Students' Experiences of Cheating in the Online Exam Environment

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The purpose of this thesis was to produce recommendations to teachers who instruct online courses on how to best instruct courses to mitigate cheating online. The beneficiary was Laurea University of Applied Sciences. They needed someone to investigate this subject, since they are going to start offering students with entire online study opportunities, which are then accompanied with an online degree.

The decision was to interview students who have experience from online and in-class studies to able to compare. After a few pre-interviews with students, some problems arose. For instance, online exams can often be done from a remote location, the students are able to cheat by i.e. doing the exam together with someone. These findings helped shape the questionnaire schedule.

Eventually, five students were interviewed, and the findings were similar to those of the pre-interviews. Poor quality in online studies, teachers, and feeling connectedness depended mostly on the teachers' and students' low engagement. The interviewed students reported various cheating methods, some of which they had used themselves. The most common cheating method was completing the online exam together with peer(s)/friend(s) while searching for answers from the internet and course material. The motivations for cheating were 1) no barrier for cheating and 2) wanting to pass or get higher grades. The teachers did not always define cheating to the students. Two of the students said that if the teacher' did not define what constitutes as cheating, then there could not be an act that would count as cheating. Therefore, anything goes.

The recommendations were 1) teachers define what constitutes as cheating, 2) do not have online exams, instead have weekly essay assignments, since essays require the application of knowledge. If the instructor decides to have online exams then 3) have the online exams in a physical room, 4) more demanding questions, 5) less time to complete the exam, 6) software that prevents internet access, and 7) have the questions drawn randomly from a pool of questions.

Keywords: Academic dishonesty, online exams, security

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1   Introduction

Learning online has been a great innovation. It allows people anywhere in the world with a device and an internet connection to study. Since the local university does not have endless variety in the subjects of the degrees, online studies enable almost any degree to reach someone on the other side of the world. People who have constrained daily schedules do not have the time to study. With online studies, people can open the online learning platform whenever they find time on their hands.

Some major issues with online studies have been the quality and cheating. Can online studies truly deliver the same level of quality to the students as the traditional in-class studies? Can online studies have exams that truly assess the ability of the students?

This thesis seeks to understand the experiences of students who are familiar with online courses and exams, to determine what factors affect the quality of online learning and what are the best measures to assure a quality online exam. What is found from the students' experiences of cheating, will be the foundation on which to build recommendation for online exam instructors on how to design online exams to best mitigate cheating. There are also recommendations on how to increase the quality of the online courses.

1.1   Research questions

Essentially, this thesis attempts to find solutions and measures for online instructors to best mitigate cheating during online exams. The foremost research question becomes "how do students cheat online?", secondly "what is the quality of the online studies?". Based on those research questions, the next task is to identify what research method is the most fitting. That can be found, in its most descriptive form, in the Methodology-section. Nevertheless, the chosen method is qualitative face to face interviews, which through analysis aspires to reveal the methods and techniques students use to cheat. As well, to understand what the students know to work in both mitigating cheating and rising the quality of online courses.

To truly understand the students and the mechanism that are at play when it comes to cheating, this study aims to more profoundly understand the whole process of students' cheating. Therefore, a broader question like "what is the students' experience of online courses?" would be more sufficient. Although, the first questions could be interpreted in a way that would, not only consider the particular cheating method, but also e.g. the location, surrounding, reason for cheating. However, the purpose is to also understand such things as students' experiences of the quality of the course, which makes the third research question relevant.

2   Literature review

This thesis will review the students' experiences of cheating in the online environment. The goal of this thesis is to find the best methods for mitigating student from cheating on online exams and construct a guideline for teachers which contains important aspects that needs to be considered to mitigate cheating during an online exam. This is because of the increase in online studies, which has left some wondering if there is enough counter measures in place against academic dishonesty.

Distance learning was described by Moore & Kearsley (2011) as follows: "Teachers and students are in different places for all or most of the time they teach and learn". This means that students and teachers are connected by a platform, on which both students and teachers need to learn how to navigate through. This thesis will use distance learning and online learning as synonyms for each other.

2.1   Prevalence of online studies

The number of students attending online courses have really increased during the 2000s. Allen & Seaman (2003) reported that in the US in the fall of 2002 there was 1.6 million students taking at least one course. In the fall of 2005 the number had doubled to 3.2 million (Allen & Seaman, 2006).

In the United States the number of students taking at least one course online was over 6 million in autumn of 2015 (Allen & Seaman, 2017). They also reported that the total number of student enrolment has been decreasing, however, the distance learning enrolment share of the total has increased. 2012, the share was 25.9%, and in 2014 it had grown to 28.3%.

Another study done by Allen & Seaman (2013) analysing the enrolment of students in the US in online learning in 2012 reported that the number students who had taken at least one course online was 32%, whereas the Allen & Seaman (2017) report suggested that the number in 2015 was 29.7%. Both the earlier (2013) and the later (2017) report suggested that the number of online students enrolled are increasing, nevertheless, there seems to be a decrease in the number of students taking online courses after all, since it regarded students who had taken at least one course online.

The reason for this rapid growth in online education is, primarily, four factors: the information revolution, competitiveness in higher education, student lifestyle and characteristics changes, and the ability of online education to reach people of different nationalities, geographic locations, and in different personal circumstances (Taft, Perkowski & Martin, 2011). Some students were found to commence their studies because they were only able to commit to studies that were asynchronous (Lieblein, 2000).

2.2 Synchronous and asynchronous learning

For online learning there are the synchronous and asynchronous learning. Synchronous learning means that the lecture and chat room are experienced live. Whereas, asynchronous learning can happen at any point of the day, or in time for that matter (Lieblein, 2000). Lieblein (2000) purports that due to online learning, institutions can reach students from afar, which means that some student might be in another part of the world, thus, placing them in another time zone. This means that asynchronous learning has the upper hand when it comes to the reach of online education. That said, Branon & Essex (2001) found four limitations for asynchronous learning: "Lack of immediate feedback, students not checking in often enough, length of time necessary for discussions to mature, and students feeling a sense of social disconnection".

Online learning is very favourable both for students and teachers. As a substitute for the traditional school, students are now able to study where and when they want. For teachers, teaching a course online makes it easier to track the progress of the students, and the material is the same for all the enrolled (Guragain, 2016).

Another research conducted by Hiltz, Shea & Kim (2010) fund that the motivators for the teachers in asynchronous online learning was "… the flexibility allowed by being able to teach "anytime/anywhere"; better/more personal interaction and community building supported by the medium; the technical and creativity challenges offered by this mode of teaching; being able to reach more (and more diverse) students; and better course management". Hiltz, et al. (2010) also found faculty demotivators to be "…more work, lack of medium, lack of adequate support and policies for teaching online, and the fact that the medium is not a good fit for some students".

2.3 Prevalence of cheating

Nonetheless, with all these benefits, online learning is not satisfactory due to the prevalence of cheating. Cheating on an online course at least once was found to be 95 percent. Whitley (1998) found in his study that the prevalence of cheating in the traditional school environment ranged from 9% to 95%. A longitudinal research conducted by Schab (1991) where student where asked the same questions 1969, 1979, and 1989 suggested that academic dishonesty is increasing. Schab (1991) also found that dishonesty and fraudulent behaviour was considered by students a defining factor for success in business. It is hard to estimate what the actual percentage is for cheating, but clearly it exists. This thesis will not be looking into the prevalence of cheating, because there are so many studies indirectly showing that cheating exists. By this is meant that studies that have e.g. investigated the students' motivation for cheating can also confirm that cheating exists, on the grounds that the researcher(s) had found reasons, or motivations, for cheating, and if the findings would have been non-existent

than the researcher(s) could conclude with a hypothesis that "No reasons were reported, and thus cheating did not exist within the chosen population". Nevertheless, it is important that there are various findings of instances of cheating among students to directly and absolutely confirm that cheating occurs.

2.4   Motivation for cheating

Gaskill (2014) found the cause for cheating to be time constraints, course difficulty, and un-preparedness. Another study suggested that the two most significant reasons for academic dishonesty, cited by the students themselves, were peer pressure and grade pressure (Heiser, 2014). Heiser (2014) also reported that sometimes students lacked the needed time management skills due to inadequate direction, which, in a traditional classroom would be given by the teacher.

Schab (1991) asked a question about the reasons for cheating and concluded that "…there was remarkable agreement over the three decades: "fear of failure," "too lazy to study," "parents demanding good grades," "desire to keep up with others," and "it's easy to cheat" were the top five responses, with "not enough time to study" a close sixth (malls and TV were seductive attractions compared with dull studying and homework)".

It has been found that cheating occurs significantly more in the later part of the semester, and as the students neared graduation (Mastin, Peszka & Lilly. 2009; Chase, 2010). The researchers speculated that it could be because of students feeling the pressure of grades at the end of the semester, however, nothing definitive. Another study found that there was essentially no correlation between cheating and year in college (Whitley, 1998).

Whitley (1998) studied, as well, the factors that caused students to cheat, and found them to be: "moderate expectations for success, having cheated in the past, studying under poor conditions, holding positive attitudes towards cheating, perceiving that social norms support cheating, and anticipating a large reward for success".

McCabe & Trevino (1997) studied "…the influences of individual and contextual factors on self-reported academic dishonesty". They found three main factors for the individual influences to be age, gender, and grade point average. Influences for the contextual factors where the level of cheating among peers, peers' disapproval of cheating, fraternity/sorority membership, and the perceived penalties for cheating. Peer disapproval was the most influential factor.

O'Rourke, Barnes, Deaton, Fulks, Ryan & Rettinger (2010) studied the effects of witnessing another student cheat. They found that it increased the chance of the students witnessing cheating to be more likely to cheat in the future, because then students perceived cheating as less morally reprehensible.

2.5 Challenges with online studies

Research suggests that students are much faster at adopting technology in comparison to the teachers (McGee & Diaz, 2007). Technology implemented by faculty, staff, and administration to prevent student from cheating on online exams becomes redundant due to the quick adaptive response from students to find ways to circumvent the preventative measures (Deadman, 2016). A study examined student perceptions about the level of learning and the cheating in online settings and found that students were satisfied with the convenience of online studies, but not with the interaction or the quality of it (Cole, Shelley & Swartz, 2013). A research done by Swartz & Cole (2013) found that 35% of respondents said no to their survey question asking if academic integrity was applicable to online studies.

Myers (2010) found that online studies do not properly enable peers to form relationships which increases academic integrity. However, at the same time, a negative impact on academic integrity emerges from not being able to form relationships with faculty and professors. Another suggestion was that using assessment tools when implementing collaboration projects for online students, the teacher has a better access to the students' learning process which can help the teacher better identify where the cheating can occur (Styron & Styron, 2010).

The importance of peer-to-peer interaction has been established in the online learning environment (Burge, 1994). However, the student-teacher interaction also needs to be engaging for an adequate learning experience to materialize (Berge, 1995).

Harasim, Hiltz, Teles & Turoff (1995) argued that the traditional model of teaching is a teacher-centered model, in which the student are passive listeners. Online education has changed this because students learn the most when they are collaborating. This model is a learner-centered model, where the learners are as well participants, rather than simply observers. For this reason, the online education should take advantage of the collaborative learner-centered teaching model as much as possible.

An extensive study done by Chase (2010) on online learning environments, with more than two thousand respondents, reported that a) students with a low feeling of connectedness self-reported academic dishonesty more often, b) higher level of connectedness correlated positively with a higher GDP, c) students cheated less when the instructor showed devotion towards the course, students, and the learning, and consequently d) the students are more successful academically. A decrease in the likelihood of students cheating in a traditional classroom was found to be, among other things, high instructor vigilance, severe punishment for getting caught, and essay exams (Genereux & McLeod, 1995).

Styron & Styron (2010) expressed their concern for students in online settings, saying that they are isolated compared to the students on campuses, resulting in a risk that the ethics forming the social norms needed in an academic setting are diminished. Research in students' perceptions towards cheating in an online setting was found to be more dishonest than in a traditional classroom setting. They mitigated this by having students complete an "Academic Integrity Tutorial" which, upon completion, showed that students' ability to pinpoint more accurately what behaviours constitutes academic dishonesty increased (Ellis, 2016).

2.6   Honour codes

Mastin et al. (2009) research found that students who had been instructed not to cheat by an honours pledge did not show any significant difference in the cheating outcome, although the instructed group had a little lower amount of reported cheating.

McCabe, Trevino & Butterfield (2002) suggested that modified honour codes could have a positive influence on academic integrity. Traditional honour codes contain at least two or three of these four elements: un-proctored exams, a written pledge by students affirming they have not cheated, students are part of the judicial or hearing body, and students are obligated to report any observed violation of the honours code. They argued in their article that the traditional honour codes work because they are usually implemented in small and medium sized campuses, thus, making it easier to establish a campus community where this works. Modified honour codes contain, in general, two main factors: communicating clearly to students that academic integrity is of the highest importance to the university, and that students have a significant role both in the judicial or hearing body and developing programs to communicate the honour code sufficiently to other students.

If McCabe & Trevino's (1997) findings about peer disapproval being the biggest influencer on cheating stands, then the argument that if the honour code is communicated to and understood by the students adequately the disapproval of cheating will rise, and thus, further deter students from cheating.

2.7   Academic integrity

Boehm, Justice & Weeks (2009) found that academic dishonesty decreased if definitions and examples of cheating was clear to the students. Boehm et. al. (2009) also found faculty training and effective classroom management strategies to be significant for increasing academic integrity. Tatum & Schwartz (2017) suggested that faculty should focus on academic integrity, by implementing strategies to help prevent students from making the decision to cheat. "Helping students understand what is meant by academic honesty is key. Establishing clear expectations about integrity, showing trust and respect for students, and addressing cheating consistently and fairly sends the message that you value academic integrity" (Tatum et. al. 2017).

For online education, the methods of cheating have changed due to technological advances. For instance, students in online classes can exchange private emails without the teachers knowledge, or download past tests before or even during the exam (Chase, 2010). Boaz, Elliott, Foshee, Hardy, Jarmon & Olcott (1999) found that proctored exams are extremely effective at deterring cheating and authenticating students, however, in distance education online exams could be un-proctored. This could be solved by having the exam on the campus or some off-campus location where the exam can be conducted. If this is done then two problems are solved or mitigated: 1) authentication of the students is assured, and 2) cheating is mitigated to at least the level of prevalence that the traditional education has.

Abbott, Siskovic, Nogues & Williams (2000) found in their report that instructors should have several small tasks for the students to complete during the course that requires individualized answers. This minimizes academic dishonesty because of the continuous involvement, which makes it more difficult for the students to plan for someone else to constantly keep on cheating for them.

Another good way to mitigate cheating is to form the questions so, that they are not asking for facts. Instead, the questions are requiring the students to analyse and apply the methods that have been taught. The problem with un-proctored exams can also be mitigated by using other evaluation tools, such as essays, research papers, interactive web-based exercises etc. (Boaz et. al., 1999). Students in an online class should also be collaborating within groups while working on a project (Olt, 2002). However, during online exams, one of the fears appears to be the collaboration between students. This can be overcome by setting time restrictions for the length of the test, a limited number of accesses to the test, and having a pool of questions from which questions are randomly picked for each student, resulting in every student having a different test (Olt, 2002).

In their research, Swartz & Cole (2013) had an open-ended question for any suggestions by the students on how to increase academic integrity. The suggestions were:
"Checking cited work;
"Spying" on students using webcams;
Requiring "some online policy";
Assigning more papers since they can be checked for plagiarism;
Using "comprehension" questions in place of those from the text;
Setting time limits;
Using skype for oral exams;
Using different assignment for each student;
Conducting tests on campus;
Giving explicit instructions about what is and is not allowed;
Locking students out of internet sites during an exam;

Using full screen programs that prevent students from minimizing the question in order to look up the answer;

Making exams more difficult and shortening the time to take them, but allowing the use of any and all resources;

Allowing students in onground courses the same freedom to use any and all material that may be available to the student in the online course, thus levelling the playing field."

3   Methodology

This thesis uses a qualitative semi-structured interview to answer the research questions. This research revolves around cheating in the online exam environment, identifying how students perceive cheating online, what motivates students to cheat in the first place, and common techniques that students use to cheat. The end goal of this thesis is to produce a guideline for the teachers who instructs online courses on how to conduct an online exam. The most optimal study would be to interview experts in the field on mitigating cheating online, however, these experts are hard to find. Nonetheless, what there is, is a vast selection of different studies which investigate what they have found to be the best ways to conduct an online course to reduce the amount of cheating. Using these sources, and what is found in this research, makes up the final guideline for instructors. That is why this study focuses on cheating in the online exam environment from the perspective of students.

This research does not look to confirm that cheating occurs because there is already substantial evidence to support that (McCabe &Trevino, 1997; Gaskill, 2014; Schab, 1991; Whitley, 1998). Instead, a deeper conversation into the topic of cheating on online exams is a much better option considering the wanted outcome of this research.

3.1   Research framework

In this section, the reader can find this thesis' framework in its simplest form. Here can be found the "Aim of the study", "Subjects of the study", "Methodology", and "Analysis". This section exists for the reason that the methodology-section might be a bit long, and slightly difficult to follow, regardless of the writer's attempt to make it easy to follow. The methodology-section conveys a great deal of information, and this can make it challenging for some to follow the text. Nevertheless, it is recommended to take a glimpse at the research framework before commencing on the journey of the methodology-section, for it might be helpful to understand the amalgamation of the different parts.

Aim of the study.	Construct a guideline for online instructors on how to design online exams to best mitigate cheating. Guideline achieved through understanding the experiences and the way in which students behave in the online courses and exams.
Subjects of the study.	Students from a University of Applied Science in southern Finland, who have had courses in the classroom and online courses, and completed online exams.
Methodology.	Qualitative study. Semi-structured interviews with students. Inductive approach. Subjective. Small sample size.
Analysis.	Interpretative phenomenological analysis (IPA). Thematic analysis.

Table 1: Research framework

3.2 Qualitative research method

To answer the research question, the researcher decided to use the qualitative method, since this research seeks to gain insight into what the students experiences are of cheating in the online environment. This question cannot be simply asked with a simple quantitative questionnaire because of the potentially extensive experiences that the students might have. The researcher did not want to limit the answers of the students, but rather, wanted to allow for a deep and generous explanation of the experience.

Gillham (2005, p.5) purported that interviews that are quantitative seeks to reach people through a medium that is very generic, whereas qualitative interviews become personal. The advantage is, according to Gillham, that the interviewees become more open and honest when there is a human receiving what they are saying, that is, it is much more personal. This idea is very important considering that, students are required to talk about something that is very sensitive, that is, academic dishonesty. Getting caught in the act of academic dishonesty is usually met with some sort of punishment, e.g. suspended for major cases, and required to retake the course for minor incidents. Brinkmann (2013; 53) implied that the face-to-face interview method is the most common in qualitative research specifically, but not exclusively, because of the "interpersonal contact, context sensitivity, and flexibility that enables interviewers to take advantage of the research logic of qualitative inquiry".

As Noaks & Wincup (2004: 77) argue that in a qualitative study the interviewer is to probe the perspective of the interviewee. The reason the researcher has chosen to use a semi-

structured interview method is that it is very important that the interviewer does not make an attempt to suggest any ideas of what that experience might have been (2004: 79). Instead, discussing a topic to allow the interviewee to speak more freely about what they have experienced. Noaks et al (2004: 80-81) purported that usually the more structured interviews have a large sample and seek to become standardised, which means that there is no space for improvisation. The interviews conducted in this study seeks to at least allow the possibility for improvisation. This is because the researcher does not expect all the interviewees to have the same experiences of cheating, indicating the possibility of varying outcomes.

Noaks et al (2004: 81) described semi-structured interviews as follows: "The semi-structured interview offers more opportunity to probe, typically with the use of follow-up questions. The interviewer will be equipped with an interview schedule but there is more flexibility in the order in which questions are asked", "The semi-structured interview offers more opportunity for dialogue and exchange between the interviewer and interviewee. An important feature of this approach is that the interviewer has an understanding of the context of the project to facilitate alertness to significant themes". This method is perfect for this research. The unstructured interview approach could almost have been used in this study, because it is used in "life history" interviews and has a very broad aim in mind (Noaks et al, 2004: 81). Nevertheless, this study does not have a "broad aim in mind", since it seeks the knowledge of students' experiences of cheating in the online exam environment, essentially not looking to pursue anything outside of that realm. With that said, in the interview it is good for the interviewer to try to establish rapport (noaks et al, 2004: 81). In the interviews, this is done by first asking about the quality of the online studies compared to in-class studies, instead of rushing into asking about cheating, which can be to some students a sensitive topic. The first question presented to the research subjects does not directly have to do with the experience of the students of cheating, and the researcher is aware of that.

Interpretative phenomenological analysis.

This thesis uses the interpretative phenomenological analysis (IPA) approach to study the subject in this study. What IPA essentially tries to do is to understand the experiences of the participants, and to understand how they came to their realizations. The researcher attempts to understand the phenomenology of the participant, but also to interpret them, since there might be a risk that how the participant is trying to portray themselves might not be the absolute truth. They might conceal something. The researcher seeks to understand what it is like from the perspective of the participant. To understand the accounts of the participants, the researcher must both employ an empathic role and a critical questioning role. Empathic, to uncover the bountiful experience, and critical questioning for unveiling experiences that the participant might not have been able or willing to discover themselves. IPA has two hermeneutics, called "Double hermeneutics", which refers to the participant trying to make

sense of their world, and the researcher trying to make sense of the participant making sense of the world (Frost, 2011; 48).

IPA is idiographic since it pursues to examine in detail either a case or a small sample of participants. What this means is that first the researcher analyses one case very meticulously, and then can move on to more participants to identify and ascertain shared themes and categories that emerges from the experiences of the participants. IPA is considered suitable for cases where unique experiences needs to be investigated. "For example, in health psychology, in order to understand the meaning and significance of a particular condition for a person's everyday life, the researcher may need to gain access to in-depth accounts of individuals' experiences" (Frost, 2011; 49).

3.3   Research bias

Something important to remember when conducting a quantitative and qualitative study, is that both researches' results must be interpreted. The problem with interpreting is that it requires the researcher to write what he or she thinks the results of the research means from their own perspective. The result is that the research becomes biased (Gillham, 2005; Silverman, 2005; Chenail, 2011). Silverman (2005, p.11) posited that "Unfortunately, as most scientists and philosophers are agreed, the facts we find in "the field" never speak for themselves but are impregnated by our assumptions". "Whatever we observe is impregnated by assumptions" (Silverman, 2005, p.12). Another bias that emerges in the IPA method, is that while the researcher seeks to understand or make sense of the participant making sense of their world, the researcher is inescapably going to be interpreting the "sense making" of the participant (Frost, 2011; 48).

3.4   Ethics

The topic of this research can be sensitive to the students. Therefore, clarity about how the confidentiality, anonymity, security of the obtained data, publication of findings, and data lifetime must be established before the interviews take place (Gillham, 2005: 13). Furthermore, the researcher should have established an informed consent, that is, made it clear to the research subjects what the research is for and their role in it (Noaks et al. 2004; 52).

Confidentiality

The researcher explained to the students before commencing any of the interviews to whom the information would be available. In this research, only the researcher had access to the audio recordings from the interviews. However, there is a transcript of the interviews in this thesis. The reason for this is that when the audio is converted into text, no one can recognise

the subject by their voice. For that reason, as well, the researcher was the only one with access to the audio.

Anonymity

The students do not have to be concerned with their identity, on the grounds that in the interview the interviewer referred to the interviewees with fake names. The fake names were made up by the interviewees (students).

Security of the obtained data

The audio recordings were stored on a computer with a password in place. This assured that the audio recordings were safe. It is important to protect the audio, even if the interviewer referred to the subject (interviewee) with a fake name. Because someone might recognise their voices, thus, it is very important that no one gets access to the audio recordings. The odds of someone recognising a subjects voice is miniscule, inasmuch as it would requires the person who gets unauthorized access to the audio to have heard that specific subject speak before, albeit not impossible.

Publication of findings

The students were informed that the thesis, which has been built upon the information obtained from the students in the interview, will be published. Notwithstanding the other criteria of confidentiality, anonymity, and security of data, the students must be aware that the findings will be published. When the transcripts of the recorded interviews were complete, the researcher sent each subject their respective interview transcript for review so that they were not misrepresented in any way. Before the publication of the findings, the subjects were given the opportunity to get a free copy of the final thesis, to make sure that they were not misrepresented in anyway.

Data lifetime

The data, or audio, as mentioned before, was transcribed and attached into the thesis. However, the audio is the sensitive part of this research. Therefore, as soon as the thesis was completed, the audio recordings were deleted, since they did not serve a purpose anymore and to protect the anonymity of the subjects.

Safe environment

Since the topic of cheating can be sensitive, the environment in which the interviews are being conducted should be secure and safe. Because of that, the researcher decided to conduct the interviews in a closed room, where they would not be disturbed, and no one would hear

what they talk about. This is also why this interview is done face-to-face. If the interview was done by e.g. email, the interviewer could not assure that the interviewee is in a safe and secure environment, or safe enough to have the courage to answer the questions honestly, e.g. public place. The interviewee would not necessarily want to discuss their experiences of cheating in the online exam environment in public, if they cheated.

Informed consent

The researcher must make sure that the interview subjects are aware what the interviews are for, implications of the research and the involvement of the subjects. Essentially, this is achieved by completing all the previous point of the "Ethics"- section. As a result, the subject can trust the researcher. However, the subject might change his or her mind, especially if the research is continuous (Noaks et al. 2004; 53). For this reason, the researcher decided to ask again for consent before the publication of this thesis.

3.5   Ethical positioning

This section addresses the role the researcher has chosen to take in relation to the interviewee. Since, qualitative studies seek to gain and discover as much information of a small sample, the need to establish good rapport is vital, forasmuch to achieve the desired outcome. As Noaks et al. (2004; 57) justified it, "Pressure to move beyond the researcher role, whether that into a friend, advocate, colleague or collaborator, are a particular feature of qualitative work with it greater propensity for reciprocal relationships between researcher and researched". The researcher was, at the time of the interviews, a student, and the study subjects are students. This meant that the interviewer and interviewee where peers. It is very important to address the positioning of the researcher, in context to the study being conducted. There could be a slight problem if the interviewee was a teacher. Not suggesting that teachers could not form good rapport with their students. Alternatively, the students, in the context of students' experiences of cheating, would not feel comfortable confessing their practices to the teachers, on the grounds that the teachers are the ones who are trying to do away with academic dishonesty and build up and encourage academic integrity.

3.6   Selection process

The IPA qualitative method uses for its selection process what is called purposive sampling. This means that there are specific criteria that the participants need to have, because the study is looking into a specific phenomenon, in this case cheating on online exams. Because of the specificity of the study, the core idea is to examine in a very detailed way the participants, and thus, the sample size should be small (Frost, 2011; 50).

Anticipating that the research will be biased, the best way to select the subjects to the study would be by random sampling, because it avoids systematic biases. However, this method is

usually only used in quantitative research, and can hardly be applied in a qualitative study. In the case of this research, the subjects must have had experience with in-class studies, online studies, and online exams. This means that the selection cannot be random, but rather, information-oriented. This method seeks to get the most out of the small sample size specifically chosen based on the predetermined requirements. It is also required that the researcher has knowledge of the field in question, that is academic dishonesty (Brinkmann, 2013; 57).

The researcher prepared for this study by reviewing the relevant literature in the literature review section. Before conducting any interviews, the researcher engaged in some discussions with friends about the online exams from that University of Applied Sciences in southern Finland. According to them, it was very clear that it was surprisingly easy to cheat on the online exams. The initial plan was to have one of the criteria to be "experience of cheating", nonetheless, based on the pre-interviews it seemed that that requirement was unnecessary. Through the pre-interviews, the researcher was able to construct an interview schedule with the questions that was thought to be necessary (Appendix 1).

In a sense, this research becomes partly an anthropological study. The idea in an anthropological study is that the researcher goes "into the field for a long time" to study the people that they have chosen for their research (Edwards & Holland, 2013; 31). The researcher was a student at the time of this study, which makes the researcher a part of the group that is being studied, i.e. students. Although not necessarily fulfilling the other factors required from the subject to be considered for interviews.

Of course, the researcher did not commence the studies of the degree with this specific task in mind, which might make the anthropological claim less worthy. Nevertheless, the process was the same, and eventually gaining the trust of the students, immersed and becoming one of them. The students becoming informants to the researcher, and shedding light on the topic at hand, that is, cheating in the online exam environment.

As mentioned previously in this thesis, the subject can be very sensitive to the students. The students are not looking to get caught of academic dishonesty, due to the possible punishment of the act. Therefore, it was very important to make the students feel as comfortable as possible. If the students would not feel comfortable enough then they might have hesitated to speak the truth.

The researcher chose the students (subjects) for the interview from the school by asking acquaintances, who studied at the school, if they wanted to do an interview about their experiences of online exams and explaining that the study is specifically about cheating. This meant that they would have to share the truth. At this point, the researcher assured to the student in question that their name would never be recorded. In fact, the students would get to

choose a pseudonym, which means that the names that are given, in this case the students, are not their real names (Oxford Advanced Learner's Dictionary).

The obvious problem that many would point out is that the researcher and the researched are acquaintances and peers, since both are students, and this could potentially be considered to theoretically undermine the credibility of the study. However, without these two factors, there might be a risk of the students not speaking forthrightly. The end goal for this study is to find the best ways in which to conduct an online exam. And after all, students are the ones completing these online exams, thus, the students should be encouraged, to the highest degree possible, to speak about their experiences. Without these unfiltered student inputs, the study would potentially not have been able to reach its goal.

Furthermore, the study should not rely on teachers' perception, since they are not the ones doing the online exams, and thus, might have completely different perceptions of cheating compared to the experiences of the students. As Patnaude (2008) found in her study, the majority of teachers thought that "…students "sometimes committed various acts of academic dishonesty".

An alternate way of selecting the right students for this interview could have been by sending out an email to all the students at that University of Applied Sciences and explaining that they could be part of a study and as remuneration they would get say 20€. The problem with this is that the researcher could get a lot of students who do not have the required elements, and therefore would not qualify for the interviews. Should the researcher then opt to explain in the research that the study is about cheating on online exams, and that the students would be required to reveal their experiences? This might shy away the students due to their fears of getting caught. Nonetheless, both problems of these scenarios reflect to the remuneration of the participation. Some students might only look to get the 20€, not sharing their true experiences with the interviewer, and thus, the study resulting in false assumptions about the condition of cheating on online exams at that University of Applied Sciences.

Therefore, there should be an investigation into the students to verify that they have done in-class studies, online studies, and online exams. However, to have absolute validity, the researcher might have to involve a teacher in this process. This was already touched upon previously by the researcher, demonstrating that to get the most truthful answers from the students, the students need to have an unambiguous feeling of safety and certainty that they and their information is not identifiable. The only certainty and credibility that could be formed is the one that emerges from the trustworthy relationship between the researcher and the student, by virtue of them both being peers and acquaintances.

3.7   Sample size

The sample size in qualitative methods can be very difficult to decide, compared to quantitative, which purports that the larger the sample the better, or more accurate and reliable. For Qualitative research, the limits can vary. E.g. Brinkmann (2013; 58) interpreted that as soon as you have the answer(s) to your research question, then the research can stop. This seems to be quite simple, but that does not necessarily mean that only one person can be interviewed and then concluded that no other interviews are needed because the study did get the answers needed. What this research used was a method called the concept of saturation. This means, in practice, that when one has conducted many interviews and notices that no new topics or themes emerges, then there is no need to conduct further interviews because everything has already come up that seems to be relevant. "Thus, rather than the number in a sample being representative of types of people as in quantitative research, in qualitative research it is the range of meanings that should determine numbers of interviews in a study" (Edwards et al. 2013).

3.8   Data collection

Much of what will be briefly brought up in this section has already been argued for in prior sections. However, data collection needs a section of its own. The students chosen for this study were interviewed in closed room to ensure privacy. The students were informed by text of the time and place where to meet. The students where asked to show their students cards, which also indicates the university. All the students were from the same University of Applied Sciences in Southern Finland. The interviews were recorded to help the research become more accurate. The interviews were recorded on a smartphone, and then transferred over to a computer. The original copies were kept on the phone as well, to ensure that if either one broke down, then there would be backup recordings on the other. Also, the recordings where transferred by email, which means that they are on the cloud of that email service provider (Google). Therefore, both devices (computer & phone) could break down and the study would still have been able to commence. Another obvious risk emerges, that is, the risk of having your email hacked, or just the email service provider mistakenly loosing the users' data. For these reasons, there was three places where the recordings were held to ensure continuity. The interviews were approximately 20 minutes long.

As mentioned earlier, the students chose a pseudonym for themselves to not be identified, since cheating is wrong. Right before the interview started, the interviewer asked a few questions to get the interviewee to feel more comfortable in the setting and, of course, to the topic. Simple questions of how their morning/day has been, what they have done, did they find the allocated location properly etc. After the small talk, the interviewer would introduce the subject to the topic. After which, the interviewer would go through the procedure to ensure that the subjects were aware of what was going on. Most of this was discussed in the

Ethics- section. Such things were: Confidentiality, anonymity, security of the obtained data, data lifetime, publication of findings. The subjects were told that they have the right to opt-out of the study at any moment if they wanted to, which would mean that anything they said could not be used as data in the study and would immediately be deleted. The subjects were as well offered the study for free if they wished to have it, however, none of them wanted it.

No informed consent- form was required by the subjects to be signed, because of the topic being so sensitive. The researcher sought to give the subjects the most comfortable feeling of confidentiality and safety. Safety as in, everything the subjects would say would be safe with the researcher. That is why the researcher did not seek to ask too much personal information from the subjects, and by doing so, the subjects feeling of confidentiality could be higher, since there would be almost nothing to tie them to this study. This topic was discussed in more detail in the selection process- section.

3.9   Data analysis

This section describes the coding of data. The reason for coding the data is to bring more clarity to the themes that have emerged from the interviews. The idea is to investigate the date to form "tags, labels and memos". What quantitative research does is it only focuses on this, but in qualitative research the understanding of why certain tags, labels and memos surface is much more relevant (Noaks et al, 2004). This thesis uses the previously mentioned interpretative phenomenological analysis (IPA), however we must remember that it is only grounded in phenomenology (Frost, 2011; 49). What grounded theory tries to investigate is a phenomenon without any preconceived ideas of the themes or outcomes, and eventually seeks to develop a theory. In this research, there is already themes that have emerged from the literature review and from the pre-interview conducted to develop the interview schedule. No theory will be developed, mainly because this research has been investigating one University of Applied Sciences in Southern Finland specifically. This means that any theory that would be developed might only be applicable to that specific University and no other. Therefore, this study will be using a thematic analysis to code the results. That means that it is not required to develop any theory, neither is it commencing the study without any preconceived themes, tags, labels or memos. Although it could, due to the freedom it has over the previously mentioned methods and approaches (Braun & Clarke, 2006).

4   Results

This study sought out students to be interviewed, as described in the sample selection- section. The number of students amounted to five. This study did not include more interviewees, since no new topics emerged from the later interviews. The average length of the interviews were 20 minutes. All the students where in the later part of their studies. Two out of the five

interviewed were exchange students. Four of the five were male, and the remaining one was a woman.

The results will be presented in sections. Each section will contain the answers to the same questions from the five separate interviews, because they are pertinent to each other. After every section a summary will follow, containing the most important findings in relation to that sections question. Afterward, when all the questions have been discussed and analysed separately, a summary of all the results will be in the "Conclusions and recommendations"-section. This is to avoid repetition, inasmuch as both a conclusion of the results and the conclusion of the study will, to a large extent, contain the same findings. The interviews were audio recorded and were transcribed into texts, which are to be found in Appendix 2-6.

The questions were regarding 1) quality of online studies, 2) quality of online teachers, 3) level of feeling connectedness online, 4) various types of cheating online, 5) prevalence of cheating online, 6) most common cheating method online, 7) cheating methods the interviewed used themselves online, 8) motivations for cheating online, 9) students' perceptions of the teachers' definitions of cheating, 10) what the interviewed perceived as cheating, 11) improvements for the online courses and exams.

The pseudonyms of the five students interviewed are Pentti, DJ, Bob, Anna, and Tomi. This is also the sequence in which the students where interviewed. The answers of the students will also be in this sequence, starting with Pentti, and concluding with Tomi.

4.1   Quality of online studies

Pentti:

Pentti thought that the online courses where wider, referring to the subject of the course. Pentti explained that sometimes the content of the in-class courses was irrelevant to the subject. He thought that online courses could explain the subject matters more precisely due to their broader scope.

DJ:

DJ thought that this is individual because he, for instance, prefers to interact and discuss with people face to face. He also said that the quality depends on the teachers. In general, DJ thought that if the online course required a considerable amount of interacting between the students, then it would be difficult to implement it online compared to studies in the classroom.

Bob:

Bob's initial thought was that he quality of the online course depended on the student's individual style of learning, some might be more suitable for an online environment, whereas, others might not. He also explained that many students in the online course tend to put in minimal effort to get a high grade. Furthermore, students online look for "…where the fence is the lowest", meaning that they put in the least amount of effort just to pass the online course. However, he still thought that the online courses are worse than the traditional in-class studies. The reason for this, according to Bob, is that it is more difficult to engage the students online.

Anna:

Annas opinion on this matter was that the quality of the courses really depends on the teachers and the students. For instance, it depends on how much effort the students are willing to put into the course, or are they just going to "…go where the fence is the lowest", like Anna suggested. She said that he latter happens often. During a regular course, that is in the classroom, the teacher is "…breathing down your neck". Anna strongly affirmed that students are more engaged in the lesson due to the physical presence and the teachers monitoring.

Tomi:

Tomi thought that the quality of the online courses was worse. The only reason for this was because of the ability to cheat. He argued that online is not good because if a student needs an answer, they can just find the answer from google, which means that the students do not learn. He thought that the fact that students could get the answers from somewhere had a negative effect on the students learning. He said that students do not learn if they can just search things from the internet or ask a friend to give them the answer(s).

Summary of the quality of the online studies.

The five students interviewed for this research had varying thought on the quality of the online course. Essentially, 4/5 thought that the quality depended on the teacher and the students. If the teacher is active in helping students, giving proper feedback, and engaging the students in the course, it makes the quality better. If the students are, for instance, putting in effort to learn the subject, suitable for an online learning environment, and they are engaged in the course, it will raise the quality of the course. 2/5 thought the quality was better. One thought it was because the online courses' content could be wider, and thus, more easily explain the concepts and theories of the subject. Another explanation was that the student was more suitable for an online environment, and therefore, thought the quality was better. More suitable, meaning that the student could study when, where, and how they

wanted. The online courses seemed to be less demanding, since 3/5 mentioned that some of the students put in minimal effort and "…go where the fence is the lowest". One of the two further explained that the traditional in-class studies are better since it requires the students to be physically present and the teacher is practically monitoring them, "…Breathing down your neck". 3/5 thought the problem with the quality was the challenges teachers will have with engaging students online, arguing that it is much easier for teacher to engage students in the classroom.

4.2   Quality of online teachers

Pentti:

Pentti thought that the online teachers are "pretty much" the same teachers as in the in-class courses so it does not matter. However, he had completed some courses in another University of Applied Sciences and thought they were really good, saying "…they told you what you needed to do and if you asked for help you got it quite fast". He continued that in his current school, the teachers are not as active in helping when needed. Nevertheless, he said that it depends on which course, because some teachers are still good, and they will help you if needed and if you truly want to learn then you will learn.

DJ:

The teachers' quality varied a great deal. On the one hand, DJ purported that in some courses the material and instructions are already posted on the forum, and the students can just get started with the course, work until the given deadline and then just wait for the grade. The problem with this, according to DJ, was that some teachers only gave a pass or fail without a feedback comment, leaving the students wondering how well they did (on a scale of one to five) on that specific course.

On one of these courses, DJ implied that the teacher had given five sources for the students to use to write an assignment. The problem was that only one of the sources could be opened, all the others could not. DJ sent emails but the teacher did not answer, which meant that he had to complete his assignment based on one source and another source that he found by himself. This led to a bad result on the assignment. Nevertheless, the teacher did open the other sources after the deadline, which that meant that DJ could not get the highest grade (five) because his assignment would now be late. These sorts of problems, or waiting for the teacher to answer emails, would not happen in classrooms because the students could just ask the teacher during the lesson.

On the other hand, some teachers where updating the forum feed and sending messages every week, which DJ thought was very helpful.

What was very characteristic for the teachers online, according to DJ, was that the feedbacks or returns were often overdue.

Bob:

Bob did not think the teachers were as good online as in the traditional in-class studies. The reason for this was that online, the teachers give out a statement at the beginning with all the required information and material and stating that "if you have any questions then come and ask me". Nevertheless, Bob noted that "people tend to isolate themselves and do what they might be able to do, and not go and approach the teachers as they would in a class-room". He did mention that online might work better if the teachers held webinars instead of simply requiring students to make a report and tell them to ask if they have any questions.

Anna:

Anna was convinced that the teacher in the online environment are better than that of the teachers in the traditional in-class courses. This was because she thought that the convenience of the online studies is much more suitable for here, e.g. studying whenever and wherever the student wants. Furthermore, she said she would prefer a good teacher in an online course over a normal course. She also explained that the best teacher she ever had was online, stating that the teacher gave them attention and good feedback, as well as designing the tasks' difficulty to suite the students level of competence individually.

Tomi:

Tomi assured that he did not think there was a difference in the quality of the teachers, they were in his opinion just as qualified online as in the classroom. Tomi did, nevertheless, say that students spoke to the teacher online approximately only once per month, which he thought was bad. Comparing it to the traditional classroom, where the students could ask the teacher face to face during the weekly lessons, gave Tomi the feeling that once per month was not enough.

Summary of the quality of the teachers.

2/5 though the quality was the same as in the in-class studies, 1/5 thought online teachers were better, and 2/5 thought that online was worse. The reason one students thought the online studies were better was mainly because of the student's preference for freedom, which they got from a not-so-restrictive online study schedule, that is, there is no demand for

the students online to be present at school at a specific time. 2/5 thought online was worse because the teachers simply post the material and assignments on the online course's main page, without any further engagement if the students understood everything. These two were referring to the lack of engagement. The 2/5 students who thought the teachers' quality was the same as in the in-class studies also mentioned that the courses or teachers had a lack of engagement. This would make 4/5 reporting a lack of engagement. The best student experiences were fast responses to students, good feedback, good and more frequent communication between teachers and students.

4.3   Level of feeling connectedness online

Pentti:

Penttis idea of the level of connectedness was that it depends on the attitude of the students. He pointed out that "…if you don't wanna learn about the thing, you won't feel that connected to the subject or teachers or anything else". With this he meant that those students who are interested in the subject are going to feel more connectedness than those that aren't. He described further, that you can pass the classes with quite little effort, and so if you are not interested in the course subject, then that little effort that you have put in to pass will not give you a feeling of connectedness.

DJ:

DJ thought that connectedness in the online studies was very low compared to the traditional in-class studies. This was due to the students not having enough communication between themselves. Also, the online course gave DJ a very impersonal feeling because the students would be divided into groups and the teacher would only refer to the group names, not the students themselves. The names of the students were never used during the course. Essentially, there was not enough communication, leading to feeling less connectedness in the online class compared to the traditional in-class studies.

Bob:

Bob thought that the less the students are engaged in activities like group assignments and discussion forums, the less connectedness they will feel. He implied, that if you only work alone then you might feel less connectedness. Bob answered this question in the last paragraph, describing that students online tend to isolate themselves, and if teachers ask the students to contact them if they have any questions, the students would rather opt for no contact. This means that, for some reason, students are already unwilling to get in touch with teachers, even if it is for their own benefit.

Anna:

Anna thought that the level of connectedness was lower in the online environment, since it was easier not to contact or collaborate with peers compared to the regular class. She mentioned that in some online courses it is mandatory to read other students' assignments and give feedback to each other, but Anna said she does not do that. Notwithstanding, she did acknowledge earlier that students are more engaged in the regular classes because of the physical presence and the teachers monitoring, which would indicate, just like she concluded herself, that the feeling of connectedness online is less.

Tomi:

Since the communication between the students themselves, and the teacher and the students, was not sufficient, Tomi thought that as a student he did not feel as connected. He explained that communicating only once a month was not enough, instead he suggested at least once per week.

Summary of the level of feeling connectedness.

All the students explained, in one way or another, that online lacked the feeling of connectedness compared to the traditional in-class studies. The reason for this was that online studies did not have as much communication or engagement as the traditional in-class studies. Another explanation, though quite similar to the first one, was that students who are not interested in the subject will not put in any effort, hence, they are not engaged in the course, and thus, they will not feel connectedness.

4.4   Various types of cheating online

Pentti:

For Pentti it is obvious that there are different cheating techniques since one can complete an online exam anywhere. For instance, during the exam one can use the help of a professional, a friend, or the internet. Some exams are done online in the classroom and some online from a remote location. He said that those exams done in class but still online at least prevent the students from having physical help and the ability to call someone. He said that some of the exams are always the same, meaning that those who know a more senior student can ask them for them for help in advance.

DJ:

DJ named using the internet, downloading the course e-books beforehand and then using them during the exam and using "control+F" on the keyboard and writing keywords to find the answers faster, putting the downloaded e-book into a document or excel and dividing it into sections making the search process even less arduous, and finally, doing exams with a friend or in a group of peers.

Bob:

The cheating techniques Bob new of was students working together during an online exam, students calling each other during the exam, using the internet, and plagiarism.

Anna:

Anna mentioned using the internet, doing the online exam with a friend or many friends, having someone else do the entire exam, and if a student have to retake the exam there is a possibility that the questions are the same, which means that you can get the questions from your peers who have already done the test.

Tomi:

Tomi specified cheating techniques like using the internet, using notes and books and doing the exam with friends.

Summary of the various cheating methods.

The following methods used for cheating are during online exams, which are done from a remote location. Students can do the exam together with anyone who might be of help like another student, they can use the internet, they can call or chat with a friend during the exam, they can download the course e-books and use the search command "control+F" on the keyboard for typing in keywords and finding the relevant topic from an extensive text, someone else doing the entire exam, students doing an exam and search for answers together as if a functioning unit, and finally, if teachers use the same exam, students can get them from students who have already completed the exams.

4.5   Prevalence of cheating online

Pentti:

When asked about the peers in his class, Pentti said that he thinks they all cheat as well. He seemed very convinced.

DJ:

DJ said that he thinks most of the other students also use different kinds of search engines to find the correct answers.

Bob:

Bob noted that it is quite normal for students to work together. He said that some students like to work alone and, therefore, do the exams alone. He estimated that in his class, maybe half of the students worked together with someone on the exams and the other half alone.

Anna:

Anna was convinced that cheating was very normal in the online exams. "…the students usually do these exams together", said Anna in the interview.

Tomi:

Tomi had no idea if other students cheated or not. He once helped a student who asked an answer to a question, which would indicate that that specific student was subject to using friends as a cheating technique. However, Tomi could not say with certainty, that other students cheated like he did.

Summary of the prevalence of cheating.

4/5 students said that they think most students cheat. Only one said that they could not say with certainty if other students cheated, notwithstanding, that the same student did allude to the most common cheating technique being to complete the exam with friends, indicating that he did have an understanding of what the other students were doing after all. Essentially, one student claimed everyone cheated, and another said half, which means that there cannot be a conclusion on how many cheats, just that it seems that a significant proportion of the student's cheats on the online exams.

4.6   Most common cheating method online

Pentti:

The most common cheating technique at the school, according to Pentti, is doing the online exam with a friend.

DJ:

Using the internet and doing the exam together with other students or a friend. DJ claimed that students in his class came to school to do the exam together in the computer classroom, and that it was very common.

Bob:

Bob thought that the most common technique to cheat is students working together to find answers from the internet.

Anna:

Anna suggested that the most common cheating technique was to do the exam with a friend or many friends.

Tomi:

Despite Tomi not being able to conclude if other students cheated or not, he definitively thought that the most common cheating technique among students was doing the exam with friends. The reason for this, he clarified, was because using the internet gave too much information and made it difficult to sort out what information was actually needed, thus, using your friends' knowledge was much better. He even explained that the course books and notes were better than the internet because of the internet's vast array of information.

Summary of the most common cheating method.

All the interviewed students agreed that the most common techniques were to complete the online exam together with a peer or a friend while searching for answers from both the internet and the course material.

4.7   Cheating methods the interviewed used themselves online

Pentti:

Pentti said he had cheated by calling a friend who was a professional, doing the exam with a friend, and using the internet. However, he said that the internet does not help since the questions have been designed in a way that they are asking for very specific details from the course book and the internet might have something different.

DJ:

DJ claimed he had cheated using the internet, using "control+F" to speed up the search process and doing the exam with a friend.

Bob:

Bob said the only way he had cheated was by using "control+F" to search for keywords from a comprehensive text.

Anna:

Anna said that she has cheated by using the internet and done the exam with a friend, although, she asserted that she has never done the test in a group, but that she usually calls a friend or utilises her contacts through a chat online.

Tomi:

Tomi had used the internet, course books and notes, and once helped a friend with a question. Tomi did not specify if the exam was an open book exam, which would signify that using course books and notes was acceptable.

Summary of the cheating methods the interviewed used themselves.

4/5 students that were interviewed claimed that they had used the internet, 3/5 said they have done an exam with someone else or in a group, 2/5 said they use the "control+F" command on the keyboard. The rest of the options mentioned in the various cheating methods where only used by one of the interviewed, or they were methods that the interviewed students had only heard or seen other students use. For instance, none of the interviewed students had done and exam in a group of students, however, they all mentioned it as a method used by students to cheat on the online exams.

4.8   Motivations for cheating online

Pentti:

The motivation behind Pentti's cheating was two things. First, he explained that it was simply too easy to cheat online. He did not think that it was really a reason, however, the nonexistence of barriers to cheat is motivating him to cheat. Second, students want to pass the exams, therefore, when an easy opportunity to cheat presents itself, students will take that opportunity to assure them passing the exam.

DJ:

DJ said that there was no reason, there simply was no barrier to cheat, that is, it was too easy. He then also explained that even though a student might know the answer, it is better to know for sure what the correct answer is, and therefore, use the internet, or a friend, for affirmation. Essentially, the motivations for cheating are no barrier to cheat and seeking assurance for passing the exam.

Bob:

Bob rationalised that the reason for students cheating in the first place was because there was no one monitoring them, that is, there was no barrier to stop the students. He also pointed out that students want higher grades, and thus, cheat when the opportunity is given.

Anna:

Anna purported that there was not really a reason for cheating, but rather, it was so easy. There are no restrictions during the exams and using the internet or discussing with friends is an obvious option to score higher. Essentially, the main reasons remain, no barriers for cheating and seeking to score higher grades.

Tomi:

The two main motivators for Tomi's cheating was both laziness and that the exams were too easy. He also described how the friend who asked for help in one of the exam questions was completing the exam on the last day of the exam date, instead of doing it earlier. Tomi said they had six days to complete the exam. The students could close the exam after the first day and reopen it on another to continue their answers. However, it was not a simple quiz, but rather, most questions were in essay form. The point being, the students asking for help had left the exam to the absolute last moment, maybe because he/she was too lazy.

Summary of the motivations for cheating.

All of the interviewed acknowledged two factors that were affecting the students cheating. 5/5 said that it is simply too easy to cheat, which means that there are no barriers for cheating. 4/5 said that students want to get higher grades, which leads them to choose the option to cheat. 1/5 mentioned laziness.

4.9   Students perceptions of the teachers' definitions of cheating

Pentti:

Pentti disclosed that most of the teachers did not say that students were not allowed to use the internet, except once. He thought that teachers new that students would use the internet because there was no way to control it during the online exams, and "…that's why the questions are so shit". He said that the teachers usually say that the exams should be done alone, but rarely anything else.

DJ:

According to DJ, the teachers did not say to the students not to cheat, or not to use the internet, or not to do it with friends. All they say is that the students can use the course books during the exams, but no remarks about cheating.

Bob:

The teachers do not separately say that students cannot work together on the exam, nevertheless, they do say that the exam is individual. They do not forbid using the internet either, however, Bob said the exams he had taken online did allow students to use the online lecture presentation slides and articles given during the course, therefore, he was somewhat sceptical if it really mattered if the students would use the internet in an open book exam. Some teachers shuffle the questions on the exam so that if students do them at the same time, the questions will not be in the same order. However, this can be bypassed by doing the exams one at a time, unless everyone is collectively given a specific timeslot within which to complete the exam, for instance between one and two-pm.

Anna:

Anna said that sometimes teacher tell them not to form groups during the exams because it is a form of cheating, and sometimes they do not. She also explained that some teacher know that the students will use the internet, and therefore, design the questions harder for them to make internet usage redundant. They also shorten the time limit which means that students will not have the time to search for an answer on the internet. Some teachers, on the other hand, do not implement any of these measures to mitigate cheating, which makes the exams easy.

Tomi:

Tomi stated that the teachers did not in any way define what cheating was or that it should not be done.

Summary of how students perceived the teachers' definitions of cheating.

There seemed to be a discrepancy between the definitions of cheating from the teachers, based on the opinions of the students. 3/5 students suggested that teachers said the exam was individual, whereas, the two others said the teachers said nothing of this. 5/5 students said the teachers did not say anything about the use of internet, except to one of the interviewed in one course. The same students who reported the teachers saying the exams are individual, also insinuated that the use of internet might be okay. Two of the three asserted that the teachers know that the use of internet is possible, and therefore, design the questions to be more difficult on purpose. Notwithstanding, there seems to be an inconsistency between what the teachers say to the students about cheating.

4.10   What the interviewed perceived as cheating

Pentti:

Pentti did not think it is cheating when students collaborate during an online exam, except if the teachers have defined beforehand to the students that collaboration with other students is regarded as cheating. Pentti defined cheating as doing something against the rules, doing something that is not allowed. However, he also said that in life, if someone does not say "no", then it is allowed. He clarifies it with the following sentence "So basically, if it doesn't read somewhere that "this is not allowed" then it is allowed".

DJ:

DJ did not think he was cheating, since there was no barrier and because the teachers did not forbid them from cheating. He also said that he thought that the other students did not think they were cheating either.

Bob:

Bobs opinion was that doing the exams together with other students and searching through the internet for answers are cheating. He explained that exams are supposed to assess the individual students' competences, and if the exam is done in groups, then the assessment is based on groups knowledge. Bob argued that if the exam would be marked as a group assignment, only then would it be acceptable to collaborate with peers. This was Bobs opinion even if the teacher did not forbid working together or use the internet.

Anna:

Anna did not think that using the internet counts as cheating, since, according to Anna, the teachers are mostly aware that the students use the internet. She rationalized that doing the

exams with your friends is cheating. However, it is not that severe she claimed, if the students have studied beforehand and have, at least, some knowledge of the subject. She did consider it severe cheating, if a student had not studied at all and got all the answers from his/her friends, because then the student does not learn anything. She also claimed that most students would, at first, say that doing the exams with others is not cheating. Nevertheless, Anna thought that most students would, after discussing and thinking about it, consider collaborating with peers as cheating, even though they do it all the time.

Tomi:

Despite not being told to cheat or what cheating meant in the first place, Tomi thought that using friends and/or the internet are forms of cheating.

Summary of the perceptions of the interviewed of cheating.

2/5 thought that if the teachers did not specifically say what constituted cheating, then there was no action that would constitute cheating. 3/5 thought that the use of internet was okay, including the two who thought nothing was cheating unless the terms were defined in advance. The remaining 2/5 said that both methods are regarded as cheating, even if teachers do not explicitly define what constitutes cheating.

4.11   Improvements for the online courses and exams

Pentti:

More open questions, that is essay questions, which require the students to apply what they have learned rather than ask specific details from a book. According to Pentti, the latter is ridiculous because exams should test if students comprehend the theories, comparatively to have memorised very specific details. His example was that in a multiple-choice question, students had to remember a specific quote from the course book, and the differences in the alternative quotes where single words. This was in his mind very narrowminded, since it did not assess the actual competence of the students on the subject matter.

Pentti said he passed all the online exams that he completed, because he memorised the content of some pages from the course book, nevertheless, he thought that it does not mean that he fully comprehends the whole concept of the course. He argued that it would be okay for students to use the internet to complete the essay questions considering that the school uses an anti-plagiarism software called "Urkund". Even if some students used the same answers, they would get caught because of this software. Furthermore, "Urkund" saves all documents

sent to its database, which means that if students copy some friends work from earlier at that school, they would still get caught.

DJ:

DJ thought that in the online exams, the multiple-choice questions where very exhausting because if there are four alternatives, two to four of them are correct, which means that all four options must be checked and that takes exceptionally long compared to questions with only one possible answer. He implied that during multiple-choice questions, the students had to opt for answering with their own intuition, or knowledge, because searching all the four options simply took too long. More multiple-choice questions in conjunction with a shorter time limit for the exam would result in a more difficult test. Notwithstanding, DJ thought these measures would not solve the problem of cheating but slightly lessen the current amount.

The third measure would be to make sure that the exam environment would be closed off from the internet, preventing students from, at least, using the internet on that device. Meaning that students could complete the exam on a computer without internet, but still have their smartphones or another computer to complete the search on the side. Nevertheless, DJ thought that this makes it "…an entire operation for people to cheat.", primarily since the students would have to use their smartphones to search for answers, which, according to DJ, is considerably more difficult compared to a computer. He even suggested an app for the smartphone to complete the online exams, if they only had single- and multiple-choice questions. But then that would free the computer on which the students would then do their searching.

Finally, the teachers should say during the class what is cheating, what not to do. DJ thought that this would prevent some cheating, because some of the students are "…true to themselves", suggesting that they would not cheat if someone told them not to.

Bob:

Bob justified that to know if the exams are really assessing the knowledge of individual students, then they should be monitored with facial recognition, or some other form of biometric recognition. Without these measures, it is impossible to know who is doing the exams.

He also advocated for essay questions, since the students can simply guess when it comes to one or multiple-choice questions. Essay questions, according to Bob, requires the students to give an answer based on their own knowledge and understanding.

Anna:

Anna's suggestions for improving the online exams was to have some essay questions, considering that it requires the students to apply their knowledge and think about what to write down. She explained that sometimes in multiple-choice questions, one of the options is the obvious answer and the other four are made up by the teacher. Although, some multiple-choice questions can be good.

Anna also gave the impression that some of the time limits for the online exams are ridiculously long, implying that the time limit should be suitable for the number of questions. She said, for example, that when an exam has twenty questions and sixty minutes for completing it, it is way too easy, and there is plenty of time to check every answer from the internet. However, when there are forty-five questions and sixty minutes there simply is no time for her to search answers from the internet, which makes her nervous and considers studying prior to the exam of paramount importance.

Anna's final comments were that she was very interested in how the implementation of the online degrees would finally turn out. She expressed her concern about this, suggesting that teachers in online degrees would find it hard to support the students properly. She also thought that employers would not hire students with online degrees as willingly as students with the traditional degrees received from attending the actual classrooms.

Tomi:

Tomi advocated for teachers to contact the students at least once a week to ask how the students are doing with the assignments, if they needed any help, or if they had some trouble understanding the assignments. He complained that the teachers almost never contact the students concerning the aforementioned issues. He also pointed out that these things do not happen in the traditional classroom, since the students can simply ask the teacher during the weekly lesson(s). Furthermore, he thought the students should be in constant communication with each other, and at least once a week.

Since Anna noted in her last remarks that she did not think it to be wise to have full degrees online, saying that "…it's not there yet", The researcher decided to ask Tomi what he thought if the whole degree was online. Tomi's initial reaction was laughter. He thought it was funny saying that "…I actually cannot imagine this system". He thought it was ridiculous partly because of the communication issues teachers were facing already (answering students' questions, feedback, checking in on students' progress etc.), but also on the grounds that some of the courses could not be online. As an example, he mentioned presenting or pitching. He thought that these could not be done online, and that they are very important.

4.12   Summary of the suggested improvements to the online exams.

3/5 students in the interview recommended to add essay questions into the online exams. The reasoning behind this was that on essay questions, students must answer based on their own knowledge and understanding. As one of the students mentioned, there is an anti-plagiarism software called "Urkund" in use at the school, which assures that no copying from others is possible without being detected.

One student claimed that multiple-choice questions where the answer can be one or all of the choices, students become annoyed since they have to check if all the answers are correct and not just one. This takes a lot of time, and thus, causes the students to choose the most viable answer to the best of their knowledge. However, this only works if there is a time limit (more about the time limit in the next paragraph). Another student said multiple-choice questions are bad sometimes because there is one obvious answer and the rest of the choices are poorly made up by the teacher, which led her to advocate for essay questions.

3/5 students mentioned time being an issue in the online exams. If there is too much time, the students can check answers from the internet. If there is no extra time, then students do not have the time to check answers, but must know them beforehand, or have someone else next to them who knows. The suggested time per question was 45 questions for 60 minutes, that is, 1 minute and 20 seconds. It is notable that this suggestion comes from only one of the interviewed students.

Use some sorts of biometric recognition system, assuring that the students are who they claim to be, and that they are doing the exams individually.

The teachers should agree upon one set of guidelines about what constitutes cheating, which they tell the students. This will not solve cheating, however, the idea is that some students would not use the cheating techniques outlined earlier, simply because someone told them not to.

The online environment should, by some measure or means, prevent the student from using the internet during the exam. 2/5 mentioned this and said that at least then you make sure no one uses internet. Nevertheless, the students could still get help from people around them, unless the exams were conducted in a physical room proctored by a teacher or instructor.

Have the online exams in a physical room, so as to preventing students from getting any help from people around them, for example peers, friends or family.

Better communication. Teachers could send weekly emails to students asking how they are doing and if they needed any help with some problems they might have encountered. More

communication between the students for stimulating more engagement. Webinars were also mentioned as a good measure for increased engagement in the class.

The fourth interviewee brought up the concern they had about online degrees and said that it does not seem like it is there yet. Suggesting that the teachers will find it hard to support the students properly. The researcher decided to have a fifth interview and also asked them what their thoughts were on degrees being completely online. The interviewee laughed and showed disbelief toward the idea, saying that teachers already have problems, e.g. communication, with implementing online courses, thinking that it would be ridiculous to have complete degrees online. The fifth interviewee also said that there are certain courses that cannot be done online, e.g. presenting or pitching. The idea here is that you need to present or pitch before a group of people, simulating the experience of e.g. presenting a new business idea to the management of a company, and it might not be the same is students do this online to each other.

5   Conclusions

The quality of the online studies depended mostly on the teachers and the students. More specifically, the experiences differed. Some thought the quality was better than the traditional in-class studies, and others thought the opposite. 3/5 students indicated that is was easier to pass a course online. Regarding the quality of the online studies, 3/5 students thought that the teachers' biggest challenge in attaining good quality is engaging the students online.

When asked about the quality of the teachers, 4/5 students report a lack of engagement. One student posited the teachers' quality was better online, nevertheless, that student also claimed to be much more suited for online studies, since they did not enjoy a restrictive school schedule. The best student experiences of teachers were fast responses to students, good feedback, good and more frequent communication between teachers and students.

All the students agreed that the online studies did not give them as high of a level of feeling of connectedness as did the traditional in-class studies. The reason for this was lack of engagement in the online studies.

All the students were in unison of the most common cheating technique. Doing the online exam together with a peer or a friend while searching for answers from the internet or from the course material.

4/5 students that were interviewed claimed that they had used the internet, 3/5 said they have done an exam with someone else or in a group, 2/5 said they use the "control+F" command on the keyboard.

The students agreed that the motivation for cheating was that there was no barrier to cheat. The second answer, which 4/5 students agreed on, was that the students wanted a higher grade or simply wanted to pass the course, which led them to cheat. One student mentioned laziness as a reason for cheating.

Based on the student's experiences there is very little clarity on what the teachers say about cheating. Some teachers said the tests are individual, some said nothing. Almost no teacher mentioned the use of internet being discountenanced. 3/5 students said they think the teacher's area aware that the students use the internet. Two of those three said that because the teacher's area aware of the use of internet, they design the questions to be very difficult.

Two of the students thought that if the teachers did not define cheating, then there could not be an act that would be regarded as cheating. One additional student said that the use of internet was not cheating. The remaining two students said that any of these, or previously mentioned, techniques constitute cheating.

Here is the gist of what was mentioned as ways in which to improve the online studies and exams: 1) essay questions, 2) well designed multiple-choice questions, 3) shorter time-limits in the quizzes, 4) teacher should be in agreement over what constitutes as cheating and inform the students about that, 5) have the online exams in a physical room, 6) better/more communication and webinars for engaging students more, 7) have a platform which prevents students from using the internet on the same device on which the online exam is being conducted, and finally 8) have some biometric verification system.

5.1   Recommendations for teachers

One tremendous problem that this University has is that the teachers are not in agreement over what constitutes cheating. There should be clear rules on what constitutes cheating. Those rules should be written into the University's policy statement to be enforced. A rule or law that is not enforced is essentially non-existent. This seems to be the case at this University. The teachers should inform the students of what constitutes as cheating at the beginning of every course. When academic dishonesty occurs, the rules and procedures can be found in the University's policy statement.

The teachers who instruct the online courses should not have online exams to begin with. Since there is currently no system that can verify that the students are doing the exams individually, or that someone else is doing the exam for them. Thus, instead of online exams there should be more essay-like assignments which require the students to apply the knowledge they have acquired during the online course. What makes this model better, is that there is an anti-plagiarism software that manages and check the submitted assignments for plagiarism. Consequently, copying from your peers, or anyone else, becomes impossible. This will constrain the students to write the assignments by applying their own knowledge and understanding of the subject. Furthermore, the assignments should be weekly, to avoid someone helping the student on a bigger project. It is considerably more difficult to find someone to complete a student's assignments weekly, if the assignments require two to three hours of work weekly. This will inevitably lead to an increase in the teachers' workload. Hence, the teachers might be reluctant to change to this model.

Nevertheless, if the teachers still insist on having exams online, then here are some small things that can be done to mitigate cheating. The multiple-choice questions should be designed so that all the choices can be correct. None, one or potentially all the choices are correct. This means that the students must tick the boxes which they think are correct. This is a considerably more arduous task, since the students are required to check if all the answers are correct, compared to finding only one that is correct. Second, the time limit should be one minute to one minute and 30 seconds per question to avoid giving the students time to check answers from the internet, course books, or their friend.

Third, the online exams should be proctored and conducted in a physical room to verify who are completing the exams and that those completing the exams are not using the internet. To prevent students from using the internet in the exam room is achieved by the teachers' vigilance. If the physical exam room cannot be organized, then there is no way to stop students from having someone with more competence help them during the exam. Another option is that someone else completes the entire exam. The fourth suggestion is to have software which prevents internet access on the computers through which the exams are being completed. If the exams are conducted in a physical room and the computers have software that prevent internet access, then the only techniques to cheat start to resemble those that occur during traditional pen and paper exams (e.g. writing answers on your palm or water bottle, checking other students' answers, etc.). The latest scenario is assuming that there is no hacker in the class who is able to circumvent the software on the computer.

Fifth, the questions should be selected from a pool of questions. This means that if there are students who are completing the exam together, they will get some different questions. The sixth measure is to have those questions randomly selected, to produce a different sequence of questions to each student.

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Tables

Appendices

Appendix 1: Questionnaire schedule

Let us start the discussion with your experience of online courses, and what you think of their quality compared to the traditional courses in the classroom?

- The quality of the teachers?
- Level of feeling connectedness, online and at school?

Could you please define all the different types of cheating that can occur in the online environment?

- Are the cheating techniques normal to students at your current school?
- What is the most common method of cheating in your mind?
- Which cheating techniques have you used (if any)?

Who did you cheat with?

- Why

What do you think was the motivations you cheated?

- Why?

Do teachers define cheating?

- How do they define?
- Do the teachers tell you not to cheat?
- Do the teachers tell you what you are not allowed to do?
- How often do they define cheating to the students in the different courses?

Do you think the methods you've used is cheating?

What could be done better in the online exams?

- Structure of the online exam?
- What Kind of questions?

Question added into 4th and 5th interview:

What do you think about offering entire degrees online?

Appendix 2: Transcript of interview with Pentti

Transcript of the interview with Pentti Pekkonen.

R -This is the interview for my thesis, and we will be discussing on the topic of your experience as a student of cheating in the online exam environment. Your name has been changed for this interview, so, no one will know who you are even when I'm writing the report of this interview, and so, you chose a name that is…

P -Pentti Pekkonen

R -Pentti Pekkonen. Nice to meet you Pentti.

P -Nice to meet you Jafet.

R -So, to start of I would just like to ask about the quality of the online studies because, if I understand it correctly, you have… or have you done online studies and normal studies?

P -Yes, both.

R -What do you think of the quality compared to each other?

P -Quality of the courses or the tests?

R -Both.

P -Well, the quality of the online lessons are always a bit, I say, wider because they tell everything in like, how could I say it, more rapidly.

R -Yes

P -It depends like if it's a scheduled study, or is it just an open study where you can study everything in one week if you want to but, I think the quality of online studies are more widened and they tell everything more precisely…

R -Yes

P -…because at least from my experience from the normal courses it's… the subjects are not really related to the actual courses sometimes…

R -Okay.

P -…and sometimes it's… you get a lesson about something completely irrelevant to the actual course or test or, that's my experience.

R -Okay, so what about the instructors, the teachers of the course?

P -In both?

R -Yes.

P -well, we have pretty much the same teacher in our school in the courses so, they don't differ that much.

R -Okay.

P -But the one, I've been having a few courses from another University of applied sciences and that was really good, they told you what to do and if you needed help they helped you pretty fast. In our school it takes a while to get help. But it depends on the course because we have also good teachers who help you and if you wanna learn the subject you will learn.

R -Okay, good to hear. What about the feeling of connectedness in these online courses compared to normal courses?

P -Connectedness to the subject or the course or the teacher or the…

R -The course as a whole.

P -Mmmhm… quite a hard question haha.

R -Okay.

P -It's, it's pretty much how you take it. What's your own attitude towards the subject 'cause you can manage all of the courses pretty easily so, if you don't wanna learn about the thing you won't feel that connected to the subject or teachers or anything else. Because it, well, it depends on the courses, at least in the security business they are related a lot to each other so you already know a little bit about the subject before you actually do the test and also you do not need to do that much effort to the exercises or whatever you have in the course. We had in physical security some kind of a bigger task that we did, and we still got a good grade, but you did not need to do that much effort towards the learning itself. So, I don't think you will get that connected to the course and subject if you don't try to learn the things itself.

R -Okay. So, since this is about cheating more specifically, so can you define what cheating means to you and some examples of cheating in the online environment?

P -Well, it's doing something against the rules, basically doing something that is not allowed. But also in life I think that if someone doesn't say no, then it's allowed.

R -Okay

P -So basically, if it doesn't read somewhere that "this is not allowed" then it is allowed.

R -Okay, haha. I understand. Are there any specific cheating techniques that are in the online environment, or online exam environment, that differs from the usual classroom?

P -Well, obviously yes because there is no one there seeing what you are doing, so there are a lot of different techniques to cheat in the online environment.

R -Like what?

P -Well, you can have a professional friend, if we are talking about the actual online tests. If you have a test in law, then you can have a friend who is a lawyer to do the test with you and at least help with it. You can do it with other friends who are more professional in the area and you can use Wikipedia, even though it doesn't help but…

R -Haha.

P -…I don't know, if there is like, for at least experience from my school we have usually the same test, like, I can ask a friend who is in the third year and he has ready templates because they already have the answers from the last years.

R -Okay. So, if I understand correctly, you are not present at school when you are doing these test, like, you can be anywhere basically. You can do these test from anywhere?

P -Sometimes yes, it depends on the test, but sometimes you can do them from anywhere. Sometimes you need to be in the room and still do it online.

R -Okay so, does it prevent anything if you're in the room?

P -Well, at least the… the physical help from… from your friend or mom or father, and you can't like call to any one for help.

R -Okay, what do you think is the most usual cheating technique?

P -I think that if doing it with a friend is cheating then that's the easiest or most common way to cheat.

R -Okay, well aa… do you think it's cheating to collaborate with a friend on a test?

P -No.

R -Okay.

P -It might be if the teacher has said that don't do it with a friend but I think that if you do it with a friend who has the same studies and is in the same class and you might actually learn something when you doing the test. If you ask each other that is this this, or is this that, or right or wrong, and your friend says "yeah, I remember that one", even though you don't re-member it then you might learn it, but if you just do the test and you get "this question you failed, this question you failed, and this was correct" then you don't, or at least I don't check the correct answers after the test if I passed.

R -Okay.

P -I just, you know, "okay, those questions were not for me" and move forward.

R -Okay. So, you don't think you really learn from these online courses or do you?

P -If I do them alone no, no. They're just test to see if I learned them before or not.

R -Okay, okay.

P -But when I do it with a friend, I might learn something.

R -Okay, and so, you have used these cheating techniques?

P -Yes.

R -Yes, you have, alright, okay. Is it the only technique that you have used? Just collaborating with a friend?

P -Mmmm… well, obviously I have used Wikipedia, but it doesn't help really.

R -So, the internet?

P -Yeah. But I think most of the test. I think I had one test where they said that you're not al-lowed to use different internet sites, you can only use the book that you have but that's dumb I think because, at least I think that the teachers know that all the students use the in-ternet. If you have possibility to use it, then you use it. So, I've used internet and… and on one test a had a friend with me from the school.

R -Okay, okay. So, you say that you think the teacher knows because they've allowed it to happen, when given the chance?

P -Yeah, because it's so easy, it's so easy and you really can't get caught.

R -Okay. Is there any chance you would get caught by using the internet?

P -I don't think so, but I don't think it's… I don't think too many teachers says it's not allowed or denies the possibility to use the internet. I think most teacher allow you to use the inter-net because… Well, that's why the questions are so shit…

R -Okay.

P -…in my point of view 'cause their like… like "did this person say this sentence in the book", and then they differ with "is", "are" or "aren't" in the question. And their like "Pope has a hat", "Pope doesn't have a hat", "Pope never has a hat", and they use them in the test, and you can't find the answers on the internet, you can only find it in the book on one page.

R -So, you need to remember a quote?

P -Yeah! kinda. That's pretty much the questions I think. There's a lot of those kind of questions, of course we don't have questions about the popes hat but…

R -Yeah, but still… haha.

P -…Like bigger picture we have some… I can't remember a single one haha.

R -Haha, no it's okay I understand.

P -Something related to risk management, and then there are like, "which of these elements are on risk management according to this book?" and then you need to know it's from that book.

R -Yes.

P -Like, I remember having debate about something relating to that and then there was different information on the internet than in the book.

R -Okay, so that was difficult haha.

P -It's not difficult it's just dumb, I think. It's like… like it doesn't matter what is exactly said in the book if you understand the subject, I think.

R -**Okay**. Has any teacher made it clear to you that you shouldn't use the internet or how you shouldn't cheat on particular tests, 'cause you talked a little bit about that, can you explain?

P -I remember one test where we had to… the teacher said you weren't allowed to use the internet.

R -Once?

P -Once, normally I think it's a lot. At least no body says it's not.

R -Okay, so, it's not clear.

P -Eeh. No. They don't really tell you what you should and shouldn't do. Normally they say that you need to do it alone. That's pretty normal but… yeah, that's about it.

R -Okay, okay. Still one more question if you could clarify because sometimes you have test in class, but sometimes you can do them anywhere, so, what is the number difference there, like percentage, how often are you anywhere?

P -I have done one test in the class…

R -And all the other ones?

P -…and all the other ones where done anywhere.

R -Okay, so, what is that like, one in ten or one in twenty or…?

P -I'd say one in ten.

R -one in ten, okay. Alright, okay do you feel like your school friend also use these techniques?

P -Yes.

R -How about the class? The whole class, is it just your circle, your buddies?

P -I think the whole class.

R -The whole class, okay. And what do you think are the reasons for you to use these cheating techniques in the first place, like what motivates you to do them. Are there any motivations, any reasons?

P -Not particularly reason to cheat but…well, it's easy, that's why you could do it you know. And you wanna pass the test so, you wanna do it the way that you will pass the test.

R -Haha, so it's too easy?

P -It is too easy yeah.

R -And you don't wanna fail?

P -Yeah. You wanna succeed haha.

R -You want to succeed, okay. Do you think there is anything that should be done in the online environment to prevent this? Do you have an idea, anything?

P -Not really, nothing pops on my mind.

R -Nothing?

P -Maybe there would be more of the open questions to… that would tell if you understand the subject itself…

R -Yes.

P -…'cause at the moment it's like you need to read the book and remember something about the book… At least I passed all the online test just by memorising some pages, like which subjects are on which page and so on, but still I might not understand the whole concept of the test. I just remember the words, so basically the open questions would be more like, even though you can use the internet, you can use whatever you want to but…. you can be tested like, eve though you do it with a friend, even if you use the same kind technique to write or if you use the same text, you will find in the "Urkund" thing that they use in the school, "Urkund"-system.

R -Is that for preventing plagiarism?

P -Yeah.

R -Okay.

P -But, basically if you… they put all the texts to the "Urkund" database, or whatever it is then even though your friend has done the test years ago, two years ago, the same test with the same question, you'll still get caught in the future if you use the same answers, so that's why open questions would be better.

R -Okay.

P -You can actually see that somebody knows what he's talking about, even if it's not the same course or, or there is nothing from the book that you had to read.

R -Okay, okay. Is there anything else you would like to say about this subject or…?

P -No not really. Cheating is easy…

R -Haha okay.

P -Cheating is easy in the online tests.

R -Okay. Well thank you Pentti for this time.

Appendix 3: Transcript of interview with DJ

Transcript of the interview with DJ.

R -So, I asked you to come up with a name that I would refer to so that no one would know that it's actually you sitting here, but it's someone else...

D -Yeah

R -...so what is the name that you would like to use, Please?

D -Well, the name that I would like to use is DJ.

R -DJ, alright. Hi, DJ. Welcome to this interview.

D -Thank you.

R -So, correct me if I'm wrong, but you have done some online studies and online exams?

D -Yeah, I've done both.

R -Good, that's the criteria that I'm looking for. Let's kick off with the first question about online studies compared to the in class studies, do you think there is a difference there in quality?

D -Yeah, I... but that's more like a personal thing because I enjoy talking to people face to face, but I think this also depends on the teacher...

R -yeah.

D -...And what kind of classes they're actually giving because if you have some participating teachers, they'll update their feed, like every week by putting some info or putting some extra sources, and this is you know, a very educational way of doing the courses. But I also had one online course where everything was already stated like in a premade agenda...

R -Okay.

D -...and you just work that one through until a certain deadline and then your just done. And waiting for a pass or a fail or a comment but sometimes they don't even put a comment but just a pass or a fail. So, you don't really know where you're at, was it just passing because you had all the criteria, but it wasn't really good, or did you pass because it was a five minus or something... *(transcribers note: grades given on a scale from 1-5, 5 being the highest, 1 being the lowest).*

R -Mmmh...

D -...sometimes you don't know these differences, so, yeah I think it depends on what kind of study because if you have something like IT, like computer, or cyber safety or something, when you have to do something inside a program, I don't think it's a bad thing to do the online course, but if it's like very intercultural and you have to talk to different kind of people and getting different point of views, I think this is way more difficult in an online course.

R -Okay.

D -And then you have the participation of the teacher itself, which can help or cannot help.

R -So, what about the teachers, any quality difference between online and in class studies?

D -Well, I haven't noticed it a lot… well, I have like fifty-fifty online classes and actual classes in school…

R -Mmm.

D -I've been noticing that aah… more teachers in the online class are overdue with checking with the grades, or putting in some information, or putting in some new sources… while you're in class you can just ask the teacher and the person will just give you the answer immediately. When you're in an online class you're always waiting for an email, or waiting for a message, or waiting for a return.

R -Okay.

D -And sometimes things get overdue…

R -How much overdue?

D -…like aah… two days or something, while the agenda's premade and you're searching for a source but… one time I had this problem where there were six sources, and five were not working. So, one was working…

R -Haha.

D -…and then there was no answer, so, I base my report on one source and one that I found on my own.

R -Yes.

D -While the other five sources where like, yeah, okay, fine. And then you'll get a grade like two minus, or a two plus, but it's due to you not having enough information because the other sources where not open yet. And then like two days after the deadline the sources opened, or, or, the sources changed and… what the teacher said was "now you can open them", yeah but now you have an overdue deadline so you can't get a higher grade than a four or something because they'll cut your point so, things like that just happen online which I haven't been experiencing in class…

R -Okay.

D -…these differences.

R -Alright, alright. But the overall quality?

D -Oh yeah! I think… I think it's comparable, yeah.

R -Okay. How was your level of connectedness in the online environment compared to the in class environment?

D -Well, I think it's very low because… If you have the online class and you don't do skype and you don't do anything, and there are teachers who asks you to put your profile picture on so they can recognise your face. But there's also teachers who don't care I guess because they don't say anything about this…

R -Yeah.

D -…and they just refer you to a group and use the group name. So, in this case, your entire online course your name is not being used, there are no personal messages being sent, it's just the group doing the group thing within the deadlines, that's it.

R -Okay.

D -So, the connection is less there.

R – Less. Okay, thank you. Okay, so let's go into the cheating in the online environment…

D -Oh yeah, haha.

R -… so can you please name some techniques you could use in the online exam environment?

D -Well, you can always open a tab net o the… the thing that you're studying for…

R -yeah.

D -…you can also download the e-books, and then "control+find" the key words, but there's also premade programs for this, where you just fill in the question and it spots out the key words and it will give you the best google search, or the best yahoo search, or the best what-ever you're searching. So, and it works to like an index, a theoretical index that you can make when you download the e-book, you can copy the… the methods and the theories…

R -Yeah.

D -…you just put them in a big document or in an excel or whatever, and when you're seeing the question, you can like, type that one in to find the correct understanding which is faster. Things like that.

R -Things like that, okay. What do you think is the most common technique to use among stu-dents?

D -Among students… Yeah, because I'm an international student, I think also other interna-tional students use different kind of search engines to come up with the answer of the ques-tion.

R -So… the internet?

D -Yeah. I think this is the most commonly used.

R -Okay nice. well, how do you know, I mean do you do these things alone or are you with someone?

D -One I did with someone, which is even better haha.

R -How so?

D -Well, because aah… one can like concentrate on searching and one can concentrate on the answers or you split up, one goes into the books, and one goes online, or when you're with multiple people you can like divide tasks and be like a cheating team haha…

R -Okay, haha.

D -…this is pretty functional.

R -so, the tests are not done at the same time, students can do them at different times?

D -Yes. Aah… you can check in, there's different times when you can check in for the online exams, but one can do it before the other or after, as long as you have enough time to finish it, you'll be fine. But you can also do it at the same time too, but you know, it's whatever you like.

R -Okay so, how much time do you have during the test and how much is the timespan within which you can do the test?

D -Yeah, aah, that also depends on the test itself. It also depends in which way the questions are made because you have the round things and the square boxes…

R -Yeah, multiple choice and one choice.

D -…yeah, if you have more multiple choice, this will take a longer time to google search, because you have to know if there are more things correct, and the other is just one thing correct. So, if one is concentrating on the question and one is searching, and one is in the books, these round boxes are very easy to answer correctly and easily.

R -Okay, alright. And so, you have used all these techniques?

D -Yes, I've used all these techniques… and as DJ hahah.

R -haha yes of course. And so, what do you think was the reason for cheating? What is the motivation?

D -I think the motivation is actually not having a barrier. It's too easy to cheat.

R -Okay.

D -So, even though your… because I haven't missed classes I'm still learning.

R -Yeah.

D -Even though you are pretty sure about the answer, you want some confirmation and if it's that easy to get… yeah, why not use it? And, I also think it could be like a social thing, like meet up for cheat, you know…

R -Okay.

D -…meet for cheat, I'm going to open that app haha.

R -hahah, okay.

D -So, it could be like a social thing, like maybe you have an opinion about a question, and I have my opinion about a question and maybe the opinion is different, but due to our conversation we'll be able to understand the question. I think that's also one of the important things.

R -So you're talking about students meeting up together and…

D -To cheat.

R -Yes, to cheat.

D -Yeah, yeah absolutely. I'm mean that's not a new thing I guess, that's like, yeah that's really happening.

R -But you said you did it once.

D -Yeah.

R -But do the other classmates, do they cheat?

D -Yeah. well I haven't seen them doing it but I know they're doing it, because they told me.

R -Oh, they told you, okay.

D -Some were even doing it at school, just together in the computer classroom. Like, okay let's meet this time, there, and then that classroom, everybody check in on school computer and makes the exam on school computers together, next to each other.

R -Okay, okay.

D -Yeah, because nobody's controlling them, and if there's like a teacher walking into the IT-room, they won't notice you all doing the same thing so…

R -Okay. So, what do you think could be done better online, to make it better because these things are too easy?

D -Well when we are doing online exams, we are always grumpy about the square boxes, like no not the square boxes again because the round boxes are way easier to use the search engines, than the square boxes your like nooo another square box, because you know it will take more time.

R -Okay.

D -So, and if you, if you decided on having separate times to start the exam, this puts some pressure on the last one to do the exam, you see?

R -Yeah.

D -So, that's why square boxes are a good way to prevent, but it's not really preventing it's more like, you'll be more willing to answer by your own knowledge when you get the square questions, because it takes too much time to search them all.

R -So, when it's multiple choice, you do what?

D -You just go with your intuition because it takes too much time, like if you have A, B, C, and D, or even E,F sometimes, but with A, B, C, D, and they're squares, you have to check all four of them. It's always two or four are correct, so you have to check all four of them if they are correct or incorrect with the search engine, book, or whatever you are using to cheat.

R -Yeah.

D -And so, when you… with the round boxes you just check one and then you're done. So, the one takes less time. And, I think you should not… You can have the online exams, but sometimes the times are so long, I think you can shorten the time for online exams. You have a very long time to actually make the online exam.

R -How long?

D -like, two hours, two and a half.

R -For how many questions?

D -like, forty.

R -Forty, okay. Okay and then you do four people after each other…

D -And some people have dyslexia, so they get one hour more.

R -Okay.

D -So, he will be the previewer, he will check every answer and help the other ones because he knows he has one more hour than the others to do his thing.

R -Okay.

D -So, this is also being used as a possible way. But you know, I think if you shorten the exams, you have to answer with intuition because you don't have time to do the search.

R -Okay.

D -And, maybe a closed online environment for the exams.

R -yes, so you can't use the internet.

D -Yeah, so you cannot use the internet.

R -Okay, anything else you would change, from the schools perspective, to make it more secure?

D -Mmm… I find it more difficult to search on smaller devices than on a laptop, so if it's an exam where you only have to tick boxes, so only the square or the round boxes, why not use a smartphone, or tablet interface, or even an app, because if you only need to tick the boxes you don't need a laptop. If you can log in on an app and then do this, and it's closed on that phone, you have to use a different device to do the searching and then it's going to be like, an entire operation for people to cheat.

R -Ookay.

D -So, I think the motivation will be less. It's just an idea.

R -Okay, okay. Well, do you regard this as cheating, to use the internet or…

D -Ummm… No I don't think so.

R -Why not?

D -Because I think that if there is a possibility to check your answers without actually being told not to, or not being controlled not to. You can still state it's cheating, but if there is no barrier and in most of the classes it's not even told.

R -So, they don't tell you?

D -No.

R -Well what do they say?

D -They actually don't say anything about the cheating part. They just say, "yeah, you can keep your book on the online exam".

R -Okay.

D -And you'll be like "Okay". But they won't tell you "Yeah you can use the search engine", no they wanna tell you that but they will not tell you "You should not use the…", I never hear this. I never hear a teacher tell me not to use the internet.

R -Even though you can.

D -Yeah! So, they can minimise this by just telling people not to do this. Because I think some people are still, you know, true to themselves

R -Yeah.

D -So, if a teacher will ask me "will you use the internet?", I'm just gonna say yes, and he tells me I should not be doing that and helps me studying, maybe I won't.

R -But this is the reason you think it's not cheating at all?

D -Yeah!

R -Because there's no barrier, and no one says anything.

D -Yeah, I think this is actually the reason. I really think some international students don't think this is cheating or whatever.

R -Okay, alright. Thank you.

D -Thank you.

R -Is there anything else that you would like to add.

D -No, yeah aaa... I would like to say that this is a very good subject. Really, honestly, because I think this is really innovative if you can do anything about this... haha. Instead of giving people papers and pens, because this will eliminate all the chances to cheat, unless you write it on your hand or... haha...

R -Yeah, haha.

D -... primary school stuff. But I think this is very important.

R -Yeah, Okay. Thank you, DJ for doing this interview.

D -Thank you.

Appendix 4: Transcript of interview with Bob

Transcript of the interview with Bob.

R -So, this is an interview and we are going to discuss students' experiences of cheating in the online exam environment. With me here I have Bob. Nice to meet you Bob.

B -Nice to meet you, nice to be here.

R -Yes, nice to be here as well, thank you for being here, thank you for participating. First off, I would like to clarify that you have had both online exams and online studies?

B -Yes.

R -Yes, you have. Very nice. Let's start off with a question about the quality of the online studies compared to the in-class studies, what do you think of the overall quality of the course?

B -Well, the quality of those courses are not as good as those done in class.

R -Okay, why?

B -Because, it depends on the students and the way that they think and how they learn, are they a visual learner, are they more like independent learners or they tend to gain information and how they can actually show it. During the online course many people tend to just briefly do them and try to get a good grade without actually putting in effort. Where if you are in a classroom, you kind of have to listen to the teacher, even if you are not listening, your still kind of listening. People try to find where the fences are the lowest…

R -Okay.

B -Instead of umm… doing what their actual potential is.

R -Okay. Well, what do you think of the quality of the teachers, online versus in-class?

B -Well, the quality of the teachers is in many cases online so, that they tend to just publish on different post or, you know, discussion lists that they have online about "if you have any questions then come and ask me", people tend to isolate themselves and do what they might be able to do, and not go and approach the teachers as they would in a classroom.

R -Okay, okay, so, what do you think the quality is, based on that?

B -Umm… the online studies' quality, on a scale from one to 5, being maybe a two or a three.

R -And the in-class being?

B -The in-class being a four, possibly a five. In some cases, a three of course, depending on the teacher. But, the quality is maybe not as good online depending on the teaching methods. If there is, for example, a live camera where the teacher is explaining and whatnot…

R -Yeah.

B -… then that might be better than "go and do this research and write me a report".

R -Okay. What do you feel about the connectedness in the online environment, is it the same as in in-class studies?

B -Well, it depends if it's like, a group assignment, if there's a discussion list where everyone has to, you know, work together then that is okay, but if you have to do it alone then some students might not even know who their teacher is, it's just someone there writing the instructions. So, it might be, it's… in some cases it's good in some cases it's not so good.

R -Okay. Let's get on to the cheating in the online environment. So, what do you think are the different types of cheating, can you name a few different techniques?

B -Well, there is of course in an online exam at the same point, people can work together in a given classroom.

R -Okay.

B -People can try o plagiarise by copying something off the internet and not get caught.

R -Oaky.

B -Umm… people can try calling each other during the exam if there is no monitoring. Yeah that's pretty much different types of cheating.

R -Umm… Do you think these are normal to other students in the online environment?

B -It is quite normal because even if teachers say cannot work together people do tend to work together.

R -Okay, what do you think is the most usual technique?

B -Most usual technique among students, if you can call it cheating, is probably umm… if it's an open book test, or even if it's not, they tend to work together and search through the internet to find the answers.

R -You mentioned "if you can call it cheating", as in working with other and looking up answers from the internet. Do you think it's cheating?

B -It is cheating, but it depends if it's an open book test or if it's not defined separately then it's cheating, because exam are supposed to be done alone and concentrated on you yourself, and what you know and not what others know, and not sharing opinions, because otherwise it would not be an exam, but some kind of discussion where people can say whatever they want.

R -Well, how do teachers define, or do they define?

B – Well, for example, they can see if people have the same answers or if it's like a multiple-choice question, and there is four to five students answering the same questions then it's cheating because you are not doing it by yourself, you're doing it with someone else.

R -Okay, but do the teachers say that can or cannot work together, how do they define, do they say anything?

B -Some teacher do define that you can work together in the groups, some teachers don't. Some teacher tend to, if there is a time for the exam to be taken, for example an hour and a half, they tend to shuffle the questions around so that you cannot work with a peer.

R -Yeah.

B -But people bypass that by doing one exam first and all focus on that one and then doing the next exam and just fill in.

R -Okay, yeah. How many online exams have you had?

B -I have hade roughly three or four online exams in my past, and they have been limited to roughly one point five hours with roughly thirty questions, and the questions having one choice or multiple choice.

R -Okay, and how many teachers defined cheating, how many said that you cannot...

B -None of the teachers actually defined cheating, that you cannot work with someone, they just give us a given time... how long we were supposed to do the exams, and just the instructions on how you are graded.

R -So, nothing about "you cannot use the internet, or a friend or"...

B -Well, like I said, the exams that I have done have been based on open book, if they have been online. So, you can use the presentations or pdf's that have been in the course, or online. But it will be mostly focused on the questions that have been given us during the lectures.

R -But they wouldn't say that you couldn't be with a friend?

B -Not separately, no.

R -Okay, okay. And which cheating techniques have you used?

B -Well, I haven't really used any cheating techniques on online exams 'cause, like I said, I've only had like four or five and they've been open book exams. If you can call it cheating we are bypassing using control + F to look for search word instead of actually doing prior work and knowing the questions, but trying to find the answers during the exams by using control + F, for example, for key words or key concepts.

R -Do you think these tests are effective if you can use this control + F?

B -I honestly think that it's not effective. The only way for me to know if actually someone knows what they're doing is having a paper and pen, or having an online exam that is monitored where one can only show what they have in their head. And it doesn't show that much skill but in an open book exam the questions are usually much harder because you actually have to answer the question that is given and you cannot bypass it, you have to give proper facts because you can use open sources, but yeah.

R -Okay. So, what do you think is the reason people cheat, why they use the internet or control + F or...

B -The reason people cheat is probably the fact that they know they don't have anyone monitoring them, and that they can get a better grade because they want to get a higher GPA or just want to pass, because everyone wants to pass and everyone want, of course, better grades.

R -Okay. So, what do you think should be done better then? you said you don't like some of the tests.

B -If we're looking at online exams than they should be monitored with facial recognition, for example, different biometrics for exams to get to know what actually someone knows, and

not just having open book because, some of the online exams have to be open book because it's impossible to know if someone is cheating or not…

R -Yeah.

B -… 'cause if you tell someone to go home and do an exam and not to use any sources, the chances are most people are going to use sources, and they'll just say they haven't been using if it's not an open book exam.

R -Okay. Well, what about the structure of the online exam, can you do anything better there? You're now thinking about authentication and monitoring. What about the structure?

B -The structure of the exam is fine, maybe it should have more writing instead of just multiple choice questions umm… actually having to think about something to write instead of just guessing, because anyone can just guess a question if it's right or wrong, if it's a fifty/fifty.

R -Okay.

B -So, maybe the structure could be some multiple… umm… multiple questions and then something to write.

R -Write as in?

B -Just write in, if it's a topic then you have to write about it and umm.. for example, "say why this is good, why is this bad. What are the advantages, what are the disadvantages", instead of just having multiple questions.

R -Well, what does that help then?

B -It helps to show that the student knows and understands. Take what they see, if it's an open book test, and connect ideas instead of just, you know, guessing. It shows that they can explain it somehow, their knowledge, instead of just guessing the answers.

R -yeah. Let me just get back to this one question, maybe you answered it already, but do the teachers tell you not to cheat?

B -Well, the teachers tell you not to cheat in someway, but yeah, they tell you that it's an individual exam. They said you can do it at school or not. They don't tell not to cheat, they just predict, maybe, that you're not going to cheat.

R -Okay.

B -But they say it's an individual exam of course, don't get me wrong there, it's an individual exam.

R -Yes.

B -Maybe they should go through cheating a bit more, because it's something that's… maybe popular, around the world, 'cause people tend to cheat. They should actually try to do something about it to monitor the exams and not just say "Don't cheat".

R- Okay. Well, what about the classes that you've been in, is cheating usual?

B – People do tend to, from what I've seen, if it's a big auditorium, people try and take notes on their palms or use phones, but maybe the monitoring could be a bit better.

R -But what about the online exam environment? Do people cheat there? Do they do it together with friends?

B -They do. That is a problem. People don't tend to work alone, they tend to use their peer, which is cheating.

R -Okay, you think it's cheating?

B -Yeah, I think it's cheating because if it was otherwise categorised as a group assignment or group test. So, if they tell you everyone is going to have an exam at the end of the semester, that is pretty clear that it's going to be an individual exam.

R -Okay.

B -It would otherwise be marked as a group exam, and then every group would be assigned, like "this group has this, and the other group has the other one", so it is cheating because you're not using your own knowledge, but you're putting forces together and helping each other.

R -And how many in a class would do this, say in a class of 20, in an online exam?

B -I would say maybe half.

R -Half.

B -Yeah, there are some students that like working alone, but there are some students who tend to help each other and try and umm… try to answer the questions together and try to find the answer to the questions together.

R -Okay, well, that's great. Thank you Bob for this interview, this helped me a lot.

B -Thank you, thank you.

R- And thank you for your time.

B -Thank you.

Appendix 5: Transcript of interview with Anna

Transcript of the interview with Anna.

R -Nice to meet you Anna and thank you for coming to this interview.

A -Thank you.

R -In this interview we will be discussing the students' experiences of cheating in the online exam environment. And if I understood correctly you have done some online exams and some online studies?

A -Yeah, that's correct.

R -Okay, so let's start with just a regular question. What is the quality of the online courses compared to the regular in-class courses?

A -Well, I think it depends on the teacher, how much effort the teacher is willing to put into the online courses…

R -Yes.

A -… But umm… it depends a lot on the students themselves as well. Like how much effort you are willing to put in, or if you can go where the fence is the lowest haha…

R -Haha, yeah.

A -… you usually do that, but if you have a regular course with a teacher breathing down your neck, because it's like, you're physically there but umm…

R -Yeah.

A -… it's an interesting question because actually, one of the best courses that I've done was an online course, but I feel like, the teacher gave us a lot of attention and time. So, I would prefer a good teacher in an online course over a normal course.

R -Okay. Did the teacher do something else that was good, like you mentioned a lot of attention, in what way was that good or…?

A – Well, he gave us a lot of good comments and umm… good… what is that word, well if you do an assignment or an online exam you get a full feedback and not only pass or fail and umm… something that you can evolve yourself on and I think he really good separated the… like the students, the ones who struggle and the ones who didn't struggle, so he would give something to the students who didn't struggle with the course, something to struggle with.

R -Yeah.

A -I mean he could give the feedback based on the students know-how and skills.

R -Okay. My next question would be about the quality of the teachers, but you had this one teacher, so what is the overall of the teachers online and in-class quality?

A -It depends, it depends on a lot but umm… in my own experience, if I can only reflect on my own experiences and opinions, all the online course teachers have been better than the regular course teachers.

R -Okay.

A -Yeah, in my experiences, but maybe it's because the online environment is more suitable for me because I can make my own timetable or do it whenever I want rather than being on Tuesday nine am on a lecture.

R -Okay, so you like more the freedom of…

A -Yes! yeah of course.

R -Okay. How much connectedness do you feel in the online environment compared to the in-class environment? Like, connected to the class as a whole?

A -Well, not in the online environment, it feels like it's just me on the course haha, umm… There are a lot assignments that say we should read through the other students assignments and that after the assignments they will be published to see by all on the course, and comment and learn from the others but I don't do that haha…

R -Haha, okay.

A -So, at the lecture you kind of have to put in the effort to speak with other students and discuss. So, I think that with the regular classes you can say so, I'm more connected than with online studies.

R -Okay.

A -I don't mind.

R -Okay. And, so in this online exam environment, can you define or name few cheating techniques that you think occurs?

A -Umm… Only the exams or assignments as well?

R -You can name both.

A -Umm… for exams, well, it depends on what counts as cheating. Of course, if you have an online exam you have the possibility to go through the internet and search in google and I think the teachers know that haha…

R -Okay

A -… and umm… they design the exams so that we don't have the time to search all the answers, if it's, what is it called multiple…

R -Multiple choice questions.

A -… multiple choice. But at least the exams I've taken online was multiple choice exams, so, I don't know if google counts as cheating but umm… one fact is that you can do online exams with groups, I mean you can sit down in groups with laptops and ask each other "what did you put in here, what did you put in here?", "can you google this for me, and I'll google that for you?", or someone else can do your exam, that's quite easy.

R -Yeah.

A -Okay there is always the possibility that if you haven't done the exam and there is the re-take, that the exam is the same and you get the answers from your friends.

R -Ookay.

A -But I haven't done that, I have always been on time, never done a retake.

R -Okay. Anything else, any other types?

A -Well, if there are free-text fields or an essay, you can do plagiarism, or use someone else' material, or someone else' text or use you friend or mother to write the text for you.

R -Right, right. So, are these cheating techniques normal among the students?

A -Yes! haha, yes, yes.

R -Yes! Okay, okay. Which method do you think is the most common?

A -I think it's the using your friends.

R -Using your friends.

A -Yeah. Doing it with your friends or giving the answers to your friends, because the students usually do these exams together.

R -Okay, and have you used these techniques?

A -Yes!

R -Yes, okay. Just the one with the friends or?

A -Well usually when I do an online exam I had at least one friend on the phone with me and we discussed the matters, but you can choose which one haha.

R -Okay haha.

A -But I've never sat with my friends and everyone has a laptop, I've never done that. And if googling counts as cheating than yeah, I've done it.

R -Yeah, okay.

A -I usually choose discussing with a friend during the exam the questions and the answers.

R -Okay. And you said you call a friend to discuss…

A -And chats.

R -And chats, okay. What do you think motivates you to cheat, what was the reason you cheated?

A -I don't know if there's a reason or if it's just a habit, because umm… it's not like re-stricted, no one tries to stop you from doing that and it's an obvious option to score better if you discuss with your friends and you have a visual understanding on the correct answer. I never really appreciated exams because I don't think they tell the level of knowledge.

R -Yeah.

A -Maybe that is one reason why I don't do them strictly haha.

R -haha.

A -Or, I cheat if it counts as cheating. so, that's the reason, I don't believe in exams.

R -do you think the teachers define cheating in the class or online?

A -Well, I'd say anything from googling to discussing with your friends, or use someone else' text, or plagiarism, or someone else does your exams, I think the teachers aren't so… how do you say… they don't have such a wide pro… what is it… aspect on what counts as cheating. I think the teacher think that the exams are made with one paper, the student and the pen.

R -Okay.

A -Everything else, I guess, counts as cheating, of course they know that if they gave us mate-rial online that we can just search from there, and maybe that's part of the umm… reason

why they try to make the exams more difficult. But umm… I think that everything that we do counts as cheating, from the teachers point of view.

R -Okay, but do they say these things? do they say not to use the internet, not to use friends?

A -It depends, sometimes they said that umm… that these sorts of teams happen so, please don't, and if you do it's a way of cheating and it's your own responsibility and it effects your own learning and bla bla bla bla…

R -Okay.

A -They try to make us feel guilty about it. Sure, the teachers know that it exists, and even teachers who say that of course you can google, but then the exams are way harder. And limited time, so, the teacher gives like forty-five minutes to answer sixty questions, so you just don't have the time.

R -Yeah. So, you think that at least most teachers define and tell the students that these are the things that you are not allowed to do?

A -yeah, but they also recognise that the students do it any way, or at least some of the teachers.

R -okay. What do you think is cheating, how would you define these techniques as?

A -Yeah, yeah. If you do it with your friends then I would count that as cheating, but it's not that bad of cheating, like if you haven't done anything, any effort for the course and then you do the online exam in a way that your friends tell you all the answer and they already finished the exam and you have like 15 minutes left and you haven't done anything and so, I count that as cheating.

R -Yeah.

A -Because it's not your own effort that goes into it. Googling not so much because I think the teachers acknowledge that we are in our twenties and thirties, and we google things, like what else hahah. It's what we do.

R -Haha.

A -Not googling but if someone gives you the answer straight, I think that's cheating. It harms yourself, that's what the teacher says.

R -Haha. Okay. You mentioned the questions, so, how difficult are the questions, and can you know the answer without google?

A -Yeah sure, if you read the material they have provided umm… there's a lot of links to e-books and some articles even if you read it through and you really, like take it in, then you're able to answer of course, but I don't think a student want's to read two e-books and ten articles to one online exam. So, of course there is the possibility to know the answers.

R -Okay. Well, how would you then change the questions, or the structure of the online exams?

A -That's an interesting question.

R -Because you said you don't believe in online exams.

A -Yeah. I don't believe in exams in any particular way. Of course, I believe in exams in some level, but umm… I don't think an exam should tell skills and competences one has.

R -Yeah.

A -I would maybe change it from the multiple choice question to free text…

R -Free text.

A -… format, because in that way it harder and you need to actually think what you are going to put there, and the multiple choice questions are so that you can, sometimes at least, see which answer is the obvious answer, and the other three are made up by the teacher, and you can see from the structure of the text or, the quality of the answer you are going to put. But there are also good multiple choice questions. But that one way to make the students think more, and it would take more time to answer the questions.

R -Yeah. Do you think there is something else that would stop students from cheating?

A -well, I think the time-limit should be adjusted to the level of the questions. There are different kind of students of course, some are harder and some easier for other but, like if you have twenty questions and sixty minutes, of course you are going to google everything.

R -Yeah.

A -Of course you are going to make sure three times that your answers are right, if you want a good grade. I think time-limit is one crucial thing, I mean I have an exam coming up and there are forty-five questions and sixty minutes and that makes me feel like I need to study a bit, I need to know where I can find the answers, if I need to find them. But if I have twenty questions and sixty minutes then no stress about it.

R -Yeah.

A -I know I can google everything because then I have the time, so that's one aspect. I don't know if umm… if they could somehow restrict the googling or, give the exact material or… not monitor but… I mean if you have an online exam and you would have to come to school to do it in the class room with the other students and the teacher, I don't know if that would affect the level of cheating like googling.

R -Yeah.

A -But if you're just at home on your couch with your laptop, you don't have any outside pressure not to cheat.

R -Yeah.

A -Because you cannot restrict the umm… there's no way the school can do some internet protocols to prevent students from googling in another window, if you have the exam open in another window. These are some small thing that would lessen the motivation to cheat.

R -Yeah, yeah, because now you think it's too easy to cheat?

A -Yeah, way too easy.

R -Way too easy, haha okay.

A -Yeah, but then again what counts as cheating so…

R -Yeah. Still about that, do you think other students think it's cheating to do exams together with other students?

A -Well, I don't think any of the students would consider it as cheating, but if we put them around the table to discuss about it then I would think that most students would think "alright it's cheating, but that's what we do". And who does not cheat, but I do think that the general opinion is that it's cheating, once you start to think about it.

R -Okay. Is there anything else that you would like to say about this particular topic?

A -Umm… let me think. Well, not like this but, I am interested in how they are going to implement the degrees, if they are going to put the whole degrees online, I'm curious to know how that might work?

R -Yeah, yeah, me too.

A -As the possibility for us to online and regular classes now is like… well, if I have 210 credits on my whole degree, I've done maybe 20, 25 online, and that's not much. I don't know how it supports the learning, it depends on the field of course, if your doing accounting or security, I don't know what degrees they're putting online but umm…

R -Well, I think eventually all of them will be.

A -Mhmm… Yeah, I don't know how it's supposed to help the students and help the learning, because I feel like now if I have an online course and the teachers say that they will be available at this time in this class if you have any questions or need tutoring or anything to support, I don't think anyone goes there.

R -Yeah.

A -So, the ability to support and the actual umm… once they graduate from the online degree, what is the level they have like, it really scares a bit!

R -You're nervous about that?

A -Yeah. I don't believe that's umm… we're not there yet. Or I don't know, it's my opinion.

R -Okay, but what do you think can happen then?

A -Well, umm… If the students can work after that or be able to go directly to working life, if they are competent enough.

R -Oh yeah.

A -Because if you have a degree and you get a job and you go to work, you cannot expect the courses to tell you all the time what to do, and you need to perform and develop and do whatever you do, I don't think that's good. If you do everything by yourself, on computer umm… I don't think you can really appreciate that much your own degree either.

R -yeah.

A -Because I think I read some research or article or opinion or some such, that the employers don't appreciate the online degrees as much as the normal degrees…

R -Yeah.

A -… Something like that, I don't remember exactly what it was. Let's see, interesting!

R -Haha yeah, let's see. Thank you, Anna, this helped me a lot. Thank you for participating.

A -Thank you.

Appendix 6: Transcript of interview with Tomi

Transcript of the interview with Tomi.

R -Alright, nice to meet you Tomi.

T -Nice to meet you too.

R -Thank you for participating in this interview. This interview is about the student's experiences of cheating in the online exam environment. If I understand correctly you have had an online course and an online exam?

T -Yes.

R -Yes, okay. To start off the interview, can you tell me a little bit about the quality between the normal courses and the online courses?

T -So first, my online course was separated into three themes. For the first theme, at the end we had two online exams, and so did the exams and I thought maybe they have a high security during the exam, I'm not going outside to the website, but no it wasn't. You open the page and you can do everything you want.

R -Okay.

T -You can open other tabs, you can use your phone, your notes, everything.

R -Yeah.

T -I was pretty intense to do it, so the first one I did only with my knowledge and I got eight points from ten, which was good because I study. So, then I think what will happen if I open another tab or go to google. So, I did the first one, and then in the second one I cheated a little, and what happened, nothing happened. It was weird, because it's an exam...

R -Yeah.

T -... but you can do everything you want, but I think this for our learning is not good. Because if you're cheating you really don't learn.

R -No.

T -So, this was the first theme, and the second and the third was, in my opinion, a great course because the teacher gave us the material, they made a webinar maybe once or twice a week, and in the webinar they explain you the content of the course, it was content marketing, so they explain you everything, and then you have to select a real company and you do the theory in practice.

R -Yeah.

T -So, you cannot do cheating because you had to create your own material. So the second and the third themes were great because you had to create your own material, so no cheating.

R -Okay, okay.

T -And I had another course which was in a classroom but the final exam was online and you had six days for do it.

R -Six days?

T -Yeah. From twenty-fourth to thirtieth. So, it was open for six day, you can enter today maybe one answer, read the other, close it, find the answers and then tomorrow you might put in the answers, I don't know, you have six days for do it.

R -Was it difficult questions?

T -Actually no. In total, you can do it in one hour and a half, I think, or two, yeah two hours in total, but it was open for six days so…

R -How many questions?

T -Ten.

R -Ten questions?

Yeah, but some of them have A,B,C,D, and E. For example, one question was number five I think, I don't know, and you have to explain the concept and give an example, so five concepts in the same question. Do you understand?

R -Yes, I understand. So, it was something like an essay?

T -Yes, something like that. But it was different, some questions you had to choose, some questions you had to explain, some questions you had to calculate something umm… I think the exam was good, but not for online, because I use google to answer some question. One day was the last day of studying, and one classmate comes to me like "hey, hey, did you answer this question? Please help me"…

R -Aah…

T -And I say okay I think I put this one and this one and explained them, and then "aah okay thanks", And then go to write it haha

R -Haha okay.

T -So, if you have more friends, you can create the exam together haha.

R -Ooh okay, so, you did that with your friends?

T -Yes, I was in the library and they ask me if I help him, and I help him and gave my answer.

R -Okay. Well, what do you think about the quality between the regular and the online classes, I mean, is it better or is it worse?

T -It's worse.

R -It's worse? why?

T -I think only the online exam is worse. Because if you can do cheating you don't learn, like I said before, so, if it's online you don't study hard, you only study a little bit. If you have some question you only open google and find your answer, so the quality if worse in that case.

R-Okay. I understand. Do you think there is some other cheating techniques that you can use, other than doing it with friends and using google?

T -Maybe your books and notes.

R -Ooh yeah notes.

T -Because the online exam is based on the notes so maybe you can find some answers in your notes, I did it.

R -Okay. What do you think is the most common technique to use among you and other students?

T -I think that ask from your friend, because it's a confidante source, and maybe your notes.

R -So, not google?

T -No because the exam is focused on the course, so, google will give a lot of information but not the useful for the exam. But your friends answer correct you think, so, if they give you the answer than maybe it's correct.

R -Yeah. Was it because in the questions you had to explain so much that google wasn't good?

T -Yes. Something like that.

R -Because they didn't ask like a fact, they ask more like an explanation?

T -Kind of. It's like "this ratio, what does it mean?".

R -Okay.

T -So, when you google, they give you a lot of information about it but not the specific.

R -Okay.

T -And if you ask your friend or you take your notes, you have the correct answer in that case.

R -Okay. So, maybe there is too much information on google?

T -Yeah, too much information.

R -Okay. What was the motivation for cheating, like what was the reason you cheated? Do you think that there was a reason, a motivation for cheating?

T -Ooh good question… I don't know exactly, but sometimes for laziness, you don't want to think about this anymore, so you find on google, and it's easy way to answer. So, I think laziness is the principal answer.

R -Laziness and it's too easy?

T -Too easy yeah.

R -Yeah. Anything else?

T -Yes. One friend when they asked about the exam, they ask me the last day and almost the last hour. So, you have six days to do it but if you do it on the last day and last hour, you have to maybe do cheating for answer it.

R -Yeah.

T -Well, in that case you are busy to do it.

R -Okay. Do you think that the other students in the class with the six days to do the exam also used these techniques?

T -I'm not sure.

R -You're not sure?

T -No, not sure.

R -Just the one that asked you.

T -Yes.

R -Okay, but what do you think?

T -Well, some of them are good in the topic of the course, so maybe they didn't but I'm not sure.

R -Okay. I want to ask you, did the teachers tell you not to cheat in the online class?

T -No, nothing about cheating. They trust in us.

R -They just started the course?

T -Aha.

R-Okay. Do you think that the methods that you used are cheating? Do you think it was cheating to look at your notes or look at the internet?

T -Yeah, I think so.

R -But no one told you that it wasn't, but you still think.

T-Yeah, I still think.

R -Why?

T -Because you not use your own knowledge to answer the exam. So, if you use other sources and these sources help you I think it's cheating.

R -Yeah. Okay, okay. Can you still tell me what you would do differently in the exams, like what would you change, because clearly there is something wrong with it because it's not working? Maybe the exam structure or the questions?

T -I think online it's easy for the teacher to evaluate, and for this reason they do it. But if they could make the exam but have it in the classroom, or computer room, then maybe the level of cheating is lower.

R -Okay.

T -I think online it's good but increase the methods to cheat. Sounds confusing, online is good but have it in the computer room so that the teacher can check the students aren't cheating.

R -Yeah. Anything else, about the questions or something?

T -Well, if you have six days and a little bit longer then you should have more questions, I think this is good.

R -Okay, but do you think the time is a problem, that it's six days or? should it me shorter or longer?

T -Shorter, two day or three day is enough.

R -Okay. Still a question about the teachers. What is the quality difference between the online and in-class teachers, I mean are they better or worse?

T -No, I don't think so, that one is better, and one is worse, I think both are good. But the difference is that in the online course only the teacher talk to you once or maybe twice a month. So, you are like doing alone, and you think that okay I'm online and I have to do this, but the teachers really don't help you that much. And this is the big difference in the classroom, because you have class every week, once or twice per week, so you can ask the teacher face to face if you have a question and explain more to you than online.

R -Yes, yeah. So, you don't feel as connected?

T -No, I don't feel it.

R -Okay. What do you think the teacher should do better to connect more with the students?

T -I think, maybe create more webinars umm… and ask constantly are you good with the work, or do you need help, do you understand correctly, because there is only the webinar and then done! Nothing more. But if maybe they send you a message every week like how are you doing, do you need help, do you have questions… maybe it will be better.

R -Every week?

T -Yeah, I think every week send you a message.

R -Yeah okay. Do you think it's important for the students to be in contact with each other?

T -Yes, absolutely.

R -And in what way?

T -If it's online then there is only the platforms, yes messages and webinars… I think this is all. But constantly, not once per month. At least once per week in my opinion.

R -Okay, yes. What do you think if the whole degree is online, if all the courses are online, what do you think of that?... You're laughing?

T -Hehe, I actually cannot imagine this system.

R -No?

T -No.

R -Why not?

T -Well, I don't think that is works if all of my courses would be online…

R -Okay.

T -… yeah I feel weird with that.

R -But why, why is it weird?

T -Why? Because I always talk with the teacher face to face and ask for the question, and sometimes when you have online… No, no! When you have exam in the classroom, and after that the teacher gives you feedback, or you have a presentation it's necessary that the teacher can see you how to present, how to do your pitching. And if you have the course online it's impossible to do this.

R -Okay so you think you don't learn enough?

T -…enough online.

R -Okay, alright. Okay I think that's it, I got some great answers.

T -I hope so.

R -Thank you Tomi for participating.

T- Thank you.