students, since they leave no room for human error or creative answers, which means that students may feel like they must strive for perfect language use and ultimate grammatical correctness.

So far, the students' experiences with electronic exams had been somewhat neutral, and they did not express strong opinions for or against them. Some positive sides, such as faster finishing time and easier correction were listed, but struggling with technology and stricter assessment were seen as negative issues related to digitalized exams. The students' previous experiences were reflected in the way they described their expectations of the digitalized matriculation examination of English. Some students stated that they had no expectations for the upcoming exam and that because they use computers so much nowadays, digital testing feels natural for them. Others had initially had negative feelings towards the transformation of the examination:

Example 2: En mä tiiä. Se herätti ehkä tunteita, kun mä tulin lukioon ja kuulin siitä ekan kerran mä olin sillee että no ei varmaa sehän on iha kauheeta, mut niinku ei sen jälkeen oo oikeestaan. Sit mä olin vaa sillee että no: sit se pitää kai tehä sillee

I don't know. It maybe awoke some emotions in me when I started upper secondary school and heard about it for the first time I was like no way it's awful, but like not really after that. Then I was like well, I guess I'll have to do it like that

Like Example 2 shows, the interviewee had already had some time to recover from the initial shock or amazement caused by the news about the modernized examination. One student also commented that as they had not taken matriculation exams before in any form, they could start with a clean slate instead of constantly comparing the on-paper exams with the electronic ones. When one is accustomed to doing things in a certain way, it can be difficult to become acquainted with another method or technique, which is why the first generation of upper secondary school students with all-digital exams are perhaps in a good position.

4.2 Positive and negative sides of the digitalized matriculation examination

The interviewees were able to quite effortlessly name some assets and liabilities of taking the matriculation examination in electronic form. All the first-year students who participated in this study had already taken course exams online or via Abitti, but according to them, preparation for digital matriculation exams had not yet begun. Some students noted that as they are the first generation in Finland to take all matriculation examination tests in the Abitti system, they would need more practice to become acquainted with the exercise types included in the tests.

Example 3: Voi silleen joku ainakin stressata tavallaan siitä kokeen koneella tekemisestä et jos sitte on just ollu huonoja kokemuksia siitä. Mut ei oo itellä kuitenkaan ollu

Some people could stress about taking computer-based tests if they've had bad experiences with it. But I've had none.

In the example above, a student discusses stress, which is an important factor in test performance. The feeling of stress and anxiety is individual, but it can often be induced by tests. According to Zeidner (1998), test anxiety can be defined as a temporal process that has four different stages: the anticipatory stage (prior to the exam), the confrontation phase (during the exam), the waiting phase (prior to the results) and the outcome stage (after the results). Individuals suffer from different levels of cognitive concerns, such as worry or self-preoccupation, and express test anxiety in different ways. Anxiety is often a response to a threat to self-esteem or ego and, consequently, it can be induced by tests, since one can either fail them or succeed in them (Zeidner 1998). The feeling of uncertainty can play a significant role in experiencing stress anxiety, which is why it would be important to practice taking exams on various platforms and gain confidence in one's skills.

Many students said that they often prefer to write essays on computer and that it is easier, because one can effortlessly change the order of paragraphs or add a sentence somewhere without having to erase the whole text to do so. Moreover, incomprehensible handwriting is no longer an issue in exam texts composed with a word-processing program on a computer, which makes checking and assessing easier for the teacher. In addition, the fact that one can write with two hands simultaneously was considered a positive side, since writing with a pencil for a long period of time can cause pains or hand fatigue.

The new form of the listening comprehension section was also discussed. Until now, the English matriculation examination has been divided into two parts: first students take the listening

comprehension test and then approximately a month later they sit the written exam. In an interview, one student remarked that he had enjoyed the fact that in previous electronic course exams he was able to listen to the audio multiple times to ensure that he had heard correctly and reflect on his answers. Now that all matriculation exams are in electronic form there is no longer a need for a separate date for the listening comprehension section and, thus, it is included in the written exam. In the exam, students can move at their own pace and do the written part after finishing the listening comprehension tasks based on video or audio.

Some interviewees discussed their apprehension about the implementation of the examination in concrete form, as they were not certain how schools would manage with possible technical difficulties on the day of the exam. Similar technical questions occurred in the Lakkala and Ilomäki study (2013), so it seems like technology is always an issue that raises concern. Some of the participants of this present study wondered how it would be possible to have so many computers in one room or hall, and how all the laptops would have enough battery to finish the four or five-hour exam. One interviewee brought up an interesting downside of having a whole classroom full of people writing on laptops:

Example 4: Oli paljon porukkaa, kaikki alko kirjottaa [näppäimistöllä] samaan aikaan nii en mä tiiä ei mua haitannu se oli ihan hauska mutta jotkut sano että niitä haittas sellanen niinku ku kaikki kirjottaa nii se kuulostaa sellaselta sateelta

There were lots of people, everyone started typing at the same time so, I don't know, I didn't mind it was quite funny, but some people said that they were bothered by the fact that when everyone was writing it sounded like rain

I would suggest that the phenomenon described in Example 4 - a disturbing clicking noise caused by a group of people simultaneously typing on keyboard - is rather new. Some individuals can be distracted in an examination situation by noise around them, so perhaps wearing noise-canceling headphones or earplugs during the exam would be recommended.

A few interviewees were concerned about the way writing on computer can affect one's own performance in the exam. They had noticed that occasionally they made more mistakes when writing on computer and that it was easier to leave an error unnoticed or to push a key unintentionally and, thus, possible lose some points. In addition, the faster writing pace could lead to more typing errors left unnoticed. Some informants had been in situations where a simple typing error or the push of a wrong key had resulted in errors in the exam:

Example 5: Mut sitte mulla tuli ainakin huono puoli [mieleen] siit ku meillä oli se koe nii sitte mulla oli sillee että- mul oli vahingossa sillee- mä olin kirjottanu niinku et "have not" niinku

sillee "haven't" ja sitte mulla oli se heittomerkki oli lipsahtanu sinne t:n toiselle puolelle. Että semmosta.

But then I thought of a downside about when we had the test I had like-I had accidentally like-I had written "have not" like "haven't" and then I had- the apostrophe had slipped on the other side of the t. That sort of stuff.

Perhaps writing by hand in a slower pace enables one to reflect and study his or her own text more carefully, which can help to avoid typing errors and other mistakes, whereas typing on a keyboard is often much quicker and possible more hurried. It will be useful for students to learn to go through their own text carefully and to check for typing errors, since writing important texts on keyboard will become more and more common. In addition, as the students in Tarvainen's study (2014) suggested, the test platform could have features that prevent errors.

4.3 **Opinions on having an oral section in the examination**

The interviewees expressed various opinions on the matter of including an oral section in the matriculation examination of English. Some students believed that the nervousness induced by the exam setting could weaken their performance in the test and, thus, would not be eager to take part in it.

Others considered an oral section a useful addition, since oral skills are essential for an English language user in our globalized world and now only reading, writing and listening comprehension skills are tested in the English exam. Consequently, reading and writing skills are focused on and perhaps valued more than oral production skills. The students who expressed positive attitudes towards the assessment of oral skills seemed to feel confident about their ability to express themselves orally:

Example 6: Mä ite koen että mul on niinku vahvin alue englannin puhuminen nii se ois itelle hyvä mutta sitten on just niitä ketä vähän pelottaa puhua muitten edessä ja tommosessa tilanteessa nii semmosille ei välttis hirmu kiva

I think that speaking English is my strong area so it would suit me but then there are those who are a bit afraid of speaking in front of others and in a situation like that so for them it would not necessarily be that nice

In Example 6, a student acknowledges the fact that opinions on oral exams can vary substantially depending on one's level of confidence and experience in speaking English. According to Zeidner (1998), individual reactions to anxiety can affect test performance significantly, and one can be a

perfectly fluent English speaker in relaxed day-to-day situations, but then suffer from severe, performance-hindering anxiety in test situations. Evaluative situations activate worry cognitions in test-anxious students' brains, and hinder their performance (Zeidner 1998). If the oral section is adapted to the matriculation examination in the future, students will become acquainted with speaking English and not just writing and reading in the language. Practicing speaking and oral communication skills in class could make students feel more relaxed in situations in which they have to utilize their oral skills. An interviewee talked about the feeling of certainty he would gain from taking part in an oral exam:

Example 7: No mulla itelläni on varmaan just se, että se [suullinen koe] sitten että antaa enemmän varmennusta siihen että niinku pystyy kommunikoimaan englanniks, että se ei oo vaan niinku pelkästään tekstillistä se tieto,

Well, in my case it [oral test] would probably make me feel more sure about the fact that I can communicate in English and that the knowledge is not just in textual form

As stated above, oral exams can be a source of anxiety, but also an extremely positive experience. Like the student says in the example above, it is not often that a student can prove to his or her teacher that he or she can use English in real situations and can express him or herself orally. Participating in an oral test can give extra confidence to students who thrive in speaking the language, and for them it would be a marvelous opportunity.

A question about practicing oral skills in class was also posed in the interview. Students told that they practice speaking during each English lesson and it usually includes doing conversation exercises in pairs. The content of textbook exercises was discussed:

Example 8: Se varmaan sitten pitäis enemmän just niinku opettaa semmosta niinkun öö normaalimpaa kommunikointia että koska niis tehtävissä se on just yleensä semmoin että kerro mitä tämä henkilö tekee tai sitten sano muutama sana. Sitä semmosta just niinkun pelkästään kommunikointia toisten kanssa niin semmosta pitäs sitten enemmön opettaa

We should probably be taught like, um, more normal communication, since the exercises are usually like tell what this person is doing or say a few words. Just simply communicating with others should be taught more

In Example 8, the student criticizes the artificiality of speaking exercises done in class. He would prefer more natural-feeling communicational situations, and to him made-up conversation tasks feel demotivating. A few interviewees said they would prefer that all student-teacher communication was in English, since according to them it would be more beneficial than resorting to Finnish. Perhaps a consistent use of English during lessons would be the answer to the questions raised in Example 8.

5 DISCUSSION AND CONCLUSION

In this section, the results of this present study are discussed. The aim of this study was to investigate the opinions that upper secondary school students have towards the digitalized Matriculation examination. At the time of the interviews the students had already taken electronic exams and, thus, had already formed some opinions on them. Their opinions seemed to be based on personal experience as well as on stories heard from friends. The findings revealed that the respondents were rather unanimous in their answers, and most of them were rather satisfied with the fact that the matriculation examination would soon be completely digitalized. These results contradicted the results of Harju (2014) and Tarvainen (2015), since in both studies the participants would have preferred to retain the on-paper exam. This result could be due to the fact that as this study was conducted in 2017, students had more knowledge on the subject and they were accustomed to the thought of electronic exams, whereas in 2014 and 2015 the thought of a digitalized exam still seemed distant and ambiguous.

The interviewees of this present study discussed their previous experiences with electronic exams and their expectations on the matriculation examination. Some of them were disappointed about having made more typing errors and other mistakes while typing on keyboard. Moreover, the strictness of assessment of electronic exams was discussed as some students felt that some previous online exams that they had taken had only accepted one right answer. Apart from these concerns, they seemed to have neutral views on the subject, and none of the students expressed hatred or disappointment towards the new exam. Using technology seems to be an important part of students' lives, and many participants said that they preferred to take exams in electronic form or that it actually made no difference in their opinion.

Since the interviewees had already taken computer-assisted exams, they could list some negative or positive sides related to them. Utilizing technology in exams was discussed and students named both assets and liabilities related to it. On one hand, some students questioned whether all schools could organize suitable exam spaces, and one interviewee suggested that the loud noise caused by typing on keyboard could be disturbing for some people. On the other hand, technology can make text editing easier and typing faster, which is definitely useful when writing long essays in English. In addition, some students thought that incomprehensible handwriting or hand fatigue would no longer be problems with the new matriculation examination. The new form of the listening comprehension

section and the fact that both the written section and the listening comprehension are taken during the same day were also praised. Overall, most of the students thought that, compared to, for example, mathematics, English as a subject is quite suitable for digital exams, since it does not require drawing or making complicated graphs.

The main research question of this study was "What opinions do first year upper secondary school students have on the digitalized matriculation examination of English?". Based on their answers, the nine first-year students seemed less worried about their upcoming matriculation examinations than was initially expected. None of the interviewees expressed clearly negative attitudes towards the digitalized matriculation examination nor seemed to be completely against it. The tone of the interviewees answers could be a result of the fact that upper secondary school students constantly use technology and are frequently exposed to new applications and electronic devices. It is likely that upper secondary school students are capable of adapting to changes in the way exams are taken, because they are accustomed to using technology on a day-to-day basis. The students have known since the beginning of their time in upper secondary school that they would be taking their matriculation examinations in digital from, so they have had some time to adapt.

It is possible that at the time of the interviews in January 2017, the matriculation examination was still not relevant for the students, since upper secondary school students usually take their first exams at the earliest in the spring of their second year. This may also explain why so few interview answers expressed concern towards the upcoming final exams, and why the interviewees were mostly at ease with the changing matriculation examination. Even though taking the matriculation examination of English is an important step for many upper secondary school students, it is not the full purpose and goal of studying English, and it is no use thinking about final exams at the beginning of one's school journey. It can be difficult for upper secondary school teachers to emphasize the importance of studying English for life instead of for good exam results, when matriculation examinations are such a significant part of students' lives. Especially now in the transition phase, different exam types must be rehearsed so that students feel confident in their own skills in technology as well as in the language itself, but at the same time students must be reminded that they will need English after final exams, too.

The students had not participated in any matriculation examinations yet, so their answers were based on computer-assisted course exams and friends' experiences, but since this study concentrated on personal opinions and expectations, the lack of experience was not an issue. In earlier studies conducted on the subject, the results have been collected via questionnaires, which is why allowing the students to freely elaborate on their thoughts in interviews is one of the strengths of this present study. Previous research on the digitalized matriculation examination has been limited, so these results are an important addition to the field. Tarvainen (2014) and Harju (2014) used questionnaires to gain insight into the opinions of upper secondary school students, and Lakkala and Ilomäki (2013) employed both interviews and questionnaires in their study.

The results of the study are based on the answers given by nine first-year upper secondary school students during four separate interviews. The goal of this study was to gain insight into the thoughts of the students' opinions and attitudes towards the digitalization of the matriculation examination. Due to the small sample, the qualitative nature of this study and the uniqueness of each individual's personal experience and opinions, the results are not to be generalized. The answers could have been significantly different in some other school or a city or with less enthusiastic students. Nevertheless, the results of this study can be utilized when planning and organizing new exams and training for them. In addition, the results allow the organizers of the examinations to take into account the interviewees' worries related to the examination situation, and this way possible problems can be prevented. For example, the participants of this study felt that English as a subject adapts well into digital form, but thought that a mathematics exam would not be quite suitable for taking on computer. This subject can be extended upon, when the digitalization process has been completed, and students can be interviewed about the actual electronic exam situations. Perhaps the point-of-view of teachers and the way they have trained for the digital examination could also be interesting.

In this transition phase, it is important to listen to students, the most important party in the matriculation examination. Taking high-stakes exams is an important step in young students' lives, since the results received from the exams can affect their future education and careers. By conducting more research on this topic, decision-makers and school personnel can attempt to make the last leg of students' journey through upper secondary school more and more pleasant and develop the matriculation examination to its full potential.

BIBLIOGRAPHY

- Eskola, J. & Suoranta, J. (1998). Johdatus laadulliseen tutkimukseen. Tampere: Vastapaino.
- Digitala (2017) Tietoa DigiTalasta. <u>http://blogs.helsinki.fi/digitala-projekti/tietoa-digitalasta/</u>. (22 April 2017)
- Harju, A. (2015). "I trust the old way": Opinions and attitudes towards digitalizing the matriculation examination of English. University of Jyväskylä.
- Hirsjärvi, S., & Hurme, H. (2008). *Tutkimushaastattelu : Teemahaastattelun teoria ja käytäntö*. Helsinki: Gaudeamus Helsinki University Press.
- Holstein, J. A. & Gubrium, J. F. (1995). *Qualitative Research Methods: The active interview* : SAGE Publications Ltd, doi: 10.4135/9781412986120
- Hurme, T., Nummenmaa, M. and Lehtinen, E. (2013). Lukiolainen tieto- ja viestintätekniikan käyttäjänä. Raportit ja selvitykset 2013:11. *Finnish National Board of Education*. <u>http://www.oph.fi/download/152369_lukiolainen_tieto_ja_viestintatekniikan_kayttajana.pdf</u> (6 April 2017)
- Juurakko-Paavola, T. (2015). Ylioppilastutkinnon sähköisistä kielikokeista yhdessä kehittäen kohti uusia mahdollisuuksia. *Digabi*, 25 Feb 2015. https://digabi.fi/2015/02/ylioppilastutkinnon-sahkoisista-kielikokeista/.
- Lahti, J., Heinonen, S., Siira, E. and Lattu, M. (2013). Korkean panoksen sähköiset kokeet maailmalla. <u>https://www.ylioppilastutkinto.fi/images/sivuston_tiedostot/Raportit_tutkimukset/digabi_tyo</u> <u>raportti_2013-08.pdf.</u> (6 April 2017)
- Lakkala, M. & Ilomäki, L. (2013). Lukioiden valmiudet siirtyä sähköiseen ylioppilastutkintoon: kahden lukion tapaustutkimus. Vantaan kaupunki, Sivistystoimi, Vantaa. <u>https://helda.helsinki.fi/bitstream/handle/10138/39406/87368_Lukioiden_valmiudet_siirtya_sahkoiseen_yo_tutkintoon.pdf?sequence=6</u>. (6 April 2017)
- *Lukion opetussuunnitelman perusteet* (2015). Finnish National Board of Education [online]. <u>http://oph.fi/download/172124_lukion_opetussuunnitelman_perusteet_2015.pdf</u>. (6 April 2017)
- Lattu, M. (2017) Uudessa Abitti-tikussa kevään yo-kokeen kuuntelumekanismi. *Abitti*, 16 Jan 2017. <u>https://digabi.fi/2017/01/uudessa-abitti-tikussa-kevaan-yo-kokeen-kuuntelumekanismi/.</u>
- Ruth, O. (2015). Ylioppilaskoe sähköistyy. In M. Löytönen, A. Rutanen, & H. Ruuska (eds.), *Laatua!: Oppimateriaalit muuttuvassa tietoympäristössä*. Helsinki: Suomen tietokirjailijat, 237-246.
- Ruusuvuori, J., Nikander, P., and Hyvärinen, M. (2010). *Haastattelun analyysi*. Tampere: Vastapaino.
- Tarvainen, S. (2014). "Takes a little getting used to" : Perceptions of finnish upper secondary school students on the digitalized matriculation examination for English. University of Helsinki.
- von Zansen, A. (2014). *Virtaa ylioppilastutkinnon kielikokeisiin!* Soveltavan kielentutkimuksen keskus, Jyväskylän yliopisto; Kielikoulutuspolitiikan verkosto.

Ylioppilastutkintolautakunta (2017a) Historia.

https://www.ylioppilastutkinto.fi/tietopalvelut/tietoa-ylioppilastutkinnosta/historia. (23 April 2017) Ylioppilastutkintolautakunta (2017b). Yleisesittely yo-tutkinnosta. <u>https://www.ylioppilastutkinto.fi/tietopalvelut/tietoa-</u>

ylioppilastutkinnosta/yleisesittely-yo-tutkinnosta.

Ylioppilastutkintolautakunta. (2016) Ilmoittautuneet eri kokeisiin tutkintokerroittain 2007 – 2016. <u>https://www.ylioppilastutkinto.fi/images/sivuston_tiedostot/stat/FS2016A2007T2010.pdf.</u> (23 April 2017)

Zeidner, M. (1998). Test anxiety: The state of the art. New York: Plenum Press.

APPENDIX

Interview questions

- 1. Oletko jo tehnyt sähköisiä kokeita? Mikä koe oli kyseessä? Miltä se tuntui? Have you taken any electronic exams yet? Which ones? How was it?
- 2. Milloin aiot suorittaa seuraavan/ensimmäisen sähköisen kokeesi? When will your next electronic exam take place?
- 3. Mitä odotuksia sinulla on englannin sähköisestä ylioppilaskokeesta? What expectations do you have for the digitalized matriculation examination of English?
- 4. Mitä mieltä olet siitä, että englannin ylioppilaskoe järjestetään jatkossa vain sähköisenä? What do you think about the fact that the matriculation examination is only in digital form?
- 5. Mitkä olisivat/ovat mielestäsi englannin sähköisen ylioppilaskokeen hyvät ja huonot puolet? Miksi juuri se on hyvä tai huono asia? Can you name some positive and negative sides of the digital matriculation examination of English? Why do you think those things are good/bad?
- 6. Oletteko harjoitelleet sähköisten kokeiden tekemistä? Miten? Miltä harjoittelu on tuntunut? Have you had any practice on taking digital exams? How? How has it been?
- 7. Kuvittele, että on englannin ylioppilaskokeen aika: miltä sinusta tuntuu? Kuinka olet valmistautunut siihen?

Imagine yourself in the situation of the digital matriculation examination of English. How do you feel? How have you prepared for the exam?

8. Englannin yo-kokeeseen on tulossa suullinen osio noin kolmen vuoden päästä. Mitä olet mieltä tästä lisäyksestä?

An oral section will be added in the matriculation examination of English in approximately three years. How do you feel about this addition?

9. Harjoitellaanko suullista kielitaitoa nykyisellään englannin kursseilla liian vähän, sopivasti vai liikaa?

Do you think that oral skills are practiced during English courses too little, just enough or too much?

10. Aiotko suorittaa englannin suullisen kurssin tai oletko jo suorittanut sen?Will you take the oral skills course?