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Outlining the security needs of Finnish Teachers

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Outlining the security needs of Finnish Teachers

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The purpose of this thesis was to research school security and outline the security training needs of Finnish teachers. In addition to this the thesis researches the security culture in Finnish schools.

The thesis was not designated to any organization, but the starting point for the study was the authors' interest towards the subject. The interest stemmed from the authors' own experiences about school security and the risks and threats related to the subject. The subject has also been visible in the media recently, making it current.

The thesis research consisted of a two part qualitative research, which was aimed to receive detailed answers to the issue at hand and for the research questions. The first part of the research was a survey performed with Finnish teachers and the second part an interview with a Finnish school security professional Matti Waitinen.

Based on the research in this thesis the authors found answers to some of the problems and in the conclusion of this thesis the authors give their recommendations on how to improve school security and safety in the future.

school security, security culture, risk management, occupational health and safety, training, qualitative analysis

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Outlining the security needs of Finnish Teachers

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Opinnäytetyön tarkoituksena on tutkia kouluturvallisuutta ja määrittää minkälaista turvallisuuskoulutusta suomalaiset opettajat tarvitsevat. Tämän lisäksi työssä tutkitaan koulujen turvallisuuskulttuuria.

Opinnäytetyötä ei tehty millekään organisaatiolle tilaustyönä, vaan työn lähtökohtana oli tutkielman kirjoittajien kiinnostus tutkittavaa aihetta kohtaan. Kirjoittajien kiinnostus aihetta kohtaan syntyi kirjoittajien omien kokemusten pohjalta kouluturvallisuudesta ja siihen liittyvistä riskeistä ja uhista. Aihe on tämän lisäksi ollut jatkuvasti esillä mediassa, joten aihe on ajankohtainen.

Opinnäytetyössä suoritettiin kaksiosainen laadullinen tutkimus, jolla pyrittiin etsimään yksityiskohtaisia vastauksia vallitsevaan ongelmaan ja tutkimuskysymyksiin. Tutkimuksen ensimmäinen osa oli opettajille kohdistettu kysely ja toinen osa tutkimusta oli kouluturvallisuusasiantuntija Matti Waitisen kanssa suoritettu haastattelu.

Tutkimusten perusteella tämän opinnäytetyön tekijät löysivät vastauksen osaan ongelmista ja opinnäytetyön loppuosassa kirjoittajat antavat suosituksensa kuinka kouluturvallisuutta voisi parantaa tulevaisuudessa.

kouluturvallisuus, turvallisuuskulttuuri, riskienhallinta, työturvallisuus, koulutus, kvalitatiivinen analyysi

Table of contents

1	Introduction	7
2	Thesis background	8
2.1	Thesis starting point and topic	8
2.2	Thesis objective	9
3	Theoretical background	9
3.1	Finnish education system	10
3.2	Teachers in Finland	12
3.3	Legislation in schools	12
3.3.1	School laws	13
3.3.2	Additional safety and security related legislation in schools.....	14
3.3.2.1	Occupational Safety and Health Act	15
3.3.2.2	Rescue Act and fire safety legislation	16
3.4	School security in Finland	16
3.4.1	School security layers	17
3.4.2	School security exterior	18
3.4.3	School security interior	19
3.5	Corporate security	22
3.6	Divergences in school and corporate security.....	27
3.6.1	Security planning	27
3.6.2	Resources	28
3.7	Country comparisons regarding school security	30
3.8	Threats and risks in school environment	31
3.8.1	Examples of school violence.....	32
4	Hypothesis and research questions	33
4.1	Main research question.....	33
4.2	Secondary research questions.....	34
5	Conducting research.....	34
5.1	Research strategy	34
5.1.1	Qualitative research	34
5.1.2	Quantitative research	35
5.2	Research types.....	35
5.2.1	Case study	35
5.2.2	Action research	35
5.2.3	Survey	36
5.3	Research methods.....	36
5.3.1	Questionnaire	36
5.3.2	Creating a questionnaire.....	37

5.3.3	Interview.....	37
5.3.4	Creating interview questions.....	38
5.4	Study discipline.....	38
5.5	Selecting research subjects	38
5.6	Research timeline.....	39
6	Research results.....	39
6.1	Questionnaire results.....	39
6.2	Interview results	40
6.3	Conclusion of the research results	42
6.4	Answers to secondary research questions	42
6.5	Answer to primary research question	43
6.6	Research question conclusion.....	43
7	Study reliability	44
7.1	Information gathering method reliability.....	44
7.2	Reliability of entire study	44
8	Discussion.....	45
	References	47
	Figures	50
	Appendixes	51

1 Introduction

School security and safety has been an uprising issue in Finnish society. Unfortunately, lately there has been a rising trend of verbal and physical school violence and harassment which teachers need to confront in their working environment which has led to nearly 4000 teachers having to miss work during 2013 (Yle 2014). The subject of teacher harassment has been also visible in the national news and media several times during the past months. This is the primary reason why we pursue to provide the school world ways that can alleviate this phenomenon.

The Teacher Student Union of Finland stated in 17th of September 2014 that teachers should have tools and means for security and safety in their working environment. The key statement of the article was that the teachers in training do not receive adequate tools needed for safety education, creating and supporting a working safety culture and ensuring the physical and psychological safety of the teacher in the working environment. According to the article there has been an increase in the amount of teachers that have had to quit their profession due to inappropriate treatment or bullying at their workplace. (Soolibooli 2014, 7)

This statement further supported our previous experiences about the subject and presented a possibility for us to research teachers' security and safety needs to make the Finnish school environment safer for teachers and students. The purpose of this thesis is to research the issue and provide suggestions how school security and safety should be improved in the future. However further issues can rise from the fact that the implementation process requires acceptance and cooperation from the authorities.

2 Thesis background

The main focus of our thesis is to find ways of researching safety and security needs of teachers and teacher graduates who are facing verbal and physical violence, harassment and abuse in their working environment. The authors see that the primary function of a teacher is to provide education for the students, but they are always relied on to maintain the working and learning environment safe for themselves and the students. In current situation the teachers are not always capable of creating safe school atmosphere due the lack of security and safety training.

In the winter of 2014 the authors of this thesis conducted a school security and safety training event for a large community school. After the school security project the authors came into conclusion that there is a genuine need for security and safety education for school personnel and other stakeholders who work in the school environment. As a response to the needs, the authors decided to contribute their efforts to the subject.

2.1 Thesis starting point and topic

As security professionals the authors have been concerned for an extended period of time about various security threats and risks that are that may occur in the school environment. The authors have educated themselves on different types of incidents that have touched the school as a security environment. The authors have also heard testimonies from the teachers themselves about different forms of harassment and violence that persist in the schools.

The Finnish community has tried to answer the school-related threats by different sets of plans and policies, by changing legislation and by giving more rights for the teachers to deal with different scenarios. One example has been the 2014 legislation change that gave the teachers a new set of rights which will be discussed more thoroughly later in the thesis. But from our point of view all these security measures have overlooked the fact that the people who are employed in schools create the safe and secure working environment for themselves and the students of different ages. For example, the new law has given teachers the right to conduct a frisk search and go through the student's belongings and possible locker space that is held by the student. But there is not a guideline for teachers on how to conduct a frisk search properly and only some schools might have a person that knows how to teach the frisking process safely to the teachers of the school.

The authors feel, based on their personal security training experience from military and private security sector, that there is a necessity to define the needs which are vital for the upkeep and development of public school security and workplace safety. As most companies

see security and safety as a continuous process, the same ideology should be implemented in the school world as well.

2.2 Thesis objective

The objective of this thesis is to research school security, school safety and school security culture in basic education and the upper secondary level. With the gathered information the authors will define what should be done to enhance school security and safety procedures in target groups. Recommendations based on the results will be the final product of this thesis.

3 Theoretical background

In Finland school security and safety plans and policies are regulated by the multilateral legislation which concerns schools and people who are employed by the school system. The current legislation however does not regulate how the security plans and policies should be evaluated and by whom. Naturally some safety and security plans are viewed by safety professionals, for example the emergency plan is one of them, which is examined by the fire inspector. However this does not ensure that the proper actions are taken during a real emergency situation, if the school personnel have not received adequate training in advance.

As security professionals the authors of this thesis feel that school security processes should be developed towards being similar to those of the corporate security field. From our point of view the school world could adapt some processes on how business' react to different security threats. We strongly doubt that it is a common procedure that schools have continuous risk management and continuity planning processes, for example most of the publicly listed companies have a specialized team of security specialists to run risk management and security development processes. Instead in schools the overall security management is usually in the hands of the principal. We feel that this reduces the effectiveness of crisis management and preparedness planning in the school environment. This does not however per se indicate that the planning is poorly done, but it could be executed more efficiently if the teachers had more suitable instruments for conducting the security and safety processes.

This is why we feel that it would be beneficial that the teachers who are working with security planning in their schools would have a uniformly designed tool to create and maintain security documentation for their development needs. After implementing the design tool into use, it would be easier to compare the results between different schools and create new practices and policies based on the gathered information. The gathered information could also be used to improve the platform to react future threats and risks.

On the other hand, the authors of this thesis see that the current legislation already provides necessary resources that could be used by the teachers to maintain security and safety in their working environment. However the help that the active use of current legislation could provide for teachers as a safeguard is at an insufficient level. We believe that teachers in Finland have a high threshold to forward school related crimes under judicial screening and that is one of the reasons why the security and safety atmosphere in schools is decreasing. If there is no fear of punishment the rules and regulations will not be effective amongst people who are eager to test the boundaries within the school environment.

When addressing school security and the security phenomenon's that it includes it is beneficial to make country comparisons, because the functions and customs may vary between security policies and procedures in different countries. In most modern countries the legislation of each country provides guidance for the security procedures in the schools of that country. There are countries in the world that need to use more dramatic security measures when providing a safe and secure school environment for teachers and students. For example in Finland schools do not have metal detectors working as a part of their access control. However some measures used in other countries could be implemented into the Finnish school system as well.

Another topic in the thesis which will be taken into closer examination is the lack of risk management training and knowledge amongst the personnel of the school. Like the authors mentioned earlier there is no uniform risk management platform, which could be used to determine various risks and threats in a certain school. If you do not have knowledge of the key risks and threats in your working environment, it will be a demanding task to try to avoid, transfer or mitigate these factors. In the worst case scenario when the risks materialize the triggered events can cause severe injuries or fatalities for personnel or students.

There are also other types of risk-related incidents at schools, but they are damaging in different ways. In general the threats can be divided into physical and psychological threats. Another way to address these threats is by separating them into internal and external threats. Non-physical risks materializing can cause for example loss of reputation and social damage in the local community and in the school. These incidents can be for instance related to verbal abuse, rumors, discrimination, threatening and bullying in its many forms. A popular trend nowadays is for the perpetrator to use social media as a way to spread the harmful material. Unfortunately, these incidents do not only concern the students but also teachers are targeted with bullying as seen in media during recent years (Yle 2010).

3.1 Finnish education system

Finnish education system has distinct levels for certain age groups. Students in the age group of 7 to 16 years go to basic education level school. 15 to 19 years old students receive education in general upper secondary schools or in vocational institutions. The working hours in the Finnish school system are for the staff and students from 08:00 to 17:00. The school day can include several recesses and the recesses usually last for 15 minutes. This thesis will focus on the schools that operate within basic education, general upper secondary schools and vocational institutions. In addition, the authors will concentrate to improve the teachers work safety in above-mentioned educational levels. The picture below describes in detail the education system in Finland. (Finnish National Board of Education, 2015)

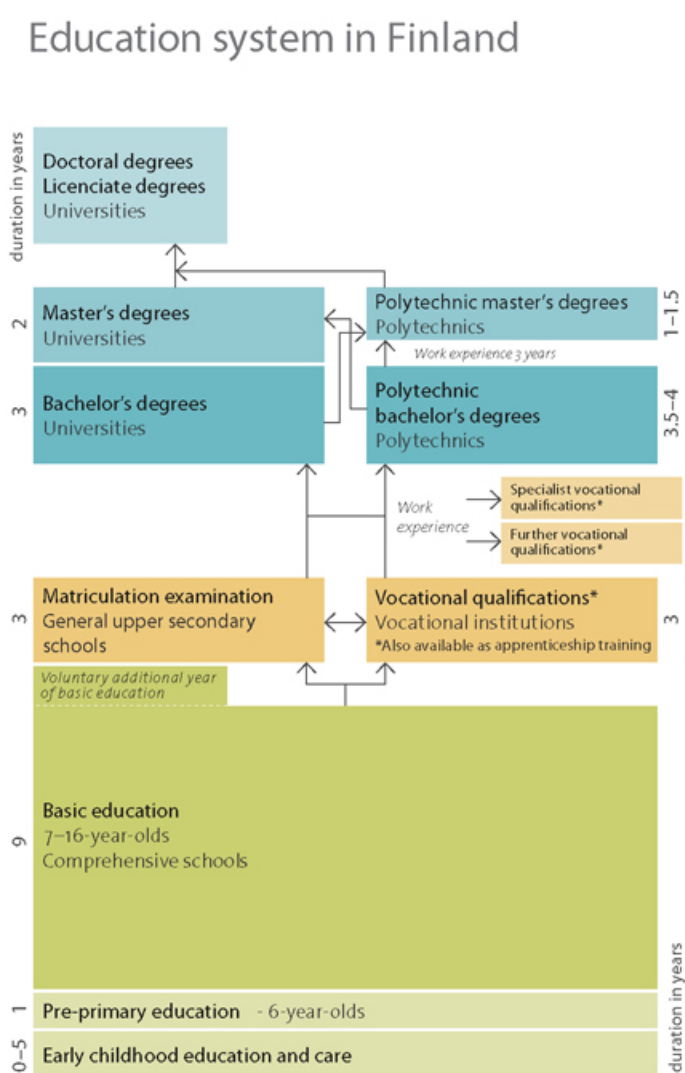


Figure 1: Education system in Finland
(Finnish National Board of Education, 2015)

3.2 Teachers in Finland

According to the Ministry of Education and Culture there are currently about 63,500 teachers employed in basic education and upper secondary level. The teacher profession in Finland is predominantly occupied by women. On the basic level education the percentage of female employees is over 70 percent amongst teachers (Ministry of Education and Culture 2014, 1). These are issues which will definitely effect how school security and safety are seen on the national level.

In general Finnish teachers who are employed on the basic education level or on upper secondary level must hold a Master's degree if they want to work as a qualified teacher. The timeframe to complete teacher studies is calculated to take approximately five years and consist of 300 European Credit Transfer and Accumulation System (ECTS) points. (European Commission 2015) Consequently 88 percent of teachers have the required qualifications. Teachers are usually employed by the municipalities and in practice this means that municipal administration makes the decisions of hiring new personnel for educational institutes (Ministry of Education and Culture 2014, 1). This does not apply for schools which operate based on private funding.

The Organisation for Economic Co-operation and Development's study which was conducted in 2012, stated that 37 percent of Finnish teachers were documented to be 50 years of age or older (OECD 2014, 494). The pedagogical skills and experience that Finnish educators possess can be seen in the outcome of international school surveys. For instance Finnish students have consistently placed well in the OECD's Programme for International Student Assessment (PISA) (OECD 2014, 5). In simplified sense this means that the quality of education is high even in international standards.

3.3 Legislation in schools

In this chapter the laws and legislation concerning the Finnish school system will be processed more thoroughly. Our focus on these issues will pertain to basic educational level, general upper secondary school level and vocational education level, because the legislation is quite similar apart from few differences. The students age in the before mentioned school levels primarily range from 6 to 19 years. For example the age of student has a significant influence on how the person will be responsible for their actions in the judicial system and in the corresponding schools. If the student is under 15 years of age he cannot be trialed or sentenced in court of law. The person under the age of 15 is however responsible for the liability in damages caused by his actions. At the same time an 18 year old student's

accountability before the law is quite similar compared to that of an adult. (Criminal Sanctions Agency, 2015)

3.3.1 School laws

The first set of guidelines provided by the legislation is the set of school laws, in the case of our study the related laws are the following: Basic Education Act (628/1998), General Upper Secondary Schools Act (629/1998) and Vocational Education and Training Act (630/1998). Educational institutes in Finland create their curriculums based on these acts. We will not be addressing the topic of school curriculums in this thesis because the subject is not related to our title but we are more interested in the opportunities that the legislation offers for teachers to improve school security and safety. The school rules of conduct and a plan to protect the students from violence, bullying and harassment are also based on the school laws mentioned in this chapter.

On the 1st of January 2014 the school laws reformed and it offered changes to the rights of the teachers, providing new lever for teachers to establish a safer school and working environment. Transitions of the law gave teachers authorization to confiscate items and substances which is used to create disturbance during teaching or which are harmful and dangerous. In addition to aforementioned, the teachers have received the right to physically examine the student's clothing, bag and space held by the student. (Finland 1998)

The authors perceive that the school law reform was necessary for the school system, but without realistic practical training and preparation the effort will be wasted. At the same time we can speculate why separate schools have unequal rules of conduct, for example how the students can use their personal cellphones during lesson. Certainly there are different types of schools, but it would be easier for everyone if the rules of conduct would be the same. A regulation like this would improve equality across the entire school system, and decrease the amount of uncertainty and the law would be interpreted equally everywhere in Finland.

Based on our understanding the current teacher education programs do not include a study unit that provides training for the teachers in frisk searching, bag searching and identifying threats and hazards. Inherently this sets the person who is performing the search, which in this case is a teacher, in danger. No-one for sure wishes that the teacher performing a search gets stung by something sharp such as a needle or a hidden blade. These can cause lacerating wounds, infection or in the worst case an infectious disease for example hepatitis C. There can be also other hazardous materials in the student's possession during the frisk search for example drug paraphernalia, noxious chemicals or explosive material.

All of the above-mentioned issues have an influence on teacher's safety at work. We have to point out that if the teacher is injured during these procedures it will be relatively expensive to society, because after a serious injury the school has to hire a substitute teacher and also pay salary to the injured teacher. Schools are already lacking financial resources on national level therefore the loss of money due to malpractice is not acceptable. Therefore unnecessary risks such as injury to the teacher should be minimized with training and increasing awareness on security matters.

3.3.2 Additional safety and security related legislation in schools

The school world is further affected by other legislation which includes laws, decrees and national building codes. Occupational Safety and Health Act (738/2002) is one of the most important laws in any workplace, because it gives directions how workplace safety should be carried out (Finland 2002). From our point of view a school is just another working environment which has its own risks and threats which need to be resolved in detail. Secondly we believe that the current state of risk and threat management at Finnish schools is not at an acceptable level, because it is lacking a situational awareness program. In this context by situational awareness the authors mean the continuous risk management process, preparedness and development of safeguards for future allocations. It seems that schools have not learned their lessons from past events, or that society is not ready for the means that would be required to fix the existing problem.

An important role of workplace safety can be seen in workplace familiarization especially with new employees. The main focus is that every person at the workplace is introduced to the rules and they have a clear picture of how different scenarios are handled within the working community. The principal of each school is usually responsible for the introduction of new employees to the workplace. In simple terms the principal is responsible for providing all the training, knowledge and rules the new employee must know, to be able to work efficiently and sustain a safe environment for everyone.

From our point of view the law withholds all the things that create the basis for a safe working environment; however the monitoring and compliance of the law in the working places could be improved by active leadership and management processes. In this case the leadership and management processes refer to taking initiative to improve the level of security beyond of that stated by the law. This can mean for example creating of safety culture in the school environment.

3.3.2.1 Occupational Safety and Health Act

The Occupational Safety and Health Act (OSH Act) is one of the essential laws that are used to create plans and policies which are used to create security documentation for schools. The OSH Act determines the existence of the mandatory occupational safety and health policy in Chapter 2 Section 9 of the law. This section of the law shall facilitate the development needs of the workplace safety and other influencing factors related to the workplace. Both the employees and employer must be aware of the plans and suggestions before they are implemented into use in a certain environment. Employees can also spearhead initiatives by creating lawful propositions to the employer and it is advisable to approach the issues at the workplace that way. (Finland 2002)

The following section of the OSH Act requires that work-related risks and hazards are identified and analyzed by the employer and the discovered risks and hazards are dealt in a proper manner. If the person whose responsibility is to conduct the risk assessment and analysis processes feels that he or she is not capable for fulfilling the task requirements, he or she must turn to the help of an external expert. In our mind this is an extremely important subject that has to be taken into account in the school environment. The risk management data and documentation must be stored and updated if a need arises. This can include a change in legislation, change in the arrangements at the workplace or an accident that requires further attention. The authors believe that the co-operation of safety professionals and school personnel can provide the best outcome for the risk management process. (Finland 2002)

In the Chapter 5 Section 45 of the law focuses on working conditions. The key statement in this section is the liability of the employer to supply the personnel with sufficient equipment in case of an emergency. In this case equipment stands for life-saving and rescue systems, fire safety equipment and essential alarm systems. Some working environments might also have special equipment needs such as water rescue equipment or specialized fire rescue equipment such as emergency escape- breathing devices. The personnel must be trained to use and utilize any and all safety and emergency equipment at the workplace to provide a safe working environment. The employer must also arrange training exercises to further improve the capability of preparedness and operative skills in a real emergency situation. (Finland 2002)

The employer has legal responsibility, under the Chapter 6 Section 50, for outsourced or third party employees at a shared workplace. The external employees must be informed and trained about the hazards of the current workplace and they must follow the same rules and

regulations as the regular personnel. They also have the obligation of informing the employer if they are subjected to risks or hazards during their work. (Finland 2002)

3.3.2.2 Rescue Act and fire safety legislation

School environment is also affected by another assortment of legislation which is vital for maintaining safety and security. This set of legislation includes the Rescue Act 379/2011, Government Decree on Rescue Services 407/2011, Land Use and Building Act 132/1999, Land Use and Building Decree 895/1999 and National Building Code of Finland: E1 Fire safety in buildings. For instance the legislation provides a guideline for emergency and preparedness planning procedures (Finland 2011) . This obliges the owner of the school facility to prepare a building use- and maintenance plan that corresponds with the requirements of the law. (Finland 1999)

The laws regarding fire safety oblige the owner and any occupants in the building or site at any given time to do their best to prevent fires and hazardous situations and to act when a risk materializes by preparing for extinguishing fires and other actions needed to save property and lives. The emergency plan shall contain a complete risk assessment of the site, markings and notes about all the safety arrangements in the site or building, a guideline for the occupants of the building to act on in case of an emergency and other measures of risk management preparedness. (Finland 2011)

All the occupants of a building shall do to their capability what they can and finally help to facilitate rescue operations and personnel. The measured tasks shall be listed in an emergency plan. The company or person responsible of their area of a building or site is obliged to create the emergency plan. If the site at question has more than one occupant the plan can and must be drawn in cooperation. The plan must also take into account if the site at question has an abnormally high risk to the safety of personnel or visitors, to the environment or possible cultural property. (Finland 2011)

The National Building Code of Finland: E1 Structural fire safety in buildings obligates that evacuation time is calculated in an officially measured manner in sites and buildings that have large quantities of personnel or other risks that can create complication for rescue operations (Ministry of the Environment 2002, 28). Naturally the before-mentioned fact can also obligate the school buildings.

3.4 School security in Finland

School security and safety resources vary throughout the country even though the schools are bound by the same legislation. Procedures and policies for school security and safety are created by people who are generally employed by the municipality administration. The structure of municipality administration related to school security and safety also varies by the size of a municipality and its local education system. The differences between schools can for example include the presence of a security person near the main entrance of the school facility. Some schools may also have other security measures such as CCTV cameras, access control and intrusion alarm systems but there are schools that are lacking all of the mentioned safeguards. This is alarming since schools do not have the adequate resources for protecting their tangible or intangible assets, and the lack of funding simply originates from the lack of assets by the municipality and state.

The lack of funding can be seen in recent articles, for example Yle news has stated in 05.02.2014 the following: "Finland's Education Ministry is planning a cut of 260 million euros in the schools budget, and wants municipalities and schools to start planning for the changes. Their plans will not go through without a fight—there have already been protests against school closures. The changes are expected to affect upper secondary schools, or high schools, the most ." (Yle 2015) This further complicates the efforts for improving school security, since the use of financial resources becomes even stricter than before. Unfortunately the safety and security measures are the first to be subject to cuttings when there is a need to find savings in the municipality even though the consequences can later be devastating for the local community. The negative effects of the savings cannot be seen immediately, but only after a crisis takes place.

In the next section of our thesis the authors will go into further detail about school security structures and divide the subject into two categories, external and internal security. Unfortunately there is no useful research data available on Finnish school building characteristics so the authors will use their own experiences about educational facilities to describe physical features and safeguards which can be found in them. Unlike businesses often do schools do not give priority to monetary assets when it comes to security, therefore the security measures at schools should be molded to respond to the needed requirements.

3.4.1 School security layers

The authors of this thesis divided the school security features into two-layer system. The layers in this case are called school security exterior and interior. From this the authors created a model in the form of a picture to elucidate the partition. In the picture number 2 the orange color represents the area of school security exterior and the blue color represents the area of school security interior.

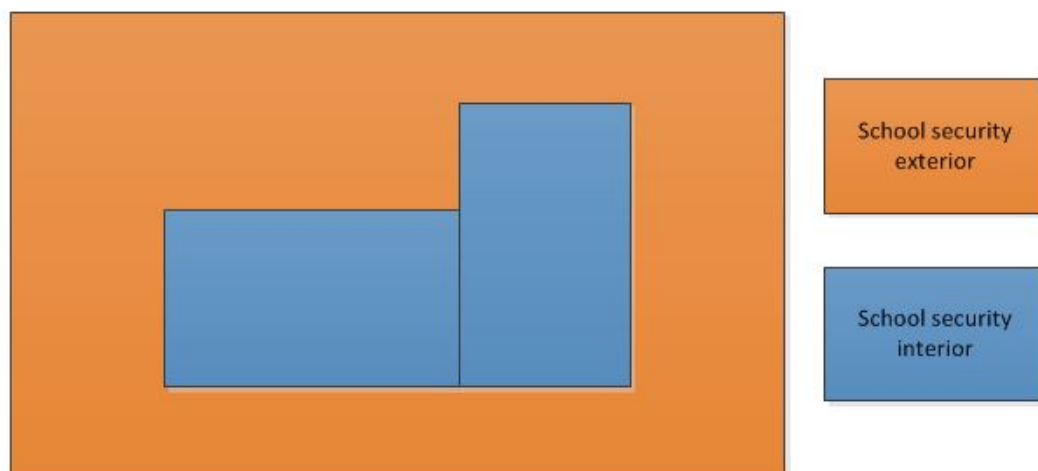


Figure 2: School security layers

3.4.2 School security exterior

In this chapter we will go through security measures that are used to create secure and safe school security exterior. Schools in Finland might have fencing on the outer perimeter of the premises and some schools might not. The fencing has several working functions in the premises; mainly it is used to separate school area from the surroundings. The fence can also work as a physical barrier against unwanted persons or in reducing and controlling unnecessary traffic both during school operating hours and in closed hours. The existence of a fence can reduce vandalism and other harmful incidents in the area and therefore for instance decrease maintenance costs.

The use of lighting at the school environment is extremely important. The visibility of small children for passing traffic for instance is vital for creating a safe school environment. The lighting is extremely vital during the winter and fall seasons, as it can get dark outside even during school operating hours. The illumination at the school yard has a significant effect for children who use the school area as a playground after school. The lighting also creates a repellent effect for perpetrators who want to for example break into the premises. This in combination with a visible camera surveillance system will decrease the risk of illegal entries to the premises.

If the school has sufficient funding the use of cameras is also effective in preventing and decreasing the effects of a burglary or vandalism. They can work as a deterrent and identify the delinquents. There are private security sector companies that offer security services and products for educational institutes. These security services and products can include nearly

anything from the field of commercial security services. One such example could be remote camera surveillance which is linked to the school public-address system and which could be used to dismiss unwanted persons from the school area. Another efficient service utilized by some schools is the use of security guards to protect their premises. Security guards can be used at any time when there is need to do so. (ISS no date)

These safeguards alone cannot completely prevent security threats such as burglaries or determined perpetrators but they can be used to minimize the risks and create a safer environment for the students and teachers. Quite often the prerequisite for safety is financial resources and the lack of funding is one of the key issues that the Finnish education system is currently facing.

3.4.3 School security interior

The authors of this thesis divide school security interior into three main groups, the three groups are the physical, the electronic and personnel solutions. Physical security solutions include structural security measures such as locks, doors, windows and lighting. Personnel solutions include school employees and outsourced personnel such as janitors, security guards and utility persons.

Doors together with either electronic or mechanical locks are the foundation of access control. There are several types of doors which can be used to create safer school environment which are provided by the private security industry. For example there are different types and protective levels of impact resistant doors, bulletproof doors and fire-resistant doors. In general educational institutes do not utilize the use of ballistic protection or impact protection in doors, because the doors are far too expensive for schools to obtain. However fire-resistant or fireproof doors are relatively commonly used in school buildings. Doors can only provide promised effects if they are used properly. For example fireproof doors are useless if the door's operating area is blocked by obstacles which prevent door from closing in an emergency situation.

Locks are used to prevent unauthorized access into the school area and facilities. There are different types of locks used in schools. For example locks can be electronic locks or traditional metal key operated locks. Electronic locks provide many advantages when they compared to metal key locks. For example electronic locks can be connected to operate as a part in access control system and if electronic key is lost the key can be nullified and replaced without changing of locks to the whole building. An electronic key also provides the information to the access control administrator on how and when the key is used. With this information it is easy to control the access rights of a person if there is need to modify or

restrict them. Unfortunately the importance of access control is not clear for everyone. In Finland there are schools which keep their doors open during lessons and no-one has control over who has access to the school premises. The situation in question completely negates the effectiveness of access control.

Windows at schools are often especially large to provide a nice ambience to the interior. This increases the risk of burglaries and can create expenses if the large, expensive glass is damaged or broken. This risk can be mitigated easily with safety and security window films or safety glasses; however they are a notable expense. The installation of safety glass has a negative side as well. Escaping in case of an emergency through the window can become noticeably harder unless the installation does not take into consideration the window's possibility as an emergency escape option.

Lighting in the school interior must follow The National Building Code of Finland: E1 Structural fire safety in buildings which means that exit and emergency lighting must be operative when it is needed. In normal situation the exit lighting operates together with the normal lighting. (Ministry of the Environment 2002, 3) Lighting has also other functions such as creating adequate illumination conditions for possible camera systems and helps with identifying possible hazards inside the facility. Inadequate or poorly installed lighting can help the perpetrators to operate in the premises and succeeding in their attempts.

The field of electronic security solutions offers a range of products which can be purchased for the school security environment. The products can be fire alarm systems, security alarm systems, access control systems, public address system or camera surveillance systems. These different solutions can be equipped with sensors ranging from infrared to inertia sensors. The limiting factor that prevents possibilities of acquiring these systems into use is the lack of financial resources. Another issue worth noticing is the fact that current legislation does not obligate schools to equip the premises with fire alarm systems or even smoke alarms. For example on the 11th of February in 2014 a school fire occurred in Kouvola Coeducational Upper Secondary School. (Yle 2014) The school facility did not have fire compartments or an automatic fire alarm system installed which could have helped in controlling the emergency situation. (Yle 2014)

Security alarm systems can have various functions in the school security interior. The main function of an alarm system is to alert if someone tries to unlawfully enter a secured area or otherwise cause harm to the premises. Alarms can be transmitted to an outsourced private security service provider or a person who holds the responsibility in the matter. Most alarm systems are offline during working hours and turned on after the school day has ended, however some areas of a school might have continuously functioning alarm devices such as an

archive or a server room. When the access control system is combined to alarm system it is quite a simple process to oversee and control the access points in the educational environment. Another option to use alarm systems is to connect them to work co-operatively with camera systems.

For example when an alarm occurs in certain area the camera turns automatically to the direction pinpointed by the alarm and captures the ongoing situation. Unfortunately the before-mentioned camera systems are seldom used in the Finnish school environment. If utilized, the camera surveillance systems are conventionally used to cover the main areas and hallways in the school. Camera surveillance systems and products can be purchased from private security product providers.

Public address system is a notification system that is operated from the teacher's common room, or the principal's office. The system is often used for daily notifications, but can also be utilized in emergency and crisis situations. The school personnel can be notified for example in a crisis situation or the system can be used to make a silent alarm in case of an intruder, this requires training of the personnel and the use of a countersign. Nearly every school has some kind of public address system. However to be effective the public address system should be installed and heard clearly through the entire school facility.

The role of personnel in school security and safety is essential, because the school personnel create the essence of security and safety for themselves and students. This means that every member of the work community has the obligation to maintain and support the security culture in a workplace. Security culture in schools is often built up by the school principal or other member in school administration. It is impossible to define how security culture is seen in schools in Finland, even though the legislation affects every school in an identical way. During the lessons and recesses the teachers are responsible for sustaining the safety and security of the students. The teachers are faced with a lot of responsibility, since the study groups can reach up to 30 students or more that need to be supervised in the classroom and outside. A recess creates even a bigger challenge for the supervising teacher, since the amount of students multiplies and the amount of risks at the same time as well.

Teachers are not the only group of personnel which has an effect on school security. Schools might also have security guards and other personnel whose tasks are related to security and safety. The maintenance personnel are often responsible for closing the school doors, after the rest of the staff has left the premises. The maintenance personnel are trusted with all the keys to the area and hold a key role in access control.

3.5 Corporate security

The authors of this thesis use corporate security as a term when describing the processes and procedures how security and safety issues are managed in business context. Corporate security management can be described as a holistic managerial process which is used to provide a safe and secure operating environment for companies. There is no single way how to take care of safety and security issues in a business and often the affecting factor is the size and type of the business. In some businesses the legislation related to the business is more demanding from a security and safety point of view and in other businesses it might be much simpler. Companies with special needs might for example work with hazardous chemicals or other dangerous materials. Larger companies might have an entire security team dedicated to working with corporate security management or the processes are managed by a one security professional appointed to the task.

The following figure presents the areas of security management in a corporate context. The picture is based on Miettinen's model of corporate security guide map (Yritysturvallisuuden opaskartta), but the authors of this thesis made some modifications to the original model to clarify and highlight certain aspects in the picture. (Miettinen 2002, 12) The inner spheres in the model that are marked with letters A, B, C, and D depict the core elements of corporate security. The letter A represents the core of business operations and it is the profound reason for all corporate security. (Miettinen 2002, 13) Next area in the picture marked with the letter B is the assets in need of protection. The area in question includes all of the tangible and intangible assets that are required for continuity of the operations and which the company in question has determined to be essential for the company's existence. Safeguards that are marked with the letter C can be divided into physical or nonphysical solutions. In other words the safeguards are the resources used to create robustness for protection of the assets that are in need of protection. Often companies have to compromise between the price of safeguards and the value of the asset in question. The dark blue circle, marked with the letter D are the corporate risks and threats. This signifies all the risks and threats that can cause harm to the protected assets of the company. The risks and threats can be managed in a risk management process. The risk management process is used to mitigate, avoid or transfer the possible effects of the perceived risks from the company and its assets. Sometimes risks can have an influence on various business functions at the same time instead of being concentrated in only one business function and these situations can cause serious harm to company or stakeholders.

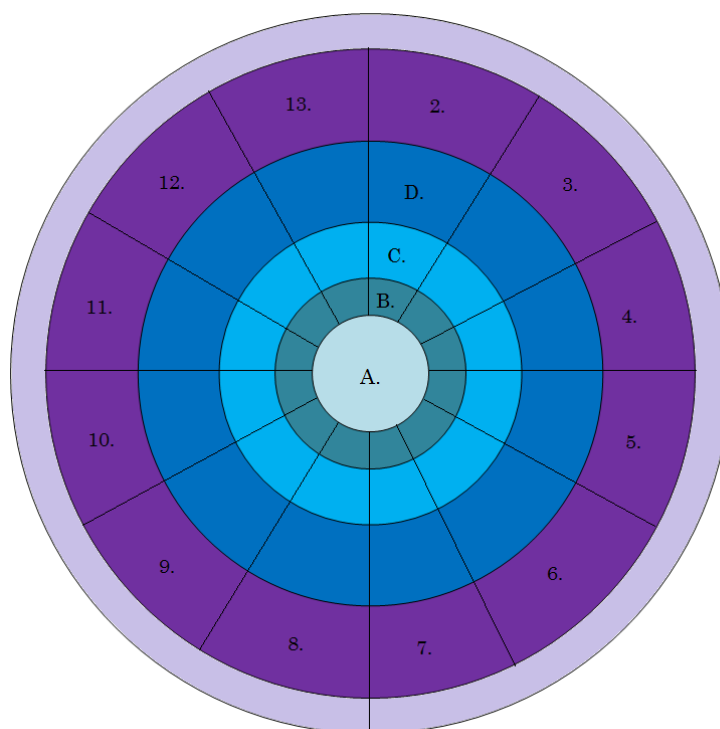


Figure 3: adapted from Mietтинен's model
(Mietтинен 2002, 12)

The dark purple colored circle in the picture which includes the numbers from two to thirteen are the corporate security areas according to Mietтинен's model. The importance of the numbered areas in comparison among each other is indicated by each company individually. It means that companies can emphasize any area based on their preferences. The section marked with number 2 covers the area of facility and real estate security. The facility and real estate security includes physical security components and the needed personnel to secure operations on a site. In this context physical security components consist of for example locks, fencing, lighting, security and intrusion alarm systems. The personnel on the site might have to take care of various security and safety related tasks such as guarding, access control and monitoring the area. (Mietтинен 2002, 14-15)

The area of personnel security is marked in the picture with number 3. Mietтинен defines personnel security as a process which is used to reduce labor force related risks in corporation. The process includes non-disclosure agreements, security clearances and background checks as well as ensuring the physical safety of all persons in the area. The area of physical security is often outsourced to private security service providers in the corporate world, because security companies can offer all the necessary services with a competitive price. The companies can determine a suitable range of security products and services to meet their demands. Pre-

venting injuries and accidents are a part of occupational health and safety in this model and they will be addressed later in this study. (Miettinen 2002, 15)

The section marked with number 4 covers the area of insurance management. Insurance management has a critical role in the risk management operations of any company. The fundamental factor in this process is to transfer and mitigate the effects of a risk by purchasing insurance coverage from insurance companies. After purchasing the necessary insurance coverage the insurance company is responsible for compensating financial losses caused by the incident determined in the insurance policy. The insurance agreement determines the covered areas, the compensation disbursement and deductible part the client is responsible for. (Miettinen 2002, 15)

The area of information technology and system security is marked with the number 5 in the model. This area of corporate security has been steadily coming even more important because of the rise in the amount of different types of attacks and phenomena related to information security and technology. These risks include denial of service attacks, information leaks and direct attacks attempting to extract information or cause harm to the business. If information risks occur they can cause loss of reputation, the loss of confidentiality, loss of sensitive information or harm to the functionality of the business, particularly if the business is operating online. Information security can be classified into three parts. Confidentiality signifies that the information of a company is only available to the personnel it was designated to. Integrity stands for the information staying in the state and form it was created the way the administrator of the information intended. Availability implies that the information systems are working as intended and that the information is available when it is needed. (Miettinen 2002, 15)

The section marked with number 6 covers the areas of preparedness and continuity planning. In this context continuity planning can be described to be a part of preparedness planning and not to be mistaken for normal continuity planning processes of a business which most firms create. This area includes all the functions related to creating safeguards and preparedness to ensure that the company in question can function in a sufficient condition during a crisis period which can be caused by a major accident, economic crisis, natural disaster, threat of war. Industries that are most required to have a comprehensive preparedness plan are those that provide public information, mass communication, transportation and traffic, medical industry, electronics, energy industry and the food industry. These industries can have legal obligations to create preparedness measures to ensure the continuation of operations. (Miettinen 2002, 15-16)

Fire safety and emergency management segments of corporate security are covered in the model marked with number 7. This part of the model strives for ensuring the safety of personnel and tangible assets owned by the business. To ensure the fire safety in a company's operating environment, different technical and physical safety measures can be introduced into use. These safety measures can be for example fire alarm systems, emergency lighting, fire extinguishing systems and structural fire safety solutions. Some of the safety measures are required by the current legislation and others are voluntary. Emergency management in this paragraph stands for the cooperation of corporate safety personnel and local emergency service authorities. Naturally the size and type of the business can impact their safety measures. There can be situations where the company for example has their own fire brigade which can operate on the business's premises. A business like this might be a chemical plant, nuclear power plant or other that requires immediate attention in case of an emergency. The third part of fire safety and emergency management is civil protection. Civil protection is implemented into this section of corporate security model. Civil protection means the measures which are taken into use when the authorities order them. These measures are seldom used, because the situation in hand must form a serious threat to lives of citizens. In some buildings local authorities can obligate the business to build a civil protection shelter on the premises. (Miettinen 2002, 16)

The section in the model marked with number 8 covers the area of environmental protection in the corporate security field. Environmental protection is an important topic for companies in today's world, as sustainability programs are turning into a way for companies to differ from each other in marketing their services or products to potential customers. Corporate sustainability programs and reporting are more commonly used in global markets. Environmental protection is the risk management of processes which can cause harm or damage to surrounding nature or environment. In the nature and in surrounding area the protected assets are protection of water resources, air quality protection and soil protection. The processes in a company which can cause environmental damage are the transportation, storage and handling of hazardous material and mismanagement of waste material. Normally these issues are governed by the authorities and the legislation sets the framework for policies and procedures. (Miettinen 2002, 16)

International operations security is covered in the section marked with number 9 in the figure. In simplified sense this area gathers all the other areas of corporate security together, but in the context of business's foreign functions. To ensure safety and security in international operations it usually requires more advanced information and intelligence gathering procedures from the company management. Weather conditions, political situation, legislation and culture in the foreign country can cause severe problems to company operations or reputation. For example extreme weather conditions such as flash floods can cause interrup-

tions to business operations or in the worst case scenario it can end them. When these risks and threats are taken into consideration the business will often try to follow common company standards or policies. (Miettinen 2002, 16)

The segment marked with number 10 covers the area of travel security. Travel security focuses on the resources that a company uses to ensure adequate protection of its employees, visitors and other personnel during any work related travel. It should be taken into consideration that travel can also refer to the personnel's travel to the workplace, which the company can affect with guidelines and instructions. This area has lately increased in significance since companies are gaining more and more ground globally and travelling is becoming more urgent and frequent. Travel safety often goes alongside with other corporate security areas such as insurance management and personnel security. Any problems caused during travel can cause unnecessary expenses to the company in the form of loss of labor force and loss of revenue. (Miettinen 2002, 16)

Crime prevention and security covers the segment marked with number 11. The focus of crime prevention and security depend on detection, delaying and deterring crimes which are targeted against business activities. Detection in crime prevention means that the detection of a crime occurs at the earliest stage possible and it prevents situation from escalating. Delaying signifies the functions and safeguards which are used to hamper and slow the perpetrators objective. Deterring stands for ways to completely prevent the crime before it even occurs with the help of safety and security solutions and services. Security and safety measures are used to minimize the risks to company, stakeholders and personnel during a crime situation. Companies can have distinct assets which are vulnerable for criminal activities these assets can be either intangible or tangible. Vulnerable assets can be exploited from either inside or outside of a company. One part of crime prevention and security is cooperation with law enforcement authorities and judiciary. (Miettinen 2002, 16-17)

The section marked with number 12 in the figure is occupational health and safety in corporate security context. Occupational health and safety has an essential role in maintaining working ability of employees and in preventing accidents at the workplace. To maintain occupational health and safety at the workplace there are many factors which need to be taken into consideration. The factors in question can range for example from air quality monitoring to use of safety equipment and close call reporting systems. These measures ensure the good working conditions of employees and are often appreciated amongst personnel, but unfortunately there is always a group or few members in every workplace who do not follow given instructions even if they are obligated in the law. (Miettinen 2002, 17)

The safety and security of production and other corporate operations is the segment marked with number 13 in the corporate security model. Corporate operations and the safety and security of production have similarities with continuity planning processes. The core idea is to secure the continuity of vital functions in the company and ensure the quality and safety of products and services. Vital functions include logistics, continuity of manufacturing processes and business operations, safeguarding financial assets and securing payment transactions. Without the contingency of vital functions the company is unable to reliably continue operating and providing services to its clients. (Miettinen 2002, 17)

3.6 Divergences in school and corporate security

Comparing divergences between school and corporation security is a challenging assignment because finding a school or company which could be used as a textbook example and which would represent the characteristics of an average school or company in Finland for the comparison process, is extremely difficult. Therefore the authors have chosen to evaluate the divergences of the topic on a relatively general level. The general level in this occasion is based on assumptions and in the knowledge of the authors about security measures and procedures which are used in the above-mentioned environments.

The authors of this thesis decided to approach the issue by dividing the divergences in security and safety management into two categories. The categories are security planning and resources. Security planning includes the documentation which is used to create policies and plans that establishes and fortifies the security culture in a school or company. The documentation includes security policies and plans based on the target's needs and legislation. Resources are factors which can be implemented into use when a need arises.

3.6.1 Security planning

Security and safety planning has an important role in companies. Planning ensures the continuation of operations during and after an anomaly and helps the company in recovering from an incident, because in a moment of distress it might be challenging to form a functional plan which can be deployed into use on time. Business continuity planning is the essential difference when the school environment and the business world are compared, because interruption can cause a business irreparable damage and thus end business operations. The planning itself has other differences as well. Companies can have a trained professional working with the planning, unlike schools that usually only have an appointed person doing the planning alongside with their normal work. Another topic is the time reserved for planning and developing of security documentation. Security planning and monitoring of the plans can be a continuous process in a company and it can be executed every day of the year. In schools the

documentation is re-evaluated and updated if there is changes in the school environment that need to be addressed more thoroughly in the plan.

The goals created and assets protected by the planning also differ greatly. For example businesses rely on their reputation and brand to get new clients and maintain relations with existing ones. However schools on the basic level of education do not need to worry about issues related to reputation or branding that much because the client base, which is students and their parents, is usually designated by their place of residence. Basic education level schools exist because of a need of education, not because they are profiting from students attending. The main focus of school's security and safety planning is to ensure the health and safety of every person on the school grounds. Companies on the other hand aim to ensure the continuity of operations and profitability, the personnel is seen as an asset which can be replaced in some situations.

3.6.2 Resources

When comparing school and corporate security, resources can be described as assets which can be used to ensure safety and security in the operational environment. The authors define resources as money, personnel, facilities and the time reserved for safety and security matters. Companies have the opportunity to direct their resources in order to pursue company management goals. At the same time schools alone do not have reign over their financial resources in the greater sense, because they are controlled by the municipalities and government authorities. The control of financial resources leads to situation where the resources are prioritized to be used with daily school functions instead of obtaining crucial safety measures and safeguards such as fire alarm systems, smoke detectors and fire sprinkler systems. There are also other security products and services offered by private companies which are even less utilized by schools due to their price. Companies can freely invest in security and safety equipment that they feel is necessary without such limitations, after conducting a risk assessment and defining their needs accurately. The lack of resources is making educational institutions more vulnerable to accidents, disasters and targeted attacks.

Personnel management in companies is more profound than in schools, because companies often have to follow standards and certifications which are almost a necessity when companies operate on a global scale. There are many different personnel management standards which companies can obtain and ISO 9001 is one of the most widely used and acknowledged. According to International Organization for Standardization's website: " ISO 9001:2008 sets out the criteria for a quality management system and is the only standard in the family that can be certified to [...]. It can be used by any organization, large or small, regardless of its field of activity. In fact ISO 9001:2008 is implemented by over one million companies and or-

ganizations in over 170 countries." (ISO no date). Schools and the personnel in them are managed with the current legislation instead of certification and standards. For example teachers in the schools are hired and employed by the municipality and not by the school. This means that the teachers are managed by the school principal and by municipal authorities. According to ISO (2012, 23-24) the management of core competences presented by the personnel is vital for a company in the moment of a crisis. The personnel in question can be company's own or outsourced personnel provided by affiliated partners. The techniques of protecting core skills and competences possessed by the company include for example succession in personnel management planning and having competent substitutes to replace company's key personnel in case of an emergency. During a crisis situation personnel management regulates providing necessary measures to ensure employee safety and amenity on site and on possible secondary sites and providing means for working at home. The key personnel can be for example branch managers or security specialists. (ISO 2012, 23-24)

Buildings and facilities are also managed differently in companies and schools. In corporate security context this means that the companies might have and utilize secondary sites to secure the continuity of business operations. Facilities which will function as a secondary site can be fully equipped with all the necessary tools and instruments which are defined to be essential in the business continuity plan (ISO 2012, 26). Schools also have secondary sites and equipment, but utilizing process is slower and controlled by the local authorities. In Finland the lack of financial resources prevents schools from preparing and creating ready for use alternative sites.

Time and time management has to be taken into consideration when the topic is appertained to corporate and school security. Reaction and response time to disruptions and harmful situations can have tremendous effects to the outcome of an incident. For example in case of fire the reaction time and actions taken by the personnel can prevent further escalation of the fire and damages to the surroundings. Companies can have designated persons to react to the described event, and the personnel can work on site continuously even when the common labor force has left the premises. The situation changes when schools are concerned, because in many cases a school is not open beyond its operating hours. If the school facilities are being used beyond its normal hours regular staff is usually not present.

The second topic of time management is the time used in developing of plans and procedures. Companies can invest more time and human resources into security planning; because they have the adequate funds to recruit outsourced services. In simplified sense the time invested into planning leads to succession with the continuity management. When business continuity management functions as intended the organization can concentrate on conventional activities.

3.7 Country comparisons regarding school security

The authors have chosen three countries for the school security comparison process. The selected countries are United Kingdom, United States of America and Finland. These countries were selected because the authors can find information from these countries with languages they understand and there are nevertheless great differences between the basic education schools of each country. For example the use of a school uniform exists strongly in the UK and somewhat in the USA, but in Finland uniforms are not in use. School uniforms can have many functions, but in security context it can help in identifying the school students.

This is contrasted by country based legislation and rules such as a license to carry a handgun openly or having it concealed which is regulated by state law in the United States of America, but in Finland and UK it is almost impossible for a civilian to get permit for concealed or open carry license of a pistol. In general acquiring any kind of firearm is easier in the US than in Europe. This affects to the risks and threats which can materialize in the school environment. This leads to the use of different safeguards. For example in USA and UK the use of metal detectors has been steadily becoming more common in schools to prevent students from bringing knives or firearms to school premises. In Finland the use of metal detectors has not become common practice.

The differences in school security measures and procedures are also visible in other forms. For example the use of police officers at schools is often utilized in USA and recently being reinstated in to use in the UK. (British Educational Research Association 2010, 43) However in Finland such protective elements have not been put into use and most schools outside of main city districts do not even have a security officer or guard working for the facility. Therefore the school personnel has the responsibility over security and safety matters and quite often the principal of the school leads and monitors the processes.

School security problems such as violence can be prevalent in any form. School shootings and other forms of violence have occurred in every subject country. This has led to progression of safeguards and procedures. In Finland the school security plans are classified material therefore the authors cannot go into details about the subject. The authors can however use media references and common knowledge for comparison purposes. Recent development in USA has offered different approaches how to stop a violent attacker. For example W.F Burns Middle School in America has requested parents to give children cans of food to bring into the classroom, and be available in case of an intruder. This is estimated to slow an attack and give the defenders time to stop the attacker, with a barrage of hard items. (CNN 2015)

The canned food case might be a laughingstock in discussions about school security, but that does not make it any less effective. The method's effectiveness can be for example proved with the following incident that took place in Finland. According to newspaper Kaleva's article (2013) a bystander stopped a knife-attacker in the school's cafeteria by throwing a drinking glass at him which caused the perpetrator to disrupt the ongoing attack and caused him to try to flee the scene. The bystander in question followed the attacker and detained and disarmed him with another person until the police arrived to school (Kaleva 2013). One can only speculate what would have happened if twenty students in the cafeteria had thrown their drinking glasses towards the attacker to stop his actions. It is very unlikely for students or school personnel to act in a certain way in a certain situation if they have not received relevant training which could provide ways to handle the difficult situation. It might prove useful if students and teachers have been shown ways of reacting to different scenarios, that they can instinctively choose when a crisis strike, even if the situations have not been extensively rehearsed.

The same threats and risks are plausible in every school security environment and country. Discrepancies are created by for example the environment, the political situation and local legislation. The key factor is the quantity of the risks and threats which a certain school can handle. The amount in question can fluctuate between countries and educational institutions.

3.8 Threats and risks in school environment

In the educational environment threats and risks can rise from several sources. Risks and threats can be categorized into either internal or external risks. Internal risks are risks which rise from inside of the organization. For example there might be a person in the organization who poses a threat or risk to whole internal environment. The risk can be caused by a student or a member of the personnel. Internal risks can also include technical risks such as information technology breakdowns or failures. Evaluation process of internal risks and threats can be easier for the organization, because a greater number of personnel has the opportunity of detecting certain threats and risks. These include risks that are related to human behavior, because some changes in human behavior can be interpreted to be warning signals for possible future threat.

External risks and threats are usually harder to control, because the threat detection is more challenging and therefore the response or countermeasures to the threat might prove to be inadequate. In general external threats and risks can be caused by human actions or by nature phenomena. Natural disasters can include blizzards, thunderstorms, flooding, hail storms and heavy rainfall. Weather phenomena's can cause serious damage to an operating environment and even with today's weather forecasting equipment the outcome is hard to predict.

External threats and risks caused by persons can include terrorism, diseases and deliberated acts aimed to cause harm. Some of these risks are extremely hard to control, because all threats do not indicate any warning signals beforehand and even if they do the response might not be adequate.

3.8.1 Examples of school violence

Unfortunately examples of school violence and harassment are easy to find from the Finnish education environment. There are several studies and court cases which could be used as examples, but the authors have selected four examples which depict different forms and stages of school harassment and violence. The mildest form of violence can be verbal abuse and the most severe can lead to injuries or loss of lives. The perceived severity of violence can change based on the opinions of each individual, but in the end the legislation sets the framework for evaluation of different stages of violence.

The first example of school harassment can be found in Ylöjärvi, a municipality near Tampere city, several schools have received threats of violence via e-mail for six weeks. The police has been unable to trace the sender of the threatening e-mails, because the person(s) in question has applied technical or software solutions to remain anonymous (Yle 2015). The above-mentioned incident has led to the situation that the threatened schools cannot have confidence that the threat is neutralized and they can continue normal routines. Situations like this can cause long term harm for the school personnel, students, parents and other stakeholders.

The second example is about a school student who posted an offensively titled video on the popular video streaming site YouTube, where content is visible for anyone. According to Finnish news agency MTV the video included the teacher singing during a school event, which was titled " Karaoke of the mental hospital ". The offended teacher sued the student and won the case, resulting in fines, compensation and the payment of the teacher's legal costs. The student became the first under aged person trialed and convicted for slander in Finland (MTV 2007). Even though some people might experience that the case in question has comical characteristics, it is still an attack towards person's character, privacy and working environment. The authors see that the court decision was justified and it helps to set boundaries in the school world.

Luckily there still are situations where school violence can be stopped from escalating. The third example proves how the actions of one person can have an effect on the result of a violent situation. The hero of the story is a teacher, who stopped an armed attacker from accessing a classroom by preventing the shooter from entering by pushing the attacker back out

and locking the door. The perpetrators motive was a broken relationship, which ended in him trying to shoot the former girlfriend who was located at the Orivesi Comprehensive School. During the incident the perpetrator fired several shots through the classroom door after the teacher had taken action to stop him (YLE 2012). The authors feel that the teacher's reaction to the threat was excellent, but it raises the question what are abilities of other teachers to react to sudden threats as described in the article.

The last example of school violence is about a school stabbing case which took place in Imatra, which is a municipality and town in the eastern part of Finland. The attempted manslaughter took place in the morning and probable reason for the stabbing stemmed from long lasting bullying of the 16-year-old attacker (YLE 2012). These kinds of incidents are hard to detect and avoid, because sharp objects are easy to obtain and carry them undetectably in a public area. The attack maybe could have been prevented by addressing the bullying issue earlier but one can only speculate.

The examples of this chapter have shown that the Finnish school world has problems that should be taken into consideration and these issues should be addressed with multilateral cooperation. In this case multilateral cooperation means the cooperation of security and safety authorities and school stakeholders. Unfortunately it would seem that schools cannot solve these problems alone, therefore they do need help in the process and hopefully our thesis can provide some solutions and new views to address the problems.

4 Hypothesis and research questions

The authors of this thesis present as their research hypothesis that targeted and additional security training can improve the feeling of workplace safety and security amongst teachers in educational institutes. Hypothesis will be tested with an empiric research. The empirical evidence will be analyzed by qualitative methods. The hypothesis is based on the authors' extensive knowledge of private security sector work experience and past projects with school security training.

The objective of this thesis is to research if a specified security and safety training can improve teachers' ability to respond to different types of security and safety threats and situations in their working environment.

4.1 Main research question

Based on the above-mentioned hypothesis the authors conducted the main research question.

The main research question is; What is the most important subject matter of security and safety training that the teachers require?

4.2 Secondary research questions

Our secondary research questions are: What help can security and safety training at schools provide? ; What are the minimum requirements for training? ; What are the needs of the teachers concerning training?

5 Conducting research

The authors of this thesis have decided to use qualitative research methods to research the subject in question. The main reason why the authors decided to utilize qualitative methods in the study is the research timeframe and the quality of answers. The survey data will be collected in a short time frame, ensuring the quality of the answers at that time. In this case the quality of answers means the current situation which can fluctuate in the future.

5.1 Research strategy

According to Lewis, Saunders and Thornhill (2009, 141) Yin states that “Each strategy can be used for exploratory, descriptive and explanatory research.” The research will be conducted in a qualitative research style, which supports the authors’ need for accurate answers and works with the time available. The research strategy of this thesis is explained in the following picture.



Figure 4: Research strategy

5.1.1 Qualitative research

Qualitative research is typically used to create a comprehensive picture of the research subject. According to Hirsjärvi, Remes and Sajavaara (2007, 160) the typical features of a qualitative research include the collecting of data in a realistic and natural situation. The collected data should come from an intentionally selected target group and the research data will be analyzed accordingly. The goal of the qualitative research is to find unexpected and

untested results. (Hirsjärvi et al. 2007, 160) Based on the mentioned circumstances the authors decided to use the qualitative research in their thesis.

5.1.2 Quantitative research

The quantitative research needs a strong hypothesis and sufficient background research before the actual research is conducted. This is because of the large amount of answers received which need to be analyzed. According to Hirsjärvi et al. (2007, 135) quantitative research highlights the need for causation in the study. The information gathered with quantitative research method can be analyzed with a mathematical practice (Hirsjärvi et al. 2007, 136). This research method ignores the quality of individual verbal answers and opinions which are needed for the authors' study. This is why the authors decided not to utilize the quantitative research.

5.2 Research types

There is a wide selection of research types which are used to examine distinct phenomena. The main difference between different research types is the nature of the research according to Lewis et al. (2009, 141) the research strategy can be consisted by research factors such as time available for use, background knowledge and research questions. Another point to remember is the research objective which has a strong influence on the selection process of the research type.

5.2.1 Case study

Case study is defined: "as 'a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence' ." (Robson 2002, cited in Lewis et al. 2009, 145-146) The authors of this thesis decide to utilize case study research type, because the aim of the research is to describe a certain phenomenon in detail in a certain point of time. From the authors' point of view the case study as a research type is relatively simple for starting researchers to conduct and interpret when compared to other research types.

5.2.2 Action research

Action research is another form of qualitative research, it varies from the case study by the perspective, because it drives the organization towards a transformation process (Lewis et al. 2009, 147). Action research could have been utilized in this thesis, but the authors do not have a subject organization which could implement the research results and suggestions into

use. Another issue is the nature of action research which involves a considerable amount of time and employee participation from the target organization (Lewis et al. 2009, 148). In this case the employee participation from the target organization would have taken too long and required too many resources in order to create sufficient results from the authors' perspective, which led to the authors not utilizing action research as a method.

5.2.3 Survey

The last type of research approach which is presented in this thesis is the survey. Survey is a quantitative research method which is used for information gathering purposes from a specified subject group (Hirsjärvi et al. 2007, 130). According to Lewis et al. (2009, 144): "Surveys are popular as they allow the collection of a large amount of data from a sizeable population in a highly economical way." Surveys have many negative and positive aspects, for example Nardi (2006, 18) points out that some questions in the survey can only provide limited information about the research subject. Naturally different sets of questionnaires provide the test subject the possibility of manipulating answers or providing false information. Of course the possibility of lying is also possible in other types of surveys, but for example an experienced interviewer can detect such behavior. The above-mentioned issues led to the resolution that the authors of this thesis have chosen not use quantitative survey in the thesis process.

5.3 Research methods

The selection process of research methods did not prove to be challenging, because the authors had a vision of how the research should be conducted and which methods will be used during the research from the beginning. The first research method utilized during the research is qualitative questionnaire. The purpose of the qualitative questionnaire is to provide research subjects with a possibility to express their opinion in a clear and comprehensive way. The second research method is qualitative interviewing which aims to provide answers to the issues which have arisen from the first questionnaire results.

5.3.1 Questionnaire

Questionnaires can be of many types but they all have a common purpose. According to Oppenheim (1992, 100) a questionnaire is: "an important instrument of research [...] its function is measurement." A questionnaire provides raw information for the researcher, which needs to be interpreted in the context of the research. The choice of questionnaire depends on the requirements of the research. Lewis et al. (2009, 362) outlines that the biggest factor is the amount of contact the administrator has with the subjects of the research. The two groups are self-administered questionnaires and interviewer-administered questionnaires. The lat-

ter of which requires more cooperation between the researcher and participants, which means that the two parties are communicating with each other during the interview. The two branches include several types of questionnaires, for example a questionnaire where information technology is utilized to fill and register the answers. (Lewis et al. 2009, 362-363) The mentioned example belongs to the self-administered group where the respondents fill in the answers themselves.

Another way of categorizing the questionnaire questions is into open- and closed questions. Oppenheim (1992, 115) points out the advantages and disadvantages in both, for example open questions provide the respondent more options to express themselves but answering an open question requires more time than simply ticking an answer box. Closed questions can be easier and faster to complete, but they constitute a less complete picture for both the research subject and researcher.

5.3.2 Creating a questionnaire

The creation process of the questionnaire started with the selection of a tool or platform which could be utilized in the process. The authors decided to use SurveyMonkey "which is the world's leading survey platform" and which is available for registered users via Internet (SurveyMonkey, 2015). The positive features of the platform is that the questionnaires can be delivered directly to the respondents via e-mail and the questionnaire can be protected with a password. Another noticeable feature is that the authors will receive answers as soon as they are posted and will be able to interpret the answers immediately.

The authors decided to use both open and closed questions in the questionnaire, to outline the importance of responder answer quality, and keep certain questions easier to answer. In the authors case the most vital factors in selecting a particular survey are the selecting a particular person or group and the preventing of the answers becoming distorted. The questions are based on the theoretical background of this thesis. The English translation of questionnaire is found in the appendixes as Appendix 1.

5.3.3 Interview

A qualitative interview is conducted to gather information from certain people. A qualitative interview means that each interview in the study is different and directed by the interviewer based on the answers during the interview (Rubin & Rubin 2005, 4). By the categorization of Lewis et al. (2009, 363) the style of interview used by the authors is an interviewer-administered questionnaire. To achieve the desirable results the authors have chosen to utilize an in depth and detailed interview to obtain data that is not only based on facts but also includes

visions and opinions of the subject which gives the study more substance (Rubin & Rubin 2005, 129-131). Because this research will only include a single interview, the quality of information attained with it is extremely important.

5.3.4 Creating interview questions

The interview questions will be created based on the answers received from the teachers and from the theoretical background of the thesis. The questions will support the questionnaire results and help to create an even more precise perception about the subject. Schedule and time-frame of the interview were ruling factors in the process, because the researchers needed to get the answers processed promptly. The English translation of the interview questions can be found as Appendix 2.

5.4 Study discipline

The research has been divided into two phases, first of which is the questionnaire. The questionnaire focuses on the experiences of teachers about school security and school security culture and outlining the security training needs of teachers. The second phase of the research consists of an interview with a school security professional. The questions of the interview are based on the answers of the first phase questionnaire and theoretical background.

5.5 Selecting research subjects

The research subjects for the questionnaire part of the study need to have a large enough dispersion concerning the subjects' age and gender. This is based on the assumption that the disparity of the answers would be unsatisfactory if the research subject group consisted of only for example older persons or mostly of the same gender. Another factor for the research subject selection was the ease of availability of the subjects. In this case the researchers contacted teachers they knew and the questionnaire was distributed to them and their colleagues.

The second part of the research was an interview. The authors approached a school security professional Matti Waitinen who is the Principal of the Helsinki Rescue School and Human Resource Development Manager of Helsinki City Rescue Department. Mr. Waitinen's training includes a PhD, Master of Arts (Education) and a Master of Security university degrees and he has conducted a doctoral thesis on school security culture. The authors contacted Mr. Waitinen by e-mail and agreed upon the interview.

5.6 Research timeline

The first phase of the research, the questionnaire for the teachers, was conducted between 23rd of April and 30th of April in the year 2015. After the first phase the authors interpreted the answers and created the interview questions for the interviewee. The second phase of the research, the school security professional interview, was conducted on 6th of May 2015. After the interview the authors were ready to interpret the research results and to gather the information for the research questions.

6 Research results

The next two paragraphs will reveal the results of the research. The questionnaire and interview results will be reviewed in detail and then the answers of the teachers and answers of the school security professional will be compared. Based on the results the authors will determine the answers to the research questions.

6.1 Questionnaire results

The questionnaire had nine questions, three of which were open questions. The teachers who answered the questionnaire were aged from 34 to 51 years of age. Both genders were represented in the questionnaire. The subject group consisted of four teachers. All of the subjects have been working as a teacher for at least 10 years, and up to 23 years.

For the first question: "Does your school regularly practice for threat and emergency situations?" all of the respondents answered negatively. The answers supported the authors' hypothesis and in addition presented a general view of the situation. The second question was about school security documentation. Every subject had familiarized themselves with the emergency plan and the school rules of conduct. However the rest of the documents including crisis plan, occupational health and safety plan, analysis and assessment of working environment hazard and threats and for example only one person had read the plan for protection of students from harassment, violence and bullying. This was alarming to the authors, because the law obligates the teachers to familiarize themselves with the school safety and security documentation.

The third question addressed the training that the teachers have received in their school. Only one of the teachers had not received first aid training. All of the teachers have had fire safety, evacuation safety and fire extinguishing training, which was a positive aspect. One of the research subjects had also acquired training for emergency and threat situations. In conclusion there is training available for teachers, but the training could have wider approach to

security issues. This issue can be seen in the answers of the next question. Only one of the four subjects has had training about the school security documentation. This question might have been composed too vaguely and the answers might not be realistic. Therefore the answers of this question can be dismissed based on assumption that the research subjects have not understood the question properly.

Question number five addressed the year 2014's school legislation change and have the teachers had training based on the topic. The answers to the question highlighted that only one subject had received training. This is an interesting fact, because the legislation change provided new tools for improving school security and safety. Another noticeable issue is that the questionnaire was conducted over a year after the legislation change. The next question was inter-linked with the content of the previous question. The question's purpose was to investigate whether the teachers knew how to perform the frisk search and the search of a student's belongings safely and according to the law. Contrary to the previous question, two teachers responded that they could perform the task at hand.

The last set of questions were the open questions starting with: "What do you feel is the biggest threat to the security of your school?" The answers to this question were primarily a fire at the school, threat of violence or intruder and lastly indoor air quality problems such as mold. The second open question was: "What do you feel is the biggest threat to your own security at your school?" The answers to the second question were similar to the previous one with an addition of one answer which was an accident related to the research subject. The last question inquired what kind of security training the teachers felt that they needed? The teachers' needs for training correlated with the threats reported in the questionnaire. Some of the threats such as fire and violence were more exposed.

6.2 Interview results

The interview with the school security professional Matti Waitinen consisted of five open questions and the interviewers asked additional and detailed questions during the interview. The first question addressed to Mr. Waitinen was: "What are the most serious threats concerning school security?" The interviewee stated that he feels that the most serious threats are threat of fire, indoor air quality issues and the increase of seen and felt violence in schools. Another issue mentioned by Waitinen was the teachers' lack of interest and a negative attitude towards risk management even though they obliged by the law to provide a safe working and learning environment. According to Mr. Waitinen the accidents and tragedies usually work as a stimulus to realize the importance of risk management. (Waitinen 2015. Personal communication.)

The second question to interviewee was: "What is the most important school security and safety matter that should be taught to school personnel?" According to Mr. Waitinen effective training for teachers would include the teaching of risk management systematically, safety walk which includes realistic simulations of different scenarios to add depth and functional security and safety training (Waitinen 2015. Pers. com.). In this case functional security and safety training means, for example first aid training and fire extinguishing training. The importance of fire extinguishing training is apparent, because Waitinen pointed out that between the years 2009 and 2012, the fire extinguishing equipment was not utilized by the personnel during a school fire situation 30 percent of the time (Waitinen 2015. Pers. com.).

The third interview question addressed to school security professional inquired the following: "Does the current teacher education provide necessary tools and means for creating a safe and secure working environment?" Mr. Waitinen stated that some of the teachers receive specified training for a specified subject, but in general level the training is inadequate. In simplified sense the teacher students should receive more comprehensive security and safety training. (Waitinen 2015. Pers. com.)

In the fourth question the authors asked Mr. Waitinen: "How would you change security culture in schools?" Mr. Waitinen proposed a three part solution for the problem. The first proposal was to influence the teachers' values and attitudes about security and safety matters. The second suggestion was to increase teachers' knowledge about risks and threats and improve their understanding of how to create and secure and safe working environment. The third part of the solution was that the schools should utilize more help from the authorities and to set a lower threshold for reporting a security and safety anomaly at the school grounds, for example there are crimes that occur in the schools and the schools decide to give detention for the students instead of contacting law enforcement authorities. (Waitinen 2015. Pers. com.)

The fifth and last question in the interview investigated the condition of cooperation between authorities and schools. Mr. Waitinen reminded that the legislation obligates the cooperation between the two parties. The teachers in Finland have a collective bargaining contract training which is held twice per year and the other day should be security and safety oriented according to Mr. Waitinen. Also the Finnish National Board of Education should provide additional training for situations dealing with aggressive or threatening persons. The training should be directed first to the principals who act as security managers along with their duties. This would help change process with the attitudes of other employees through the management first. (Waitinen 2015. Pers. com.)

6.3 Conclusion of the research results

The research results represented similarities between the answers of the teachers and the answers of the security professional. For example the answers about the largest threats in the school environment that were documented by the teachers and then the security professional were almost exactly same. The chart (Figure 5.) which can be found below in this text highlights the similarities between the research group answers.



Figure 5: Answer comparison

Because the questions presented to the expert and the teachers were different, the answers contained some differences. For example the authors did not inquire about the security culture in schools with an open question from the teachers. In simplified sense the answers of the subjects are not fully comparable, but that was not the key purpose of this study. The teachers' answers concerning what training they require in their workplace correspond closely with the answers of the security professional about the same question. The teachers answered that they would mostly require training concerning situations with fire or violence. The school security professional's answers support the hypothesis that the teachers need more security and safety training, he also feels that the training should mainly be directed towards the principals who work in the schools as security managers (Waitinen 2015. Pers. com.).

6.4 Answers to secondary research questions

The authors of this thesis had three secondary research questions. The first question was: "What help can security and safety training at schools provide?" The authors see based on the research that security and safety training can improve teachers' ability to react to different threats and emergencies that can occur in the educational environment. For example fire extinguishing training can provide a better possibility to mitigate damages in the case of a fire and risk management training can increase the teachers' ability to react to threats and risks before they occur.

The second secondary research question was: "What are the minimum requirements for training?" The authors see based on the research results that the teachers should have safety and security oriented training at least once a year. The training should have simulated scenarios where the participants would have to utilize the competences they have acquired beforehand. From the authors' point of view security and safety training should be mandatory for the teachers and the continuity of training should be controlled by the legislation.

The third secondary research question was: "What are the needs of the teachers concerning training?" This question can be challenging to answer, because the teachers are not a homogenous group. Their needs differ by each person's own interests and capabilities. However to ensure an acceptable level of safety and security in schools, probably the best results could be achieved through a comprehensive security and safety training. The training in question could be tailored to fit the needs of a certain school.

6.5 Answer to primary research question

The primary research question was: "What is the most important subject matter of security and safety training that the teachers require?" The authors see that the key issue is the training itself and that the teachers are willing to give their best effort for the training, because attitude is the driving force of learning and without participation the goals cannot be achieved. The teachers truly need security and safety training in all of its forms, because currently the variety of safety and security training is only confined to specific teacher roles. Some of the teachers might be more proactive in security and safety matters than others, but the minimum standard for training and how the training should be conducted is missing. Naturally the legislation provides some guidelines for the training, but the authors see that the minimum requirements are not sufficient to provide a safe and secure school environment.

6.6 Research question conclusion

The research question answers support a view the authors have and the research in this thesis. Some of the answers inter-link with each other and provide a complete picture of the current situation and subject. The answers support the Teacher Student Union of Finland's statement which was mentioned in the introduction part of this thesis that the teachers and teacher students need to have more specified training in safety and security matters.

7 Study reliability

Study reliability must be considered when conducting a questionnaire or an interview. Especially questionnaires can lead to falsified answers either due to misunderstanding question or deliberate actions. The next chapters will focus on explaining the consideration behind method and the reliability of the entire study.

7.1 Information gathering method reliability

In this study the authors utilized two different methods of information gathering. The first method was a questionnaire. The reliability of the questionnaire as a method can be criticized, however the authors see that the questionnaire performed for this study appreciably reliable. This is achieved due to personal delivery of the questions, the anonymity behind the subjects, the open questions instead of driving the answers to a certain direction and the size of the research group. Of course all of the above-mentioned points can be contested, but the answers are bolstered by the interview answers.

Interview as a method of qualitative analysis can be seen as more trustworthy and reliable than questionnaire. Particularly when conducted face-to-face in an informal way. The interview questions were open and the answers were gathered in the form of a conversation, the questions also gave possibilities for more detailed questions in between main questions and lastly the interviewee works in an authority position and he possesses a great amount of information about the subject.

7.2 Reliability of entire study

The reliability of the entire study can be questioned, because the first research group's size was quite small and the age dispersion of research subjects was limited to people over 34 years of age. This excludes the young teachers from the study. However in the qualitative research approach the amount of subjects is not the determinative factor, because the quality of the results provided the authors the means to answer the research questions and hypothesis on an adequate level. According to Rubin & Rubin (2005, 265) there are two key factors what should be taken into consideration when conducting qualitative research, the fac-

tors are thoroughness and credibility. Thoroughness can be described as a process where all possible answers are researched instead of focusing on the subjects or answers which would benefit the researchers cause. Credibility describes the interpretation of the answers in a holistic way to provide credible answers to the research questions. (Rubin & Rubin 2005, 265)

Even though the entirety of the study cannot be kept as completely reliable, the first research results are supported by the research results of the second part. In addition the primary research question could have been more specified, because it was not clear that the answers would be so complex. However the phenomenon was described more thoroughly through the secondary research questions.

8 Discussion

The primary role of this thesis was to outline the security needs of Finnish Teachers. The authors feel that the conducted research provided some answers to current problems. The fact is that teachers do need additional security and safety training to help them meet the requirement of providing a safe learning environment. The problem was identified both by the teachers and the interviewed school security professional. The results of the research also met with the expectations of the authors and the hypothesis presented in the thesis.

The authors of this thesis suggests that teachers should have more mandatory safety and security training in the schools and security and safety material should be implemented into teacher students mandatory studies. Security culture is important because it is defined by management and in the schools' case the principal who is also the security manager of the school. The improvement of the security culture could also improve the reporting of crimes to the authorities and these issues would not only be handled inside the school. These changes alone could change the security culture in schools and provide help for the problems that the teachers are experiencing currently.

Future development could be further research on this subject possibility in a form of research which includes the creating process of realistic security training for teachers and other stakeholders. The research could provide new models of operations, policies and procedures for the school environment. Naturally the schools should also follow the development when the world is changing.

The thesis process was quite challenging, because the authors did not have a ready subject for the thesis or a client who would define the limitations of the thesis process. Luckily the authors had some previous experience from school security which provided help during the

thesis process. In the end the authors would like to thank the teachers who participated in the research and Mr. Matti Waitinen for providing a professional view on the matter.

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Figures

Figure 1: Education system in Finland	11
Figure 2: School security layers	18
Figure 3: adapted from Miettinen's model	23
Figure 4: Research strategy	34
Figure 5: Answer comparison	42

Appendixes

Appendix 1: Questionnaire	52
Appendix 2 : Interview questions	54

Appendix 1: Questionnaire

Background information: Age? Gender? For how long have you worked as a teacher?

1. Does your school regularly practice for threat and emergency situations?
2. Have you familiarized yourself with the safety documentation of your school? If so, choose below which documents.

Crisis plan

Emergency plan

The school rules of conduct

Occupational health and safety plan

Analysis and assessment of working environment hazard and threats

A plan for protection of students from harassment, violence and bullying

Other (specify)

3. Have you received safety and security training at your workplace? If so, choose the appropriate below.

First aid training

Fire safety training

Evacuation training

Fire extinguishing training

Threat and emergency training

Other training (specify)

4. Have you received training which relate to your school's safety and security documentation?
5. Have you received training after the school legislation change in the year 2014?
6. Could you perform a frisk search and the search of a student's belongings safely and according to the law, or do you know how to act appropriately with an item or substance used to disrupt teaching?
7. What do you feel is the biggest threat to the security of your school?

8. What do you feel is the biggest threat to your own security at your school?
9. In which security matters would you like to have training?

Appendix 2 : Interview questions

1. What are the most serious threats concerning school security?
2. What is the most important school security and safety matter that should be taught to school personnel?
3. Does the current teacher education provide necessary tools and means for creating a safe and secure working environment?
4. How would you change security culture in schools?
5. Is the cooperation between authorities and schools in an adequate level?