

UNIVERSITY OF STAVANGER

Master's thesis in Societal Safety

**THE PROCESS OF LEARNING
FROM EMERGENCY PREPAREDNESS COOPERATION
IN INTERNATIONAL SCHOOLS**



Mission laïque française

Hanh Thi Hong Pham

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| Writer: Hanh Thi Hong Pham | (Writer's signature) |
| Faculty supervisor: Associate Professor Bjørn Ivar Kruke | |
| External supervisor(s): Dr. Linda Duevel | |
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PREFACE

This thesis is submitted to the Department of Industrial Economics, Risk Management and Planning, Faculty of Science and Technology, University of Stavanger (UiS) in partial fulfillment of the requirements for the degree program of Master of Technology in Societal Safety. The research has been made solely by me during the period of January – June, 2014 under the supervision of Associate Professor Bjørn Ivar Kruke.

This thesis could not have been completed without support from my family, my supervisor and my informants from three international schools: the International School of Stavanger (ISS), the British International School of Stavanger (BISS) and the French School of Stavanger (FSS), and the advisors of Stavanger municipality.

First of all, I would like to thank Associate Processor Bjørn Ivar Kruke for being my supervisor. I am grateful to him for all his enthusiastic support and encouragement throughout the study, as well as for many suggestions and advices whenever they were required.

I would also like to thank Dr. Linda Duevel - Director of ISS for facilitating me to access many documents of international education organizations, and for a wealth of her knowledge and experience of the emergency preparedness cooperation. Next, I do appreciate Dr. Len Duevel, ISS primary school principal, Sarah Johnson, administrator of BISS, John Gibbs, HSE representative of BISS, Madame Martine Morelet, FSS principal, Unni Sjølyst-Kverneland and Reidun Vevele, emergency preparedness advisors of Stavanger municipality, and other teachers, students and parents for their time to be my informants and for their valuable information and opinions.

Last but not least, I would like to express my gratitude to my parents, my husband, and my beloved children, who were always there for me to constantly motivate me to pursue my work.

Stavanger, 10 June 2014

Hanh Thi Hong Pham

SUMMARY

The cooperation between schools and organizations can encourage schools to learn about safety procedures and preparation for emergencies to improve the school emergency preparedness. In the international schools in Stavanger, learning from emergency preparedness cooperation can be optimized when knowledge creation contributes to improve the school capability and update or change the school emergency preparedness activities. However, degree of learning, quality of knowledge and improvement seem to be influenced by patterns of emergency preparedness cooperation and other influencing factors in process of learning from cooperation in the schools.

Therefore, the thesis concerns the following research problem:

“What factors influence the process of learning from emergency preparedness cooperation in the international schools in Stavanger?”

On the basic of the research problem, theoretical framework is utilized as a starting point to develop research questions and make assumptions for findings and analysis of data. I have collected a broad range of empirical data on the school emergency preparedness, cooperation, learning, policies and activities within and between the schools. The data collection was carried out using qualitative research methods, including review of relevant documents, participant observation and semi-structured interviews with 14 informants from the international schools in Stavanger and Stavanger municipality.

By discussing relations between theoretical perspectives and findings, the thesis presents a conclusion of patterns of emergency preparedness cooperation. This includes internal cooperation between faculty members, safety representatives, students and parents as well as external cooperation with international education organizations to which the schools belong and local bodies/organizations. The study also reveals that the process of learning from emergency preparedness cooperation involve knowledge gained and managed within and between the schools, along with changes of knowledge and behavior as well as improvements in the school performance. As a result, informed (safety) culture, collective meaning, willingness, disposition, responsibility, Norwegian law and regulations, international accreditation standards, the school

policies, procedures, and other activities are manifested as the factors influencing the process of learning from emergency preparedness cooperation in the international schools in Stavanger.

Finally, some recommendations are put in place for individual involvement and cooperation in emergency preparedness at the schools in Stavanger and for future research to focus on the process of learning from emergency preparedness in the international schools in Norway and in the international schools belonging to the same education organizations with the international schools in Stavanger.

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LIST OF ABBREVIATIONS

| | |
|-------|-------------------------------------------------------------------|
| AED | Automated External Defibrillator |
| AMU | Work Environment Committee (Arbeidsmiljøutvalg) |
| BISS | British International School of Stavanger |
| BOS | British Schools Overseas |
| CEESA | Central and Eastern European Schools Association |
| CIS | Council of International Schools |
| COBIS | Council of British International Schools |
| CPR | Cardiopulmonary Resuscitation |
| DSB | Direktoratet for Samfunnssikkerhet og Beredskap |
| EMC | Educational Materials Center |
| ECIS | European Council of International Schools |
| ELMLE | European League for Middle Level Education |
| E&P | Exploration and Production |
| FAU | Parents' council working committee (Foreldrerådets arbeidsutvalg) |
| FEMA | Federal Emergency Management Agency |
| FSS | French School Stavanger |
| G.I.E | Group and information exchange |
| HSSE | Health, Security, Safety and Environment |
| ibid. | ibidem (meaning "in the same place") |
| INSET | "in service" training |
| ISS | International School of Stavanger |
| MLF | French Secular Mission (Mission Laique Francaise) |
| NATO | North Atlantic Treaty Organization |
| NEASC | New England Association of Schools and Colleges |
| NECIS | Northwest European Council of International Schools |
| NOU | Norges Offentlige Utredninger |
| SU | Coordinating committee (Samarbeidsutvalg) |
| U.K. | United Kingdom |
| U.S. | United States |

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1. INTRODUCTION

1.1 Background

Through cooperation, organizational learning then occurs at the interfaces between people, between organizational actions and its external environment (Friedlander, 1983, p.199).

Since an emergency is characterized by severe threat, time pressure and uncertainty, emergency preparedness is the crucial step to prepare adequate resources and ‘knowledgeable people’ (Rake, 2003) to rapidly respond to minimize damage to human, environment and property. Cooperation between various participants, schools and organizations in emergency preparedness is thus essential to establish the consensus and consistency in decision making and implementing decisions (Alexander, 2005; Kruke, 2003; Kruke, 2010). Additionally, knowledge and skill of involved individuals and organizations can be created and improved through the process of sharing and exchange of information and experience within and between organizations based on horizontal and vertical interaction patterns (e.g. Kruke, 2010; Rake, 2003; Kruke and Olsen, 2011; Kruke, 2012). Cooperation in emergency preparedness can therefore provide opportunities for *learning* among actors to improve individual and organizational competence and behavior to strengthen “ability to prepare ourselves today to deal with new situations we are going to encounter tomorrow” (Sfard, 1998, p.9).

Furthermore, knowledge that we created through learning allows us to *change* (Dixon, 1999) and speed up the continuous *improvement of an organization* (Garvin, 1993) to produce better emergency preparedness (Kruke, 2012). Learning from cooperation in emergency preparedness is thus optimized because knowledge creation contributes to improve the organizational capability and update or change the emergency preparedness activities in order to handle efficiently the worst cases of emergency circumstances.

As a matter of fact, the importance of cooperation in emergency preparedness in school has become more concerned recently since many school emergency events occurred in Norway and around the world (NOU, 2012:14), e.g. the fire in the Seton Hall University (U.S.) 2000¹, Jokela (Finland) school massacre 2007¹, Kanebogen (Norway) school shooting 2009, U.K. school bus

¹ <http://en.wikipedia.org/wiki/>

crashes 2010, especially the event Utøya on 22 July 2011. The responsibility for the cooperation between all of emergency response sectors is also profoundly emphasized as one of the Norwegian principles for societal safety and crisis management which includes equality, proximity, responsibility and cooperation (Meld. St. 29, 2011–2012). According to these principles, all schools in each of municipality regions are responsible for establishing enhanced cooperation between themselves and with relevant municipal bodies in order to carry out a comprehensive emergency preparedness plan. Namely, during emergency preparedness activities, the cooperation between schools and organizations can encourage schools to learn about safety procedures and preparation for emergencies to improve the school emergency preparedness.

In the Stavanger region, there are 3 international schools and 41 municipal (local) schools (www.stavanger.kommune.no). An emergency preparedness advisor from the municipality of Stavanger told me that “regarding emergency preparedness, *international schools in Stavanger have hardly cooperated with local schools*”. International schools may have “typical” school culture and develop their own cooperation patterns to obtain knowledge of emergency preparedness. Although, all of schools comply with the Norwegian law and regulations of emergency response and preparedness, comparing to local schools, international schools are technically considered more “experienced” in preparation for emergency situations and prevention of risks. Therefore, I am interested in *the process of learning from emergency preparedness cooperation in international schools* to investigate their cooperation network and understand how international schools manage their knowledge in practice to improve the school emergency preparedness.

This master’s thesis thus focuses on the process of learning from emergency preparedness cooperation in international schools.

1.2 The thesis's research problem and research questions

For a better understanding of the process of learning from emergency preparedness cooperation in international schools, I have contacted three international schools in Stavanger. An administrator of an international school, who has 41 (forty- one) year-experience in school safety and emergency preparedness said that “*the school knowledge for emergency preparedness is shared mostly through cooperation among international schools*”. He also insisted that sources of reliable information and experience are crucial to contribute to update and reform the school emergency preparedness.

Furthermore, I have realized that there may have been a lot of elements that can influence the process of learning from emergency preparedness cooperation in the international schools in Stavanger. Also, each of the 3 international schools in Stavanger out of total 9 international schools in Norway (<http://internationalschool.no/>) is accompanied with distinctive organization's structure, organizational culture and management process. In addition, the process of learning from emergency preparedness cooperation may involve both *internal* and *external interaction patterns* (Kruke, 2010). The diversity and variation of cultural learning² may thus arise as a result of differences in the perspectives, policies, languages and school cultures (Dixon, 1999; Wenger, 1996).

Concerning the above issues, the thesis's research problem is therefore specified as follows:

“What factors influence the process of learning from emergency preparedness cooperation in the international schools in Stavanger?”

Based on the research problem, research questions have been developed to establish the underlying basis for preliminary investigation. The research questions are helpful to set direction for research methods and findings of empirical data. In this chapter, the research questions are introduced as follows:

² Cultural learning “is the way a group of people tend to learn and pass on new information” (source: http://en.wikipedia.org/wiki/Cultural_learning).

Question 1: *What are the patterns of emergency preparedness cooperation for the international schools in Stavanger?*

Question 2: *How is knowledge of emergency preparedness gained and managed by the schools?*

Question 3: *What kind of changes and improvements occurs during the process of learning from emergency preparedness cooperation?*

The theoretical perspectives are utilized as starting points for research questions, assumptions and data analysis. Thus, the research questions along with assumptions for data collection and analysis are presented at the end of theory chapter.

1.3 The research purpose and limitations

The main purpose of this thesis is to study the process of learning from emergency preparedness cooperation in the international schools in Stavanger, by means of which the factors influencing the process of learning from cooperation are revealed. The research will not go into detail about emergency planning or management, but refer directly to emergency preparedness process. Moreover, given that the international schools are located in Stavanger and comply with the Norwegian law and other local relevancies, the study focuses on both local and international interactions. I am thus interested in investigating emergency preparedness in school and the patterns of internal and external cooperation on emergency preparedness. Also, I focus on the process of learning from cooperation, which is characterized by the knowledge creation and management from both inside and outside of the schools along with changes and improvements in the school emergency preparedness.

The theoretical framework is used as a foundation for data collection and analysis. These theories include emergency preparedness, cooperation, learning from cooperation and the factors influencing the process of learning from cooperation.

Based on the research questions and assumptions, the empirical data are collected within the range of international schools in Stavanger, local authority (Stavanger municipality) as well as relevant local and international organizations in relation to emergency preparedness in school.

1.4 The previous researches

During the preparation process for the thesis, a large number of relevant researches are reviewed and used as references. However, none of them focused on the topic of learning from emergency preparedness cooperation in schools.

Many previous researches have addressed the knowledge creation and management from emergency preparedness work and include the topic of cooperation or coordination regarding emergencies, e.g. Kruke, B.I (2003) *“Beredskapsarbeid – en læringsprosess både for beredskapsmedarbeidere og deres organisasjoner”*, Michael K. Lindell, Carla S. Prater, Ronald W. Perry (2006) *“Fundamentals of Emergency Management”*, Sommer, Morten, Braut, Geir S, & Njå, Ove (2013) *“A model for learning in emergency response work”*, Kruke, B.I and Odd Einar Olsen (2011) *“Knowledge creation and reliable decision-making in complex emergencies”*, Kruke, B.I (2010) *“Complicated Coordination in a Complex Emergency”*, NOU 2012:14 *“22. juli-kommisjonens rapport”*, Kruke, B.I. (2012) *“Samfunnssikkerhet og Krisehåndtering: Relevans for 22. juli 2011”*. Some of them have also proposed the knowledge gained from emergency preparedness cooperation, changes and improvements in an emergency preparedness process.

Additionally, several studies have focused on emergency preparedness in school, including: Overseas Schools Advisory Council (2007) *“Emergency Procedures Handbook: Creating a Comprehensive Emergency Procedures Manual for American-Sponsored Overseas Schools”*, The Norwegian Directorate for Education and Training (2013) *“Alvorlige hendelser i barnehager og utdanningsinstitusjoner - veiledning i beredskapsplanlegging”*.

Regarding the process of learning from cooperation, various studies have indicated the relationship between learning and cooperation, and the factors influencing in learning, cooperation and learning from cooperation, including: Friedlander, F. (1983) *“Patterns of Individual and Organizational Learning”*, David A. Garvin. (1993) *“Building a learning organization”*, Nancy M. Dixon (1999) *“The Organizational Learning Cycle: How we can learn collectively, Second edition”*, Ray Stata (1989) *“Organizational learning – The key to management innovation”*.

1.5 The structure of the thesis

My research refers to produce descriptions and interpretations of the factors that influence the process of learning from emergency preparedness cooperation. It has been built on the basis of observation and empirical data consistent with theory framework. The thesis consists of 6 chapters.

Chapter 1 is an introduction to background, research purpose, research problem, limitations, research questions and short presentation of the international schools in Stavanger.

Chapter 2 presents theoretical approaches, including definitions and set of views about emergency preparedness, cooperation through horizontal and vertical interactions, individual and organizational learning process, organizational culture and organizational management. Based on the theoretical framework, assumptions for findings of empirical data are put in place.

Chapter 3 mentions research methods. A qualitative research process is chosen for data collection and analysis, including review of documents, participant observation, email interviews and semi-structured interviews to get as much as possible relevant data.

Chapter 4 presents findings of empirical data which are collected by accessing to the international schools in Stavanger, Stavanger municipality and other relevant organizations.

Chapter 5 discusses the relation between the empirical data in findings and the theoretical framework in order to answer the research questions and propose a solution to the research problem.

Finally, chapter 6 presents answers to the research questions and the research problem, and recommendations concerning the emergency preparedness cooperation in international schools and future research.

1.6 The short presentation of international schools in Stavanger

There are three international schools in Stavanger: the International School of Stavanger (ISS), the British International School of Stavanger (BISS) and the French School Stavanger (FSS - Lycée français de Stavanger).

Among international schools in Norway, **the International School of Stavanger (ISS)** is the largest school with 165 faculty members and staff, and more than 800 students in pre-school to grade 12 (age 3 to 18) from about 56 nations (www.iss.no). ISS initiated as an American school and has been operating in Norway since 1966. Administered by a Director and governed by a Board of Trustees which has representatives of ISS parents, ISS provides an internationally-accredited education primarily for students of the expat community in Stavanger. The majority of parents are connected to The North Atlantic Treaty Organization (NATO) or the major oil companies located in the region. The organizational structure of the school is presented in appendix 2a. ISS is accredited by the New England Association of Schools and Colleges (NEASC) in the United States and the Council of International Schools (CIS) based in Europe.

The British International School of Stavanger (BISS) was established in 1977 to meet the needs of British children whose parents worked in the oil industry. Since then its parent base has broadened so it is now an international establishment serving over 30 countries (www.biss.no), with pupils from a wide variety of ethnic and cultural backgrounds including British and Norwegian. It provides day education for boys and girls from the ages of four to sixteen. BISS is an accredited school with the Council of British International Schools (COBIS) and the school curriculum is approved by the Norwegian Education Authorities. As such BISS has met the criteria for the provision of quality education as determined by the COBIS. In addition, the school has a coordinating committee (SU) representing all stakeholders and a parents' council working committee (FAU) representing parents, both as required under Norwegian law. BISS organizational structure is presented appendix 2b.

The French School of Stavanger (Lycee Francais de Stavanger), managed by the French Secular Mission (Mission Laique Francaise), was established in 1972 to educate the children of expatriate families of the oil company Total E&P Norge AS, under the French educational system. The French School of Stavanger (FSS) is approved by the French Ministry of National Education, the policy decisions made by the Council of cycles (Le conseil de cycle) or classrooms, and the school certificates issued by the principal are automatically valid in all French schools for further studies and the award of diplomas. The school is a small school with about 89 students and 11 teachers from kindergarten to secondary school. French school

premises are located within the confines of Kampen Skolen (a Norwegian school). The organizational structure of FSS is presented in appendix 2c.

The overview of the three school characteristics is presented in table 1:






| International Schools in Stavanger | Total number of pupils and students | Language education | Accreditation |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The International School of Stavanger (ISS)  | about 800 from pre-school to high school | English | The New England Association of Schools and Colleges (NEASC) in the United States and the Council of International Schools (CIS)  |
| The British International School of Stavanger (BISS)  | about 281 from the pre-school to secondary school | English | Council of British International Schools (COBIS)  |
| The French School of Stavanger (FSS) Lycee Francais de Stavanger | about 89 from kindergarten to secondary school | French | The French Secular Mission  Mission laïque française |

Table 1: Characteristics of the international schools in Stavanger

Moreover, the 3 international schools have authorized by Norwegian law, and comply with the Norwegian regulations and guidelines, e.g. Law on Education (The Education Act), Lov om

grunnskolen og den vidaregåande opplæringa (opplæringslova, LOV-1998-07-17-61), Lov om barnehager (LOV-2005-06-17-64), the Working Environment Act (Act of 17 June 2005 No.62), etc. Regarding emergency preparedness, the schools also follow the guidance on emergency preparedness and crisis management of the Norwegian Directorate for Education and Training (Utdanningsdirektoratet) and regulation about municipal emergency preparedness duty (Forskrift om Kommunal beredskapsplikt).

2. THEORETICAL FRAMEWORK

Theoretical framework will play a basic role as assumptions and ideas to describe aspects and set the context and direction for the research. It also produces a foundation for interpreting empirical data and revealing answers to research questions (Blaikie, 2010).

Theories in the thesis are utilized as starting points for both research questions and data analysis. They include emergency preparedness, cooperation, learning from cooperation and the factors influencing the process of learning from cooperation.

2.1 Emergency preparedness cooperation

For understanding the definition of emergency preparedness cooperation, I will consider separately each meaning of emergency preparedness and cooperation, and then combine them in an assumed conception.

2.1.1 Emergency preparedness

First of all, the concept of emergency preparedness is described as the capacity of individuals and organizations that are prepared and ready to respond efficiently to emergencies (EMC, 2011). Additionally, Lindell, Prater and Perry (2006) define emergency preparedness as “pre-impact activities that establish a state of readiness to respond to extreme events that could affect the community” (Chapter 9, FEMA³, 2006).

Following a circular process of crisis phases, emergency preparedness is also carried out *before* and right *after* a crisis occurs (but not in the acute phase or during the crisis phase), with the aim to prevent a new crisis coming (Kruke, 2012). The role of emergency preparedness in crisis phases can be presented in figure 1.

³FEMA: the U.S. Federal Emergency Management Agency includes federal partners, state and local officials, the general public, etc. to prepare for, protect against, respond to, recover from and mitigate all hazards (Source: <http://www.fema.gov/about-agency>)

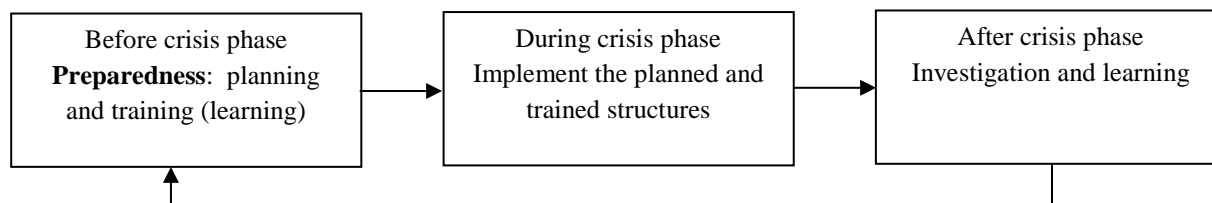


Figure 1: Preparedness in circular process of crisis phases (Kruke, 2012)

Emergency preparedness is counted as one necessary step of emergency management. An emergency preparedness process provides the readiness to confront a risk or crisis and promotes safety awareness, as well as shows the commitment to the safety of individuals, groups and organization (EMC, 2011). An overall preparedness of all *available resources, practical and mobilized equipment and personnel with knowledge and skill* must therefore be in need (ibid.).

The Norwegian Directorate for Education and Training (2013) specifies emergency preparedness in schools that “emergency preparedness work should ensure the prevention, control and handling” in which *schools shall be planned and operated in a way that injuries and accidents can be prevented; schools must have procedures and equipment to quickly respond and deal with accidents and emergency situations; procedures and safety equipment should be familiar to everyone, including children and students*⁴.

2.1.2 Cooperation

Cooperation involves a process of working together with others rather than alone, toward a common end or purpose and for mutual benefit (Chatman, 1995). Oxford Advanced Learner’s Dictionary defines cooperation as “the fact of doing something together or of working together towards a shared aim” (Oxford University Press, 2013)⁵. Consequently, the concept of cooperation describes instance of both joint action and common benefit.

⁴Obtained from www.udir.no/Laringsmiljo/Beredskap-og-krisehandtering/kriseberedskap/.

⁵ Retrieved from <http://www.oxfordlearnersdictionaries.com/definition/english/cooperation>

In view of the complexity and interdependence of an emergency situation, cooperation displays the collective strength and cooperative efficiency by mobilization of various resources in emergency preparedness from local level to strategic level (Kruke, 2012). Thus, regarding interaction patterns, cooperation is established by multiple groups, organizations at *horizontal and vertical interaction patterns*, within, between and among actors/stakeholders before, during and after an emergency (Kruke, 2010). The vertical interaction patterns are constructed based on the *internal* structures in each organization. Meanwhile, the horizontal patterns display the cooperation *between* different organizations (ibid.).

Namely for schools, U.S. Department of Education indicates that the cooperation for emergency preparedness must involve “students enrolled in that school, parents and legal guardians of such students, teachers in that schools, other school employees, and local law enforcement, fire service, public safety, and emergency management agencies” (U.S. Department of Education, 2003).

Therefore, based on various perspectives above, the emergency preparedness cooperation in schools refers to *vertical and horizontal interactions or internal and external cooperation* (Kruke, 2010) between different schools, other relevant organizations, school employees, parents and students (U.S. Department of Education, 2003). They work together based on a common purpose or mutual benefit (Chatman, 1995) to efficiently prepare all of human and equipments resources (EMC, 2011; Lindell, Prater, Perry, 2006) to effectively respond and deal with accidents and emergency situations (The Norwegian Directorate for Education and Training (2013).

For studying the emergency preparedness cooperation in international schools, I therefore focus on the school structure and patterns of internal and external cooperation to understand cooperative mechanisms, cooperative behaviors and individualistic orientations.

2.2 Learning

The definition of learning begins with a general view: a process of both *change* and *improvement* (Garvin, 1993). Scholars have proposed learning as “a change in behavior that results from experience” (Houwer, Holmes & Moors, 2013) and “a process of detection and correction of error” (Argyris, 2002) link with “knowledge acquisition and improved performance” (Garvin, 1993). Additionally, learning can be achieved through the *information processing, behavioral change, new ways of thinking, shared insights, built on past knowledge and experience and organizational routines, as well as training* (Stata, 1989; Huber, 1991; Garvin, 1993; Reason, 1997).

Furthermore, learning can be captured by individuals. It is combined, translated and amplified to emerge as a similar phenomenon at the collective level (Kozlowski and Klein, 2000). The process of learning in organization may concern both individual process and organizational performance, either in the sum of the learning of individuals or consisting of institutional documentations and collective values (Wenger, 1996; Dixon, 1999; Fiol and Lyles, 1985). In relation to study learning in an organization, individual learning and organizational learning are put in place.

2.2.1 Individual learning vs. Organizational learning

Individual learning refers to build knowledge through individual reflection and personal re-elaboration of knowledge and experience in light of interaction with others and the environment (Kim, 1993; Fiol and Lyles, 1985; Kolb, 1984). Individual learning involves an experiential learning cycle of concrete experience, reflective observation, abstract conceptualization and active experimentation (Kolb, 1984). Context of a learning environment, the *change in cognitive structure, personality, personal habit*, may be concerned as factors that influence individual learning (ibid.). Kolb defines individual learning as “the process whereby knowledge is created through the transformation of experience” (ibid.).

“Individual learning is the foundation for collective learning” (Kozlowski and others, 2009) and “there is no organizational learning without individual learning” (Argyris and Schon, 1978, p.20). However, individual learning is an insufficient condition for organizational learning (ibid.). Organizational learning is not the accumulation of members’ learning; it relates to associations, cognitive systems and memories that are shared by members of the organization (Fiol and Lyles, 1985).

Organizational learning is defined as “a process of improving actions through better knowledge and understanding” (Fiol and Lyles, 1985) in order to continuously transform the organization (Dixon, 1999). Along these lines, Dixon links organizational learning to *collective meaning structure* that is united by all members of organization who hold meaning in common and in agreement. Because organizational learning requires collective rather than only individual responsibility in organized processes, a pattern of task system is characterized by interconnected roles and performed through a set of norms, strategies, policies and assumptions that are forms of *collective meaning structures* (Dixon, 1999, p.8). Collective meaning structures and learning have a causal relationship as Dixon points out that organizational learning is achieved if organizational members retain *collective meaning structures* in common (ibid.).

Moreover, in respect of difference but relation between organizational learning and individual learning, collective meaning structures are also categorized along with private and accessible meaning structures (Dixon, 1999). Private meaning that individuals construct and keep it for themselves, (if) are accessible or available to others in organization by hallways of organization for communication (e.g. dialogues, meetings) will be continually reaffirmed and hold in common to constitute a collective meaning. Thus, for organizational learning to occur, the organization not only encourages its members to exchange their accessible meaning structures, but also actively facilitates collective meaning by involving four steps in the organizational learning cycle (ibid.) as figure 2.

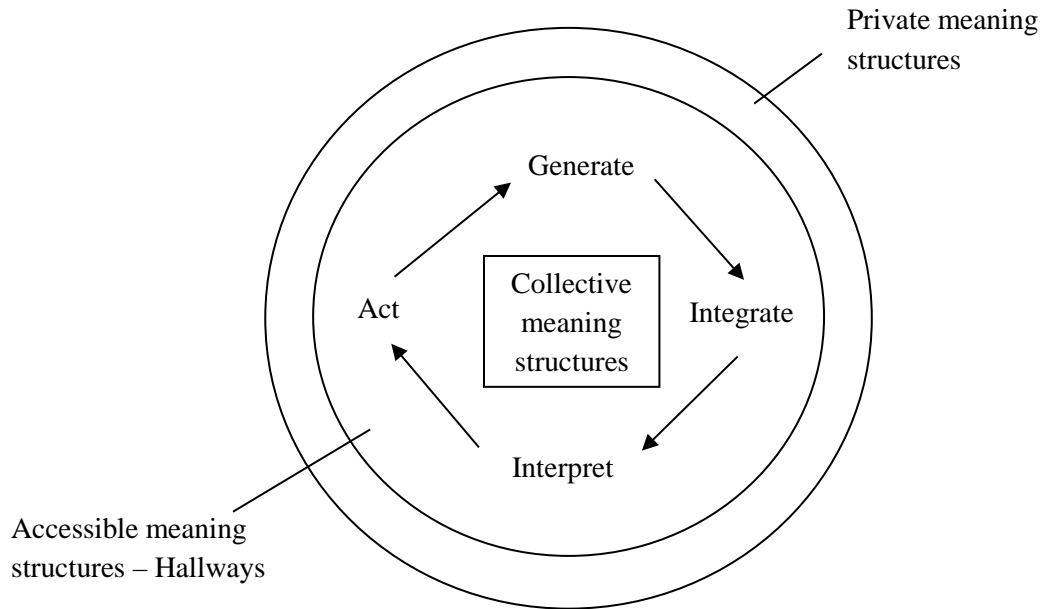


Figure 2: The organizational learning cycle (Dixon, 1999)

With the aim of continuous transformation, organizational learning can be considered as a cycle starting with (1) generation of information across organizational boundaries, (2) collective integration of accurate information into the organizational context, (3) collective interpretation of information, and (4) authorization and responsibility to put the interpreted meaning to use (Dixon, 1999, p.63).

Dixon also emphasizes the *infrastructure* to share information vertically and horizontally in an organizational learning cycle. The infrastructure might include *multi-functional project teams, the co-location of members, system-level dialogue, joint meetings, and network meetings both electronic and face to face*. Additionally, each organization's member must engage in all the steps of learning cycle and interact with others for exchanging information via the hallways of organization (ibid.).

2.2.2 Change and improvement

“Learning is the process that underlies and gives birth to change. Change is the child of learning” (Friedlander, 1983).

Through learning, knowledge creation will lead to *change* the environment and adapt to it (Fiol and Lyles, 1985) and new ideas are the trigger for organizational improvement (Garvin, 1993). “Learning and change reinforce each other. Organizational learning can lead to change which can lead to more organizational learning” said Dixon (1999, p.3). The change during the process of learning is manifested through either single-loop learning when individuals, groups, or organization modify their actions without altering underlying collective values, or double-loop learning when the correction of error requires the change in norms, strategies and assumptions as a consequence of change in values (Argyris & Schön, 1996).

The combination new knowledge, changes and improvement are required to create a learning organization (Garvin, 1993). Gavin defines a learning organization as *an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights*. Without change and improvement, the learning organization is not created (ibid.). Therefore, in order to be able to evaluate the process of learning in a learning organization, an evaluation of change and improvement must be implemented; it also calls as measurement of learning (Garvin, 1993). The measurement of learning is a critical element to show proofs of whether organization’s operational processes facilitate learning, whether individuals and organization are learning, and the extent to which knowledge is being shared or enough information is collected, etc. (Dixon, 1999). Measurement data underline the efficiency of organizational learning, from that top management instituted as a system of “pay- for- performance” (Argyris & Schön, 1996) can make appropriate decisions and continuously invest in organizational learning (Dixon, 1999).

By measuring organizational learning, the organizational members’ perception and degree of supportive factors are revealed. Organization makes efforts to put into practice the factors that facilitate learning and remove the conditions that lessen their learning. Dixon (1999) figures out

the causal relationship process between *facilitating factors*, gain new knowledge and outcome in figure 3.

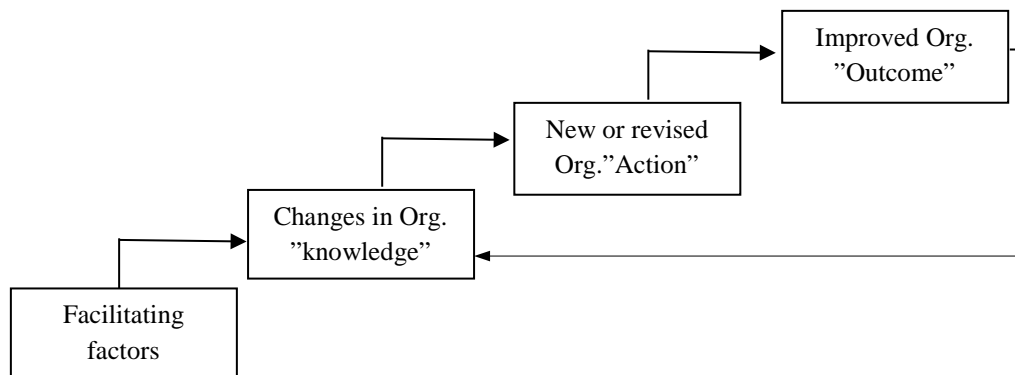


Figure 3: Causal relationships assumed in measuring organizational learning (Dixon, 1999)

Changes in knowledge refer to the difference of or the increase in knowledge from time to time, with more information, more accurate information, more widely shared information (Dixon, 1999, p. 229). Based on new knowledge that has been gained, new organizational actions with *changes in strategy, process, products or policy* are then taken to lead to changes in organizational performance (Argyris & Schön, 1996). Regarding individual learning, Kolb (1984) indicates *change in cognitive structure, personality, and personal habit* must be concerned in the process of individual learning. Likewise, several studies (e.g. Houwer, Holmes & Moors, 2013; Huber, 1991; Fiol and Lyles, 1985; Garvin, 1993; Dixon, 1999 and Argyris & Schön, 1978) state that organizational learning may be measured by stages of cognitive and behavioral changes with *new ways of thinking and behavior modifications, changes in strategy and policy, and improvement in performance or outcome*.

Therefore, in order to understand a learning organization in practice, it is necessary for me to investigate the kinds of change and improvement during the process of learning from emergency preparedness cooperation.

2.3 Learning from cooperation

In the last few decades, many researchers have addressed the relationship between learning and cooperation (e.g. Garvin, 1993; Kruke, 2010; Stata, 1989; Friedlander, 1983, Dixon, 1999), and suggested the factors that can affect the learning among actors (e.g. Weick, 1987; Garvin, 1993; Rake, 2003; Reason, 1997; Dixon, 1999; Fiol and Lyles, 1985).

2.3.1 Knowledge creation and management

Knowledge, referring to facts, information and skills, is the result of learning. Learning is the process that leads to knowledge (Dixon, 1999, p.1).

In relation to learning from cooperation, Garvin (1993) states that new knowledge and insights arrive from outside the organization and are communicated by knowledgeable insiders; or in other words the interactions of internal and external information and interchange of insights and knowledge (Stata, 1989; Friedlander, 1983, Dixon, 1999, Garvin, 1993; Chatman and Barsade, 1995) will create opportunity for organizational learning (Garvin, 1993).

Given vertical and horizontal interaction patterns in section 2.1.2, *knowledge creation during the emergency preparedness cooperation can be achieved through both intra- and inter-organizational structures* (Kruke, 2010). The quality of the vertical information exchange is affected by intra-organizational *collective meaning structures*, while inter-organizational knowledge creation is built on horizontal interaction patterns and cooperation structures which depend on performance within each independent organization (ibid.). Thus, to be able to achieve an effective functional division of labor among organizations in a cooperation network, organizational learning should occur both within and between organizations (Kruke, 2010). Within an organization, organizational learning relates to the ability of dissemination, integration and interpretation of information based their collective meaning structures (Dixon, 1999). Additionally, organizational learning must be cooperated among organizations in a network structure in which everyone has the fair authority and trust between actors must be earned (Kruke, 2010, p.240).

Moreover, knowledge management focuses on the sharing of lessons learned, integration, improved performance, innovation, and continuous improvement of the organization (Gupta, et al., 2004). Thus, in addition to knowledge creation, studying change and improvement in learning organizations (section 2.2.2) must be in place to understand knowledge management and the process of learning from cooperation.

2.3.2 Influencing factors in the process of learning from cooperation

Organizational structure and collective meaning structures are considered as fundamental structures for the organizational learning cycle (Dixon, 1999) and cooperation within and between organizations (Kruke, 2010).

Moreover, plenty of studies suppose that *organizational culture* and *management* are marked as the influencing factors in learning, cooperation and learning from cooperation. Fiol and Lyles (1985); Weick (1987); Dixon (1999); Chatman and Barsade (1995); Sommer et al (2013) point out that efficiency of learning and cooperation is characterized by *organizational culture*, which refers to collective values, collective actions, attitude, behaviors, willingness for the information exchange to meet organizational objectives. Additionally, Garvin (1993), Reason (1997), Dixon (1999), Fiol and Lyles (1985); Wenger and Snyder (2000); Kozlowski and others (2009) insist that *managers and management of learning* are vital groundwork to ensure the alignment of the process of learning and the outcome in order to make best use of new knowledge created from cooperation.

Therefore, along with investigating the interaction patterns, I will focus on studying *organizational culture* and *management of learning from cooperation* which may be seen as variables that may have influence on the process of learning from emergency preparedness cooperation.

2.3.2.1 *Organizational culture*

The concept of organizational culture is shaped mainly by a set of the *behavior of humans* which involves “the way in which one acts or conducts oneself, towards others”, and the *collective meanings* that members of an organization hold in common for their actions to influence the organizational activities (Reason, 1997; Dixon, 1999; Schein, 1992; Ravasi and Schultz, 2006). Organizational culture is defined by Fiol and Lyles (1985) as “a set of shared mental assumptions that guide interpretation and action in organizations by defining appropriate behavior for various situations”.

2.3.2.1.1 *Informed (safety) culture*

Many studies (e.g. Schein, 1992; Reason, 1997; and many others) state that organizations often have very differing cultures as well as subcultures.

Regarding the safety issues in an organization, Reason (1997) addresses an informed culture or a safety culture is the central of an organization, including subcultures: a reporting culture, a just culture, a flexible culture and a learning culture. A *reporting culture* relates to good organizational conditions in which the organizational members willingly participate to report errors and near-misses; a *just culture* reflects a high degree of trust and credibility, in which members are encouraged, even rewarded for providing safety-related information and distinguish between the acceptable and unacceptable actions; a *flexible culture* involves shifting from centralized control to decentralized work groups that require the skills, experience and motivation of the group leaders and workforce; and a *learning culture* refers to willingness to reform the basis of safety information system. All of these subcomponents interact together to create *informed culture* which equates with the term “*safety culture*” as it applies to limit organizational accidents (Reason, 1997, p. 196).

An informed or safety culture of an organization is defined as “the product of individual and group values, attitudes, competencies, and patterns of behavior that determine the commitment

to, and the style and proficiency of, an organization's health and safety programs"⁶ (Reason, 1997, p. 194). An informed (safety) culture is characterized by an effective *safety information system*⁷, in which all managers and organizational members have knowledge about factors that affect the safety of the system in order to collect, analyze and disseminate information from incidents and near-misses (ibid.).

2.3.2.1.2 Collective meanings and behavior

As results of above perspectives, an organizational culture with an informed (safety) culture refers to both collective meanings and individual behaviors. Regarding collective meaning in an organization, Dixon (1999) has proposed the definition as "collective meaning is that meaning which all members hold in common". Organizational members or individuals are seen as both recipients of and creators of the informed (safety) culture when they contribute and share their assumptions to develop organization (Dixon, 1999) and bring what they have learned from society back to their organization (Garvin, 1993). Collective meaning is like having a storeroom where organization's history are kept and as sense of community to join all members together, such as *shared values, vision, objectives, agreements, working language* (Dixon, 1999; Ravasi and Schult, 2006; Fiol and Lyles, 1985; Chatman & Barsade, 1995; Argyris and Schon, 1978).

In relation to behavior in an organizational culture, many studies state that patterns of behavior and behavioral consequences are closely connected with *motivation* such as *disposition* (wishes, desires), *willingness* and *responsibilities* (Sæverud, 2009: p.49; Dixon, 1999; Fiol and Lyles, 1985) to fulfill their tasks and roles they take on in a learning organization (Dixon, 1999). Additionally, cooperative behavior is also manifested in *willingness* to work with others (Chatman & Barsade, 1995; Wageman, R., 1995) and influenced by *disposition* to pursue collective goals (Liebrand and McClintock, 1988). Regarding organizational safety issues,

⁶ Developed by the U.K. Health and Safety Commission. 1993. Third report, organizing for safety. ACSNI Study Group on Human Factors. HMSO, London.

⁷ An information system is a computer-based or manual system including functions to generate reports, answer questions and support decision making. The system transforms data into information, information into knowledge and knowledge into action to effectively achieve organizational learning (Stata, 1989).

willingness is defined as foundation for a *learning culture* (Reason, 1997) in an organization by the way to promote behavior via seeking feedback, sharing information and asking for help (Dixon, 1999; Weick and Sutcliffe, 2011). By means of which, individuals are willing to share their ideas and knowledge, actively engage in organizational dialogue and proactively learn from experience (Dixon, 1999).

Therefore, regarding organizational culture, I will focus on informed (safety) culture, collective meanings related to organization *values, vision, objectives, languages, agreements* and individual's behavior involves *motivation* with disposition, willingness and responsibility.

2.3.2.2 Management of learning from cooperation

Management is defined by Agrawal (2011) as “the organization and coordination of the *activities* of an organization in accordance with certain *policies* and in achievement of clearly defined objectives”. Garvin also states that an organization can manage successfully their learning processes from cooperation by creating distinctive *policies and practices* for a growth mindset and new ways of behaving (Garvin, 1993).

For a school, the school members know *what to do* in case of emergencies based on the requirements of *law* (U.S Department of Education, 2003). Thus, *policies and activities/practices* are put in place when studying management of learning from cooperation in schools.

2.3.2.2.1 Policies for learning from cooperation

Policy is defined as the set of basic principles (law, rule or standards) and associated guidelines (procedures or instructions), formulated and enforced by the governing body of an organization, to direct and limit its actions in pursuit of long-term goals typically published in a booklet or other form that is widely accessible (www.businessdictionary.com/definition/policy). Procedures are the specific methods employed to express policies in action in day-to-day operations of the organization (ibid.).

Regarding management of learning from cooperation, Kruke (2010) has proposed the organizational structure⁸, standards, guidelines and responsibilities are considered as the “inner” contexts (e.g. in the same system of organization) by which knowledge is created and managed within an organization.

Among policies for learning from cooperation, reward and complaint policies ensures the equal values, such as freedom, equality, respect to foster motivation and willingness for sharing information (Dixon, 1999, p. 106). Avoiding the power differences and keeping balance in the working relationship in an organization are vital criteria to enhance mutual learning through organizational dialogue (ibid.). Recruitment policy is also needed to ensure available competence to bear on organizational issues (ibid.). Additionally, rotation policy to increase participants’ skill development and employment opportunities is one of the powerful methods of transferring knowledge (Garvin, 1993). For those policies to be implemented, manager must be creative, attentive to listening and open to criticism (Garvin, 1997).

2.3.2.2.2 Activities/Practices

On the basis of various studies (La Porte, 1996; Reason, 1997, Saga, 1993; Dixon, 1999; Stata, 1989; Garvin, 1993; Wenger and Snyder, 2000) the main activities for learning process from cooperation are structured as follows.

Training including continuous (ongoing) training (La Porte, 1996), simulation and imagination of trials and errors (Saga, 1993), instruction (Reason, 1997), use exercises and practical illustrations to provide employees with more accurate and detailed attention and thinking (Garvin, 1993). Ongoing programs and experimentation set up by efforts of “*learning by doing*” (Dewey, 1938) to transfer knowledge and improve individual skills. They refer to imagination of scenario involve new approaches, a stable flow of new ideas (Garvin, 1993) and improved technologies (Stata, 1989) and methods, which must be imported from outside the organization and applied to daily operations (Garvin, 1993).

⁸ Organizational structure depends on objective and strategy, retrieved from: www.businessdictionary.com/definition/organizational-structure.html

Publication of documents, e.g. policy, reports, newsletters, informers (Stata, 1989; Garvin, 1993) can be seen as the most powerful methods to process information (Huber, 1991) and broadly and efficiently transfer knowledge and ideas throughout an organization or the organizations rather than held in local fields (Garvin, 1993)

Dialogue can be seen as the most popular method of learning from others to gain a new perspective and abundant sources of ideas (Garvin, 1993). It consists of a written or spoken conversational exchange between two or more people, through conferences, meetings, both electronic and face to face (Dixon, 1999), visits, tours (Garvin, 1993) and communities of practice (Wenger and Snyder, 2000). *Communities of practice* refer to groups of people informally jointing together for sharing expertise and passion by meetings (e.g. for lunch) or email networks (Wenger and Snyder, 2000). Their experience and knowledge may be shared in free-flowing and creative ways that help to drive strategy, solve problem, transfer best practices and develop professional skills (ibid.). Organization of visits, tours, job rotation programs (Garvin, 1993) are equally popular means of transferring knowledge, especially for large organizations.

Strategic review (e.g. system audits, examining, getting feedback, reports and complaints) is the process of detection and correction of error (Argyris, 2002) and learning from past experience, history and mistakes (Stata, 1989; Garvin, 1993). That enables organization to value their successes and failures/errors, collect and interpret information to gain experience and increase their own learning from mistakes, past knowledge and experience (Houwer, Holmes & Moors, 2013; Garvin, 1993; Stata, 1999).

In brief, regarding management for learning from cooperation, I will study both policies (e.g. law, guideline, standard, procedures) and activities or practices (e.g. training, meeting, visit, job rotation, feedback, news, reports).

Hereby, the theoretical framework for the thesis is summarized by a diagram below. The sequences of the diagram are also explained afterward.

2.4 Illustration of the theoretical perspectives by a diagram

Theories that include emergency preparedness cooperation, learning (individual and organizational learning), informed (safety) culture and management of learning from cooperation are illustrated by the following diagram.

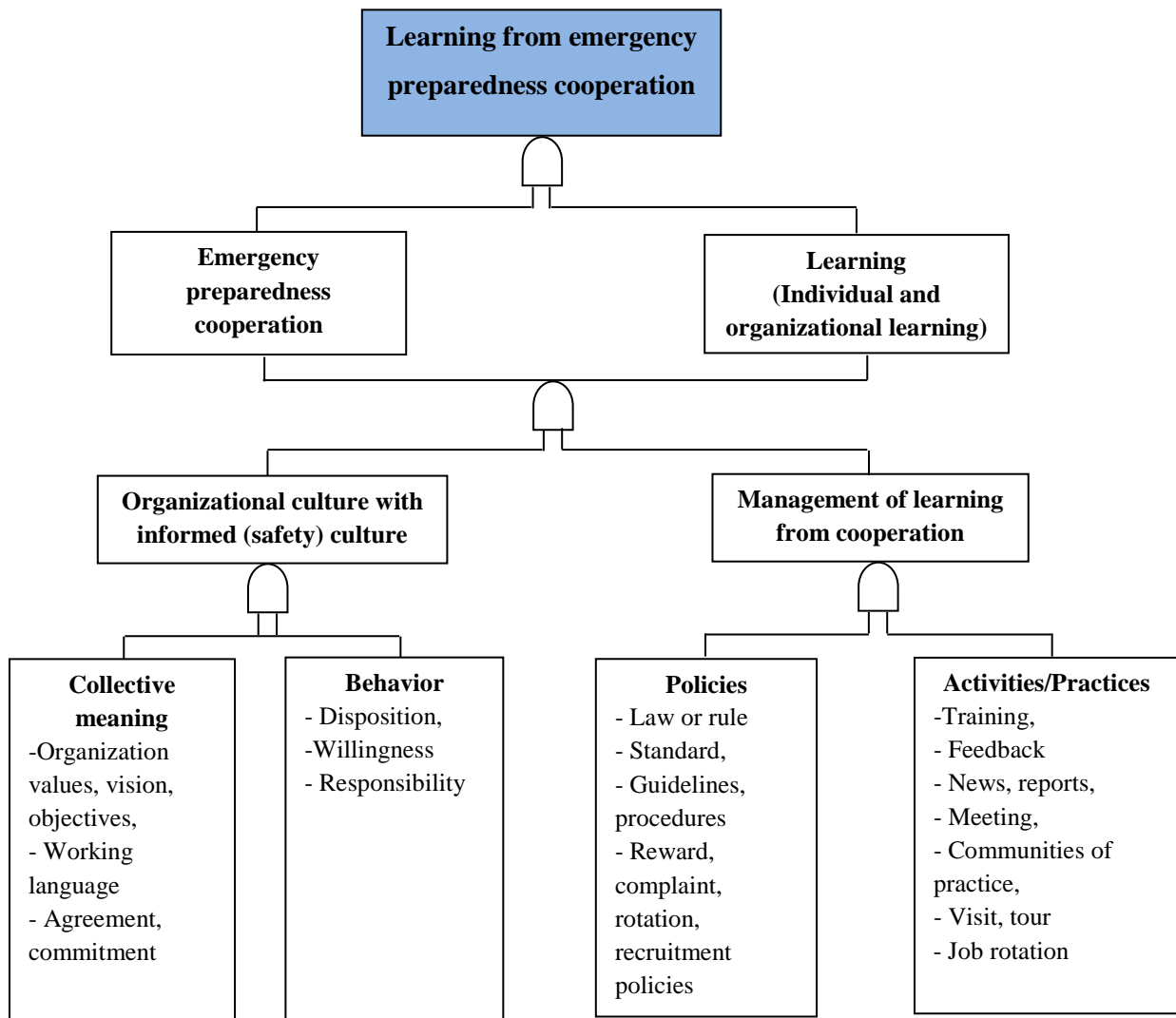
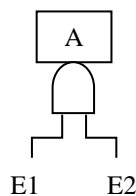


Figure 4: Illustration of the theoretical perspectives

Legend:

Symbol



means that:

Output event A occurs only if **both** input events E1 and E2 happens.

The explanation of the diagram

The theoretical diagram presents the chronological flow of factors that can influence the process of learning from emergency preparedness cooperation.

The process of learning from emergency preparedness cooperation relates to mutual relationship between *emergency preparedness cooperation* and *learning process*, **both** of which involve **both** *informed (safety) culture and management of learning from cooperation*. The informed (safety) culture concerns **both** *collective meaning* with shared organization values, vision, objectives and agreement and *individual's behavior*, such as motivation and willingness. The management of learning from cooperation involves **both** policies and activities/practices. Policies (law, rule, standard, guideline or procedures), including reward policy, complaint policy, recruitment policy, etc., by which the personnel interchange for sharing ideas and gaining values and skills, are then addressed. Activities/practices relate to participation and involvement in meetings, training, visit or tour, job rotation, community of practice, report and feedback. All of these variables interact with others to constitute a process of learning from emergency preparedness cooperation, and are illustrated in figure 4.

2.5 The assumptions for finding the empirical data

As mentioned in the introduction, the theoretical framework is utilized as the starting point for data collection and analysis. Based on the theoretical perspectives, assumptions and expectations for finding the empirical data are put in place following the research questions.

***Question 1:** What are the patterns of emergency preparedness cooperation for the international schools in Stavanger?*

Suppose that the international schools in Stavanger cooperate with other schools and relevant organizations to prepare for emergencies. This refers to two directions of cooperation, one with local bodies and the other with international education system and international organizations. Additionally, I assume that the patterns of cooperation relates to both internal and external

cooperation, within and between the schools, based on the schools' organizational structure and policies.

Question 2: *How is knowledge of emergency preparedness gained and managed by the schools?*

As mentioned in section 2.3.1, the process of learning from emergency preparedness cooperation refers to knowledge creation and management within and between the schools. I assume that knowledge for emergency preparedness is created and gained when the schools cooperate with other international schools, international organizations, local schools, local authority and local emergency services. By means of which they exchange and share information through practical activities, such as training, dialogue with conference, meetings, publication of report, etc. The faculty members bring what they have learned from outside of the schools back to their schools to share and transfer to other members. Knowledge creation are then managed to contribute to update and reform the emergency preparedness in the schools. Additionally, I expect that administrators of the schools motivate their faculty members, students and parents to cooperate to exchange and share information regarding emergency preparedness.

Question 3: *What kind of changes and improvements occurs during the process of learning from emergency preparedness cooperation?*

The process of learning in learning organizations relates to change and improvement in performance or outcomes. Thus, I assume that there are changes and improvements in emergency preparedness in the international schools. That may be changes in collective meanings: strategy, procedures and policy, changes in the way of thinking and behavior, and improvement in the school emergency preparedness.

3. METHOD

With research questions and assumptions in place, the next step in the development of the thesis is to decide how empirical data are collected and analyzed in order to answer the research questions. In this chapter, methodological issues are addressed to describe processes of data collection and analysis in order to propose a solution to the research problem. Additionally, reliability and validity of the thesis are discussed along with methodological strengths and weaknesses.

3.1 Choosing the research methods

For the thesis, the research methods are taken into account to support for description and interpretation of the influencing factors in the process of learning from emergency preparedness cooperation. Among two common research methods: quantitative and qualitative (Blaikie, 2010), qualitative methods are more concerned with producing descriptions and understanding the meanings and interpretations (Blaikie, 2010, p.204). Therefore, based on the thesis research problem and purpose, the *qualitative research methods* are chosen for data collection and analysis. Additionally, this is the first study about emergency preparedness in the international schools in Stavanger, so I did not have much experience on how to access to the schools for collecting data. As a result, the qualitative research methods also follow an *exploration* strategy.

The qualitative data collection methods include participant observation, review of documents and semi-structured interviews (Blaikie, 2010:205). Using such type of qualitative method for data collection allows me to get close to practical preparedness and actual interactions between international schools and other relevant organizations to understand in-depth the meanings of the learning in emergency preparedness cooperation. Additionally, the qualitative data analysis occurs in conjunction with data collection. The reporting of analysis results involves the use of my technical languages and the everyday languages of informants to describe and link up the empirical data to the theoretical framework.

In the thesis, the qualitative research process for data collection and analysis that is based on and consistent with detailed study in the international schools in Stavanger, is presented as follows.

3.2 Qualitative data collection

Due to a diverse range of available data of the international schools in Stavanger and the international education organizations abroad at the present time, the combination of interviews, document review and observation are used to be able to efficiently exploit the sources of data. Data for the thesis are collected through semi-structured (exploratory) interviews with relevant individuals, participant observation in the school practice and reviews of documents related to emergency preparedness activities for the schools. The overview of data collection is presented in table 2 below:

| Period | Research methods | My works |
|---------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 30 th January – 13 th February | - Document review | - Review of documents related to emergency preparedness cooperation in the schools |
| 13 th February - 15 th March | - Document review - Semi-structured interview | - Searching and gathering data from documents - 01 interview with an ISS principal |
| 15 th March - 1 st April | - Participant observation - Semi-structured interviews | - Participating in ISS Lock-down practice - 02 semi-structured interviews: with the ISS Director and 01 safety delegate of ISS - 01 interview with 02 emergency preparedness Advisors at Stavanger municipality |
| 1 st April – 10 th May | - Document review - Semi-structured interviews - Email interviews | - 06 semi-structured interviews: with ISS Director, FSS principal, BISS administrator, ISS teacher, and parent of ISS and of BISS - 03 email interviews: 01 teacher of ISS and 02 ISS Middle school and High school students |
| 10 th May – 1 st June | - Document review - Semi-structured interview | - Look back to theory - Interview with a HSE representative of BISS |

Table 2: Overview of data collection

The purpose and process of interviews for the thesis, review of documents and observation are mentioned as follows.

3.2.1 Interviews

In order to understand the school structure, patterns of emergency preparedness cooperation, policies and activities/practices for sharing and exchanging information, the semi-structured interviews are conducted with different informants at ISS, BISS and FSS and at the municipality of Stavanger. The semi-structured interviews were flexible interviews in which I did not follow a formalized list of questions. Instead, I used the interview guide which include a list of general topic and questions, so that the interviews are conducted with fairly open frameworks with two-way communications.

I conducted the semi- structured interviews, by email and face-to-face interviews. By asking each other questions, the face-to-face interviews allowed my informants say straightly what they think were important and relevant to the thesis research and their school emergency preparedness. Therefore, I could gain insights of the actual situations of the school emergency preparedness. Additionally, the email interviews were used because teachers and students could not arrange appointments to talk with me, and this type of interview allowed me to quickly receive the answers and access to different informants at the same time. Before each email interview, I sent to each informant an invitation and enclosed interview guide which introduce about my thesis topic and general questions. I was required to keep them as anonymous people. Via emails, my informants and I could also openly communicate by sending and replying each other questions. In general, the methods of face-to-face and email interviews allowed me to get close to the informants to discover their competences and motivations. It might let them engage in the process of emergency preparedness cooperation to exchange information and knowledge.

The informants are considered as representatives for type of their social actors, so asking them can obtain the information and data on their social activities, attitudes, motives and institutionalized practices (Blaikie, 2010:167). Thus, the informants were chosen for my interviews based on *their relevance* to the research topic. They are director, principal, administrators, safety representatives, teachers, parents and students who involve in the emergency preparedness process at the schools. Apart from the informants from the school, I

conducted interviews with 02 emergency preparedness advisors of Stavanger municipality to get objective opinions for a better understanding of the cooperation between international schools and local schools and other organizations in Stavanger.

The informants in the thesis are divided in three groups. The first group comprises school administrators who have top responsibility in decision-making and directly manage the administrative activities that interfere with emergency preparedness cooperation. The second group includes safety representatives or advisors who are experienced in the school safety and are responsible for practical activities in emergency preparedness. The third group consists of teachers, students and parents who have been informed and trained to prepare for emergency situations. They also gave feedbacks about what they have learned and what mistakes or near-misses they encountered. The interviews were conducted with 14 informants including 08 informants at ISS, 03 informants at BISS, 01 informant at FSS and 02 emergency preparedness advisors of Stavanger municipality. The list of informants by groups is presented in the table 3.

| Informant | ISS | BISS | FSS | Stavanger municipality |
|---------------------------------|------------|-------------|------------|-------------------------------|
| Administrators | 02 | 01 | 01 | |
| Safety representatives/advisors | 01 | 01 | | 02 |
| Teachers | 02 | | | |
| Students | 02 | | | |
| Parents | 01 | 01 | | |
| Total | 08 | 03 | 01 | 02 |

Table 3: The list of informants by groups

Before implementing interviews, I looked at research questions and theoretical basis to prepare interview guide with questions. Interview questions were considered as a tool that provides the implications of the research results (Andersen, 2006). Thus in the thesis, the interview questions (see appendix 1) were prepared in advance and specified for objectives of interview to become suitable for informants before each interview. The content of interview questions reflects what the research questions need to be revealed to figure out the research problem. Additionally, “A

special use of semi-structured interviewing is *oral history*, in which informants are asked to recount their stories, to discuss their perception of the processes involved or the changes they have seen” (Blaikie, 2010, p.207). During the interview time, some improvised questions were spontaneously raised and the discussions were flexible depending on the actual situations of interviews and the contribution of interviewers.

From the first interview with an international school principal who is also responsible for safety issues at the school, the consideration of those who would be the informants for the thesis was then formed to ensure that the adequate empirical data could be properly collected. As a matter of fact, ISS is the largest international school in Norway with 800 students (while BISS has 281 students and FSS has 89 students). Therefore 08/14 informants for the thesis come from ISS, include different positions: Director, principal, safety delegate, teachers, students and parents. All of informants at ISS are interested in the research and willing to share their opinions and information about emergency preparedness at the school. That also is one of the strengths of the data collection, which is mentioned in section 3.4.

Over the period of about three months, I have conducted 11 face/to/face interviews and 03 email interviews. Each face/to/face interview lasted from about half an hour to two hours, in which the interviews with two administrators of ISS were carried out for about two hours each. For email interviews, the answers were promptly received in just one or two days after they had been sent.

All of interview information was then noted or recorded, and stored in MS. Word document files (.docx) and mp3. After looking back at the theory, the interview themes were considered to change and justify, and 01 more interview with BISS safety representative needed to be conducted, in which the focus of the interview was increased to reach the theoretical ideas. The *saturation of theory* seemed to be achieved when the information from the last informants of each school was repeated or similar to what the previous informants mentioned.

3.2.2 Review of documents

The data collected from the interviews totally depend on the telling and willingness of informants/respondents. Meanwhile documents as data source can be used in qualitative method to identify and describe phenomena (Blaikie, 2010:207). Moreover, the data by reviewing

document are a good source of background information, and provide with a “behind the scenes” to bring up issues that are not noted by other means. Thus, using the research method of review of documents along with the method of interviews during the data collection process allows me to examine the consistency of data and saturation of theory.

Therefore, by reviewing the international schools’ documents and previous studies and researches I have looked for data on the Norwegian law and regulations, the international standards and indicators, the school policies and activities regarding emergency preparedness. The relevant books and articles for the thesis were borrowed from the University library in Stavanger at Ullandhaug and Stavanger library (Sølvberget), and specialized reference documents were provided by both the three international schools and my supervisors. A lot of information that have keywords of learning, emergency preparedness, safety, training, conference and cooperation of international schools in Stavanger have been also collected from the website of the international schools and other internet sources including Google search, Bibsys and Google scholar.

Moreover, I have picked information out from the institutional documents that the international schools issued as well as have complied with. These documents include handbooks, annual reports, guidance for school emergency preparedness, school HSSE procedures, NECIS emergency procedure, CIS standards, BOS standard, BISS first aid and accident reporting policy, French Secular Mission’s directory, etc. Such information has helped to understand the development conditions, intentions or motivations behind the different organizational structures in practice. In addition, a variety of information about school emergency preparedness has been reviewed from Norwegian law and regulations, Norwegian Education Act., as well as documents and publications of international education organizations, such as U.S Department of Homeland Security, American overseas schools, British Schools Overseas, etc.

3.2.3 Participant observation

In order to make clear the school practice, I participated in the Lockdown drill at ISS, observed and gathered information around the practice. “Participant observation is regarded as the qualitative method par excellence” (Blaike, 2010, p.206) and commonly referred to as “field research” (Burgess, 1984). According to Howell (1972), the four stages that most participant

observation research studies are: getting to know the people or at least be accepted in the community, immersing oneself in the field, recording data and observations, and consolidating the information gathered.

As for the first stage, I received an email from ISS to be informed about the Lockdown drill at ISS on 27th March, 2014. Next, I was instructed to follow the lockdown procedures. The practice lasted about 10 minutes to teach students what to do and where to go in case of an emergency. After an announcement made, all staff and students was required to stand up, move quickly and quietly to nearby classrooms, not to push or run for their own safety. Teachers and staff members around the area locked the doors behind them and closed blinds. Students was taught to hide from view in classroom and reminded to sit down as quiet as possible. Once everyone stayed quietly, teacher started to explain so that everyone understands the situation. After the practice, I also noticed some administrators gathering together to have a short discussion about the exercise. Moreover, I had the opportunity to talk with some teachers, parents and students to record and observe their opinion, motivations and emotions, as well as realize the cooperation between the administrators, teachers, staff, students and parents during the exercise.

The participant observation of the Lock-down practice provided me with the good chance to study the emergency preparedness training at the school, directly see what the school did in practice to gain a closer insight and understand actual behavior and internal interactions within the school.

3.3 Data analysis

When the qualitative data are collected, the process of data analysis is implemented to connect the empirical data and the theoretical framework to figure out the research questions and research problem.

The qualitative data analysis refers to the use of concept or coding and categories that are involved in a circular process of three activities, description, classification and connection (Blaikie, 2010: 211). Furthermore, according to Hsieh and Shannon, there are three approaches to qualitative content analysis, including conventional content analysis, directed content analysis and summative content analysis. Among them, the study with directed content analysis is based

on the theory and previous relevant researches (Hsieh, Shannon, 2005). In the thesis, I choose the study with “directed” approach for data analysis, in which coding categories are derived from theoretical ideas and identified during the process of data collection and analysis.

In the beginning of analysis, for data from the interviews, I transcribed all of the noted answers and the recorded conversations. For the data from documents, I picked up the information related to the variables or factors that influence the process of learning from emergency preparedness cooperation. All of the information and data were typed and formatted in the files that were named after the sources of data, e.g. the groups of informant with their current position at the schools. Then these data were described and classified in different categories, for example ordinal category “behavior” with variable category “motivation”, “responsibility”. The categories have been emerged during the process data collection and analysis, including knowledge creation and management with information sharing, exchange and transfer, change and improvement; cooperation with internal and external cooperation, collective meanings with values, vision and objectives; policies with standards, accreditation and procedures; activities/practices with dialogue, meetings, publication, training and reviews. These categories are also assigned for each school or informant.

Afterward, I connected categories together and linked to the research questions in order to describe and to explain the research problem in the light of the theoretical perspectives of emergency preparedness cooperation, learning, organizational culture and organizational management. Moreover, looking back the relation between data and theory could provide me with an in-depth understanding of all respondents, the focus of the observation and investigation in order to construct typology of data.

3.4 Reliability and validity

The thesis uses the qualitative research methods with qualitative data collection and qualitative analysis. Based on the views of Andersen (2006) and Guldvik (2002), in order to evaluate the quality of the qualitative study, reliability and validity must be concerned.

Reliability and validity refers to credibility, the data's confirmability or neutrality, consistency or dependability, and transferability (ibid.).

3.4.1 Reliability

Lincoln and Guba (1994) use “dependability” or “consistency” closely corresponds to the notion of “reliability” in quantitative research. In respect to the “consistency” of my research process, I conducted most of interviews with those who I found especially informative and who could contribute the most necessary information and are responsible for their information, e.g. director, principal, administrators, safety representatives and teachers. Moreover, similar findings in different interviews and other research methods increase reliability (Denzin, 1978). When interviewing informants of ISS and Stavanger municipality, I received a lot of similar answers for the same phenomena from different informants, e.g. information about the meeting with Stavanger municipality, local police and international schools in last August, and fire drills, lockdown drill, conferences and meetings at ISS. Also, informants of BISS supplied the same information about policies, training, communication between the school and parent. Additionally, I realized that most of the information related to school structure, policy, procedure, training and publications, which was collected from the interviews is similar to what was presented in the school’s documents. This was achieved by comparing the methods of interviews to the method of review documents and it shows that consistent views are received.

Moreover, in order to achieve reliability, it is important to conduct interviews with functional informants who are able to provide relevant data and willing to talk about the topic (Neuman, 2000). The informants I have chosen for semi-structured interviews have relevant knowledge and experience of the school emergency preparedness. Dividing into groups of informants with separate interview questions allowed me to exploit the most relevant data of each informant, and the given information was not only diverse and objective, but also appropriate and consistent. The reliability of informants also depends a lot on my effort and the way to influence them. This might have been a challenge for me in the beginning as most of my informants are busy with their classes and activities after school. Through my continuous and motivated approaches to the schools, however, the informants got involved in the research and expressed their willingness to share information. During the interviews, both my informants and I could ask each other question. The interviews were thus conducted in open frameworks with two-way communications. My informants also felt free and more at ease to tell their stories and recall

“non- verbal” information. As a result, I experienced a close relationship with my informants. Some of the informants for the thesis, such as advisors of Stavanger municipality, ISS director and BISS safety representative still kept contact and provided me with additional information via emails after we conducted the face/to/face interviews. Thus, the consistency or reliability could be achieved through qualitative interviews.

Patton (2001), with regards to the researcher's ability and skill in any qualitative research, also states that reliability is a consequence of the validity in a study.

3.4.2 Validity

According to Lincoln and Guba (1994), the validity includes two key criteria: internal validity, whether the findings with empirical data are believable (credibility) and external validity, whether the findings and conclusions apply to other contexts (transferability). In the thesis, the descriptive foundation is used to understand or explain the research problem. The validity will therefore refer to the quality of the actual interviews, the transferability of relevant theoretical assumptions and observation of the phenomenon and variables, and the clear and convincing discussion and conclusion for the real situation.

In order to get access to the international schools in Stavanger and to get a better understanding of my informants, I firstly collected information of the schools and about the intended informants from the school webpage, school documents and literatures. The good preconditions for interviews provided me with a critical assessment of observations and interpretations. Additionally, an active interviewing can utilize the informant's knowledge and provide greater opportunities to manage reliability and validity (Andersen, 2006). Both face-to-face interviews and email interviews also allowed me to be able to get close to my informants to explain my research purpose and the concepts of learning from emergency preparedness cooperation. During the process of data collection, the interview guides with questions were changed and updated based on actual situations of interviews in order to exploit the informants' valuable knowledge. At the end of each interview, I talked to my informants about my notes or summaries of the interviews to correct information and get their agreements. Therefore, the internal validity could

be achieved since the proper questions were raised; opinions and views of the research topic were considered; the right answers were received; data were close to reality; and the transcripts of the interview facilitated the interpretation linked up to the research questions.

Additionally, regarding to the external validity, based on the view of “inner” contexts of Kruke (2010) with standards and guidelines for the same system or within an organization, the thesis findings and conclusions have some potential to be transferred from international schools in Stavanger and apply to other international schools in Norway. The reason of the transferability is that the international schools in Norway comply with the same requirements of Norwegian law and regulations, the same guidance and regulations about emergency preparedness (e.g. Forskrift om Kommunal beredskapsplikt), by which the schools establish their patterns of locally external cooperation. Moreover, it is also possible to transfer the findings and conclusions to the international schools in the same international education system which the schools are accredited. Within the same international education system (e.g. within CIS and NEASC, COBIS or MLF), the international schools comply with the same international standards and directory and participate in common meetings and trainings, through which the international schools build up their internationally external cooperation. Additionally, based on law, regulations, standards and organizational structure, the international schools build up their external cooperation network and the internal cooperation. Within the schools, the international schools have the typical organizational (safety) culture and carry out the management of learning through distinctive policies and activities/practices for exchanging and sharing knowledge in emergency preparedness.

3.5 Methodological strengths and weaknesses

The methodological strengths are that the thesis is considered as the first study of the relationship between the process of learning and emergency preparedness cooperation in international schools in Stavanger. The thesis provides me with a description and better understanding about the learning from cooperation as well as experience in data collection and data analysis. During the data collection process, the international schools have expressed their satisfaction with my research problem and research questions. Stavanger municipality supports the research and

particularly, ISS informants are enthusiastic and willing to provide me with the wealth of information, knowledge and experience. Thus the insight and context into the topic are gained through qualitative interviews. Moreover, the interviews were done efficiently as my study concentrates in one area and I didn't have to travel a lot. The combination of interviews, review of documents and observation can select a diverse range of available data resources of the international schools. The participant's observation provides me with the insights into the school practice. Also, the reviews of documents together with the interviews allow me to verify the consistency of data and saturation of theory.

The problem is that in the beginning I was not certain about how the study will be developed, partly because I did not have much experience to access to the international schools to collect their documents and conduct interviews. The interviews were implemented in unfamiliar culture that I have adapted to during my data collection. The international school staff is so "busy" and they have their own school rules. For some semi-structure interviews, I had to wait for more than one week to receive their reply to make an appointment. In some cases, I had to come in and talk directly to administrator to get permission for interviews. The interviews were then relatively time-consuming. Another problem is that it was hard to anticipate when theoretical saturation would be reached because of the limited time for data collection and analysis along with looking back to the theory.

4. FINDINGS

In this chapter, I would like to present the results of empirical data that have been collected at the international schools in Stavanger. As mentioned in chapter 3.0, the data collection was carried out through the qualitative research methods including review of documents, semi- structured interviews and participant observation. On the basis of the thesis topic and research problem, the empirical data reflect the patterns of emergency preparedness cooperation for international schools, knowledge gained and managed by the schools, changes and improvements in the school emergency preparedness. These data are presented based on the order and requirements of research questions and the assumptions.

4.1 Patterns of emergency preparedness cooperation

As mentioned in 3.1 the patterns of emergency preparedness cooperation in the international schools in Stavanger (ISS, BISS and FSS) concern their organizational structure and external and internal cooperation in emergency preparedness.

4.1.1 External cooperation

From the interviews and the review of documents, the data of the external cooperation in emergency preparedness are collected to address the cooperation between themselves as well as the cooperation between them and local schools, local authority, international schools and international organizations in the process of preparing for emergencies. The overview of external cooperation of the international schools in Stavanger is presented in table 3 as below.

| School | Objectives | Policy, guideline, standard | External cooperation network |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administrators of ISS | <ul style="list-style-type: none"> - Foster meaningful multi-cultural relationships -Encourage positive contributions in the school, local and global communities -Provide a safe and pleasant learning environment -Promote the basis for a healthy and meaningful working environment | <ul style="list-style-type: none"> -Norwegian law, regulation, guidance on emergency preparedness, -Standards of CIS and NEASC. | <ul style="list-style-type: none"> - The international schools (American schools) around the world, such as through ECIS ELMLE, CEESA, NECIS, etc. - Stavanger municipality, local police, local fire department, NATO, oil companies, U.S. embassy in Norway |
| Administrator of BISS | <ul style="list-style-type: none"> -Contribute to a global society - commit to care for the environment | <ul style="list-style-type: none"> -Norwegian law, regulation, guidance on emergency preparedness, -Guidelines of COBIS | <ul style="list-style-type: none"> -The British schools through BSO - Stavanger municipality, local police, local fire department, oil companies, bus companies. |
| Administrator of FSS | <ul style="list-style-type: none"> -maintain the French education -contribute to the local cultural environment | <ul style="list-style-type: none"> -Norwegian law, regulation, guidance on emergency preparedness, -Directory with MLF | <ul style="list-style-type: none"> - The French schools through French Secular Mission schools. - Stavanger municipality, local police and local fire department through Kampen skolen, and Total E&P Norge AS. |

Table 4: The overview of the external cooperation

From the overview, the external cooperation follows in two different directions: one with *international education organizations* and another with *local authority and local organizations*.

4.1.1.1 International education organizations

In relation with the international education systems, from the interviews and review of documents of the schools, I realize that the international schools in Stavanger ensure their vision, values and objectives to meet the commitments and standards of the international education organizations (see appendix 2), which the schools are accredited. The International School of Stavanger (ISS) complies with the accreditation standards and indicators of the New England Association of Schools and Colleges (NEASC) in the United States and the Council of International Schools (CIS) based in Europe. The British International School of Stavanger (BISS) follows the commitment with Council of British International Schools (COBIS) and the standards of British Schools Overseas (BSO). The French School of Stavanger (FSS) follows the directory of French Secular Mission (Mission Laïque Française (MLF)).

Regarding the cooperation between (among) the international schools, FSS principal said that FSS has “very narrow cooperation” and has not cooperated with other French schools, only keeps in touch with MLF. Otherwise, the administrators of ISS and BISS confirmed that they have cooperated with other international schools in Europe and around the world. Through the international education organizations which they are recognized and by participating in annual meetings, conferences and other activities regarding emergency preparedness, BISS liaises with the British schools via BSO and COBIS. ISS has contact with the other American schools via the European Council of International Schools (ECIS), The European League for Middle Level Education (ELMLE), Central and Eastern European Schools Association (CEESA) and the Northwest European Council of International Schools (NECIS).

However, the administrators of ISS, BISS and FSS pointed out that the schools have had not any conversation with themselves and with the other international schools located in Norway for emergency preparedness. As an administrator of ISS explained, they are separated schools and recognized by different education systems. Thus the international schools manage their own

emergency preparedness plans or activities in the area of accreditation to which they belong to, i.e. the international (American) education system, the British international schools system and the French education system.

4.1.1.2 Local authority and local organizations

Based on the Norwegian law, regulation and guidance on emergency preparedness, leaders in all schools have important roles in the planning and cooperation to prevent serious incidents⁹. The schools can contact Stavanger municipality which is the local foundation of the national preparedness. The municipality assists schools and educational institutions in emergency work through coordinating and aligning joint exercises within the municipality, and cooperating with local police and the emergency services (ibid.). Moreover, schools can liaise with the local police through meetings between the police officers and school leaders. The local police advise the schools by adapting the contingency plans to the school buildings, planning exercises and the other needs. The goal is a good cooperation between local authorities, local police and the schools (ibid.).

The administrators of ISS, BISS and FSS stated that the schools have cooperated closely with local police and local fire department for safety procedures, training programs and exercises in emergency preparedness. Regarding the cooperation with Stavanger municipality and the local schools, however, the schools follow different directions. The administrators of ISS and BISS told me that their schools can contact directly by phone or email with Stavanger municipality, but have hardly communicated with local schools or Norwegian schools for emergency preparedness. Otherwise, the administrator of FSS said that because FSS is located in the building of Kampen skolen, the school has closed cooperation with Kampen skole and the municipality. The school does what Kampen skolen advise them, and any contact with the municipality is implemented through safety representatives of Kampen skolen.

In addition, according to two emergency preparedness advisors of Stavanger municipality, the municipality is mostly responsible for the local schools. This year they have a first training

⁹ Retrieved from udir.no/Laringsmiljo/Beredskap-og-krisehandtering/kriseberedskap/

program about risk analysis (risiko- og sårbarhetsanalyser (ROS-analyse)) only for the local schools, because the international schools have their typical school culture and they set their own emergency preparedness activities.

Moreover, regarding the cooperation with local organizations, ISS cooperates with U.S. embassy in Norway, bus companies for school buses, the local base of NATO and the major oil companies whose employees have children studying at the schools. BISS cooperates with bus companies for school transport (BISS operates five school buses), NATO and oil companies whose children studying at the school, while FSS has close contact with Total E&P Norge Company, who provides the budget and financial support for the school.

4.1.2 Internal cooperation

Complying with § 4 of Regulations on environmental health in kindergartens and schools (Forskrift om miljørettet helsevern i barnehager og skoler, FOR -1995-12-01-928), leaders of the schools must ensure that the school's *internal control* system for safety, health and environment is established. Also, § 14 of the regulations requires that procedures and safety equipment for handling accidents and emergency situations should be known to all, including *teachers, parents and students*. Moreover, according to the Working Environment Act (Act of 17 June 2005 No.62) - Section 6-1, for the schools with more than 50 students, the schools have a legal obligation to elect *safety representatives*. Thus, apart from the functional management of administrators, representatives of the health, safety, security and environment (HSSE), such as safety delegate, security personnel, nurse, are included in the school's organizational structure.

Moreover, the schools' vision and values focus on "community of responsibility" at ISS, "working collaboratively" at BISS and "unity, diversity, solidarity" at FSS. Therefore the schools motivate staff, teachers, students and parents to cooperate together to establish a strong community for emergency preparedness. All of the staff, teachers, students and parents are directly involved and engaged in prevention injuries and accidents at the schools.

The internal cooperation in emergency preparedness can be overviewed as in the table 4.

| School | Value, vision | Internal cooperation network |
|--------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ISS | The spirit of belonging, community of responsibility, emotionally healthy lives | -Board of director, parents' council working committee (board of Trustees, AMU) - Safety representatives: HSSE Coordinator, members of HSSE committee and Crisis Response Team members - Teachers, staff, students, parents |
| BISS | Working collaboratively | -Board of director, FAU, SU -Safety representative: Health & Safety officer, First Aid officers, Child Protection officers -Teachers, staff, students, parents |
| FSS | Unity, diversity, solidarity | -Board of director, Council of cycles or classes, -The safety representatives of Kampen skolen -Teachers, staff, students and parents |

Table 5: Overview of the internal cooperation in emergency preparedness

Talking with ISS administrators, I realize that the school has its own safety representatives, security personnel, nurse and a committee to support the safety issues and preparation for emergencies. ISS is fortunate to have an HSSE Coordinator to maintain and document school guidelines in accordance with regulations. Additionally, at ISS, HSSE committee and Crisis Response Team are established to support the emergency preparedness cooperation within the school in order to be able to deal with emergency situations in different departments.

According to the BISS administrator, the school is too small to have a department or a committee responsible for emergency preparedness. The school has the school Health & Safety Officer, designated Child Protection Officers and First Aid Officers who are responsible to assist in first aid, accidents and emergencies. Their members include: principal, head teachers of Preschool, Primary school and Secondary school, Head of Post 16 education, Human Resources/Office Manager, Health & Safety Officer, one teacher and one School Board member. The school's

nurse comes from Stavanger municipality every Wednesday afternoon at the BISS.

The FSS principal said that the school is a small school with 11 teachers, so the school does not have its own safety personnel or nurse. Also, they are a part of Kampen skolen who is responsible for the school safety, so they contact closely with safety representatives of Kampen skolen (including rector, administrators, one security personnel (Vaktmester) and two nurses).

Regarding the cooperation between teachers, students and parents within the schools, under the Norwegian Children Act and Education Act, apart from the role of heads of the schools, a parents' council working committee or Parent Teacher Association (Norwegian abbreviation FAU) is established for ensuring that parents have a real influence in the school¹⁰. Referring to the documents of ISS, BISS and FSS, I know that the schools have different boards, councils and committees, in which the parents' representatives are involved in the government of the school, such as Board of Trustee and the Work Environment Committee (AMU) at ISS; parents' council working committee (FAU) and coordinating committee (SU) at BISS; and Council of cycles or classes (Le conseil de cycle ou de classes) or Group and information exchange (G.I.E) at FSS. According to my informants, the members of the committees at ISS, BISS and FSS are parents who working for oil companies (or NATO), and have experience in safety and emergency preparedness.

4.2 Knowledge gained and managed by the international schools

The data in this section is collected based on the assumption and the question 2 "*how is knowledge of emergency preparedness gained and managed by the schools?*" Due to the patterns of cooperation in the international schools in Stavanger, knowledge for emergency preparedness is gained and managed through both *external cooperation and internal cooperation (within the schools)*. Additionally, the data of motivation to share and exchange information and knowledge are collected and presented.

¹⁰ Obtained from <http://www.fug.no/parents-council-working-committee-fau.144621.en.html>

4.2.1 Knowledge gained and managed through external cooperation

All of the administrators and safety representatives from the three schools said that the schools share information among various international schools/organizations and exchange experience with Stavanger municipality, local police, local fire department and other local organizations. Overview of knowledge gained and managed through external cooperation is presented in table 6

| Informants | Information exchange and activities | Who participate |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| ISS Administrator | <ul style="list-style-type: none"> - Norwegian law, international standards -Training with international organizations, local fire department -Sharing publications, booklet, CD, handbooks, film -Conversation and discussion in conferences, meetings about risk assessment, security measures, and crisis management plan. Visit the schools around the word -Periodic review of standards and inspections | Administrators, safety representatives, teachers, staff |
| BISS administrator | <ul style="list-style-type: none"> - Norwegian law, international standards -Training with international organizations, local fire department - COBIS conferences about child protection, “safe school and safe staff” - Periodic review of standards and inspections | Principal, Child Protection Officers, staff |
| FSS administrator | <ul style="list-style-type: none"> - Norwegian law, international requirements -Training with local fire department -Meetings with MLF for education, not talk about safety or emergency preparedness - Dialogues with Total AS. - Inspections by MLF | Principal |

Table 6: Knowledge gained and managed through the external cooperation

In general, knowledge of emergency preparedness could be gained and managed through the cooperation between the schools and other international schools and organizations, local authority and relevant local organizations, based on policies and activities of external training, sharing publication, dialogue and strategic review.

4.2.1.1 External policies

The informants of the schools told me that in order to implement the emergency preparedness activities, the schools must collect information of the Norwegian law and regulations and keep themselves updated with the international accreditation standards and indicators.

4.2.1.1.1 The Norwegian law and regulations

Regarding safety issues and emergency preparedness, the administrators of the international schools in Stavanger told me that their schools comply with the requirements of Norwegian law and regulations (e.g. the Norwegian Act of 19 June 2009 No. 45). Also, they have the same mandate as the local schools do and comply with the provisions about emergency preparedness cooperation of Lov om grunnskolen og den vidaregåande opplæringa (opplæringslova, LOV-1998-07-17-61, § 13-10: *Ansvarsomfang*). Additionally, the schools follow guidance on emergency preparedness and crisis management of the Norwegian Directorate for Education and Training (Utdanningsdirektoratet) as well as refer to regulation about municipal emergency preparedness duty (Forskrift om Kommunal beredskapsplikt) under the supervision of Norwegian Directorate for Civil Protection (Direktoratet for Samfunnssikkerhet og Beredskap (DSB)).

Learning from Regulations on environmental health in kindergartens and schools (Forskrift om miljørettet helsevern i barnehager og skoler, FOR -1995-12-01-928), the schools carry out the preparation of human and equipments resources for emergencies. Through the Working Environment Act (Act of 17 June 2005 No.62) - Section 6-1, the schools elect the safety representatives who are responsible for the safety and emergency preparedness activities within the schools. Also, by obtaining the information from Norwegian Children Act and Education

Act., the schools get the representatives of parents involved in the school emergency preparedness.

4.2.1.1.2 International accreditation standards

An administrator of ISS told me that in accordance with CIS standards and indicators (appendix 3), the school has to demonstrate a commitment to “internationalism”, both inside and outside classroom, prepare school finances, facilities and competence to prevent risks, appropriate and regularly reviewed arrangements to cover the security of people and premises, facilities meet the health and safety codes of local authorities, effective measures and regular rehearsals to address fire or other emergency situations requiring evacuation and “safe haven/lock down” in order to ensure the safety of students, personnel and visitors.

BISS administrator said that in addition to UK Education Act 2002 Section 175, the British school (BISS) complies with BSO standard to “prepare and implement an effective written policy relating with the health and safety, has proper regard for health and safety issues which conforms to local regulatory requirements, have a satisfactory written policy on first aid and does it implement” (appendix 3).

FSS principal also said that school complies with the requirements of MLF. Most of French schools in Europe don’t have their own schools and in general are departments belonging to the other schools, so the French schools do not have only one rule for safety and emergency preparedness. FSS has not yet seen any certain standard of MLF about safety or emergency preparedness. Whenever the school has school activities (e.g. ski touring) and field trips, the principal has to send MLF a safety request with emergency/accident procedures, list of participants, first-aid kit checklist and even driving licenses to ask authorization and get permission for the event.

4.2.1.2 External training

The external training consists of training with international schools and organizations, and training with local authority and relevant local organizations.

4.2.1.2.1 Training with international schools and organizations

An administrator of ISS said that a couple of years ago the school attended a training course of UK department of Health about “Explaining pandemic flu” to understand a pandemic, “who is at risk” and “what preparation should the school make now”. In addition, through a training course of the Business Continuity Institute, 2001 about “Expecting the unexpected: effective crisis management planning”, the school can know “how prepared is the school” and is equipped by skills in developing crisis management plan including key stages of mitigate, readiness, response and recover.

BISS staff regularly attend COBIS ‘in service’ training (INSET) at British Schools across Europe. The Principal, all Designated Officers for Child Protection attend the trainings relevant to their role. The training courses for designated officers will be every two years and for other staff every three years in either the UK, or Norway.

4.2.1.2.2 Training with local authority and organizations

About the training with the local fire department, a safety delegate of ISS told me about the fire men came to the school twice in 2007 and in last autumn to train the staff and teachers to use fire extinguisher and fire blanket. This year they came to talk a lot about “how’s your fire safety” through a presentation for every staff. In case of great fires, the school fire alarm system connects immediately to fire department to ask for the help. At BISS, the school has trainings every 2-3 years with fire department, in which all of staff members are trained with using fire extinguisher and evacuation. Otherwise, at FSS, all of training or practice with firemen is organized by Kampen skolen. The school alarm system connects directly to the local fire department. Few months ago the principal and assistant was invited by with Kampen skolen to their office, and the firemen came to train them with the evacuation procedures, appropriate exists, and using fire extinguisher and controlling the electricity boards in case of emergency.

In relation with the cooperation with local companies, the informants of BISS said that they contact and talk with the HSE experts of NATO and local oil companies; participate in the

presentations of bus companies. FSS principal told me that if they want to get advices about school safety, the school can contact Total E&P whose employees also are members of the school board and school committee. The informants of ISS shared with me information about the cooperation through training exercises with the local oil companies, bus companies and NATO. For years, the safety and emergency preparedness forces of NATO and oil companies come over to the school to have several tabletop exercises and practice scenario. A couple of years ago, ISS safety representatives attended a training course at Conoco Philip (an oil company located in Sola) and exercises of bus companies in Stavanger. The observation provided them with experiences on how to response to an actual emergency situations. During the “lock down” practice at ISS in April, an expert from Conoco Philip participated in the practice to advise the school. Additionally, regarding training with other organizations, the safety delegate of ISS said that safety delegates and leadership team of the work environment committee were trained through some training courses to learn about work environment law. In that trainings they do some works with risk assessment and for years ISS has implemented risk assessment at the school (see appendix 4). These courses are usually organized by an oil company out of Trondheim that train safety delegates for Norwegian employees.

4.2.1.3 External publication

The international education organizations, to which the three schools belong, have shared a variety of information about school emergency preparedness, so that the international schools can receive and collect information to strengthen their knowledge for emergency preparedness.

According to an ISS administrator, the school can learn how “to be up-to-date on current situations in school location” from Security Guide for International Schools, which includes the booklet and the accompanying CD. They also receive other documents on “well-prepared for a successful attack and plan for emergency situations” which were published by the Office of Overseas Schools (OS), the Bureau of Overseas Buildings Operations and the Bureau of Diplomatic Security, U.S. Department of State. The school can also learn about “school bus security” from Transportation security administration, U.S Department of Homeland Security, and about “Potential indicators of terrorist activity, common vulnerabilities, and protective

measures” from Risk management Division, U.S Department of Homeland Security. Additionally, the school receives information and knowledge from the emergency procedures handbook issued by American-sponsored overseas schools, Department of State, and the facilities development handbook of American overseas schools.

An ISS administrator told me that as ISS is one of the first schools involved in first-aid training with students and staff, including Cardiopulmonary resuscitation (CPR)¹¹, an Automated external defibrillator (AED)¹² training and general first-aid training, ISS has helped a number of international schools to put the training program in place for their school and is willing to share their experience with the international education organizations through their publications regarding school safety and emergency preparedness. Especially, in February 2013, ISS students were filmed and interviewed by the British network, ITV, for a current affairs show. The story covered the importance of life-saving, first-aid training and used Norway's approach of in-school training as a positive example ([www. isstavanger.no](http://www.isstavanger.no)).

4.2.1.4 External dialogue

4.2.1.4.1 Dialogues with international schools and organizations

An administrator of ISS said that the school communicates closely with the international schools around the world to exchange information and experience in the emergency preparedness. The schools also send their employees to visit the international schools around the world such as: Asia, South Arabia, America, Europe, etc. An administrator of ISS told me that ISS administrator can visit and meet the other international schools in sport events NECIS, which has its own emergency procedures (appendix 3), and often has meetings (3 times per year) with heads of international schools among NECIS, and has discussions about emergency preparedness

¹¹ CPR is an emergency procedure for manually preserving brain function until further measures to restore spontaneous blood circulation and breathing in a person who is in cardiac arrest and those who are unresponsive with no breathing or abnormal breathing (http://en.wikipedia.org/wiki/Cardiopulmonary_resuscitation).

¹² AED is a portable electronic device that automatically diagnoses the life threatening irregular heartbeat and rapid heartbeat in a patient and is able to treat them through defibrillation, the application of electrical therapy which stops the irregular heartbeat, allowing the heart to reestablish an effective rhythm) (http://en.wikipedia.org/wiki/Automated_external_defibrillator)

during the tournaments. Additionally, teachers of ISS go to conferences every year to meet teachers from other international schools. They participate in conference of ELMLE for middle school in November. The members of HSSE committee attend the annual workshops, ECIS conference, and CEESA meetings for administration. The communication at these meetings and conferences provided the participants with a wealth of information about safety and preparedness.

In addition, ISS can learn a lot through various conferences and presentations of other international organizations. By participating in the 2013 ECIS Leadership Conference in Berlin, ISS administrators can exchange their idea and experience with other participants in a presentation on crisis management by the Chief Operating Officer from the American Community School in Tunis to discuss the various aspects of crisis preparedness including risk assessment, insurance coverage, and security measures. The school also learns about “balancing safety with education” with the school crisis and emergency management plan and procedures from a conference of ECIS April 2014 “*Security for Your schools*” presented by U.S. Embassy – Lisbon (appendix).

According to an administrator of BISS, BISS senior managers attend the annual COBIS conferences, such as Child Protection conferences and the conferences about “Safe School and Safe Staff”. The designated Child Protection Officers will represent the school at case conferences. A member of staff with detailed knowledge of the child and case may be asked to accompany the child protection officer.

An administrator of FSS told me that the school objectives is “enable each student to attend school similar to that which would be offered in France, while incorporating the contribution of the local cultural environment”, thus the school administrators are responsible only for lessons, exams, learning and teaching at the school. She attends the annual meeting with other French schools in Paris every July, but the topic for discussion meetings is mostly about education and she has hardly talked with others about school safety and emergency preparedness.

4.2.1.4.2 Dialogues with local authority and organizations

Regarding the cooperation with the Stavanger municipality, ISS and BISS said that they are willing to talk with Stavanger municipality and can directly communicate with the municipality by email or telephone, whereas FSS talk with Stavanger municipality through Kampen skolen who rules the school building.

According to ISS informants, the school talks with Stavanger municipality several times per year about the school safety and emergency situations. Specifically, ISS spoke to Stavanger municipality about the danger of walking cross the rocks near the school, and the municipality came to build the big fence to stop people crossing the grass and cross rock. Based on the new municipal law, the municipality also comes frequently to check and test the safety and hygiene of ISS cafeteria. As for BISS, during the severe weather days, such as heavy snow in December 2012, BISS got an advice from the municipality to inform their students to stay at home and not travel. Also for FSS, the school got great advices from Stavanger municipality through Kampen skolen, e.g. during the strong wind days last December the school was informed in the early morning to be very careful with the windows, not allow their students to get out to the playground during the break.

Additionally, Stavanger municipality and local police held a meeting with local schools, some private schools and international schools in Stavanger in August 2013. The 02 advisors of the municipality said that on the basis of more tragic shootings at schools in Germany, Finland and most recently in the United States, the chief administrative officer (Rådmannen) in cooperation with the police prepared the guidelines for how schools should deal with threat situations and real sharp situations. In the meeting, the local emergency department and local police presented those problems to all principals and mentioned the distribution of responsibility between the police, schools and preparedness services (appendix 6). The 02 advisors confirmed that it was the first official meeting with the international schools in Stavanger and other schools to discuss about recent safety situations and emergency preparedness for school, and they may keep it held for coming years.

Moreover, the schools' administrators told me about communications with the local police through visiting the schools and through meetings between the local police officers and the school leaders. The local police come over, take a look what the schools have done and suggest what the schools should improve. ISS administrators also shared with me the story about their cooperation with the local police. ISS has close contact with U.S embassy in Norway to get financial aid grants to equip school with surveillance cameras, bulletproof doors and the safety and security window films (unbreakable glasses) which can suffer from a strong hitting or shooting. Whenever the school has meetings with U.S embassy in Norway, they also invite the local police to participate together.

4.2.1.5 External review by the international organization

The administrator of ISS, BISS and FSS told me that the schools' commitments to meet the accreditations that are determined by the Councils and Associations to which the schools belong. According to the administrators, every 5 – 10 years the international schools have been audited and inspected by the Councils' team or The Independent Schools Inspectorate to figure out what they have done to meet the regulatory requirements. At ISS, whole audit team of CIS and NEASC visits every 10 years, otherwise 2 people come every 2-5 years to inspect and keep track of the policy, standard, procedures. The latest visit of the council team of CIS and NEASC was in April 2014. After each visit the school was given an inspection report, and the report for this year will come in June. ISS director told me that 2 years ago the team recommended the school to have the "Lockdown" drill not only with staff and teachers, but also with all students; and the school has applied the practice with all students from Pre-school to High schools from this year onwards. At BISS the two latest inspections at the school was implemented in 2004 and 2010. After each inspection the schools got an inspection report and the recommendations about safety, security and emergency issues at the school from the Independent Schools Inspectorate to make further improvements. The FSS principal also said about the team of French Secular School who came to inspect last May and made recommendations about the security, safety and preparation of emergencies at the school.

4.2.2 Knowledge gained and managed within the schools

Administrators of the three schools stated that in order to transfer knowledge within the schools, they have used their policies to encourage employees to engage in the emergency preparedness cooperation to exchange information and knowledge. Additionally, the school staff, teachers, students and parents can share and exchange information, knowledge and experience through emergency preparedness *activities* of training, publication of documents, dialogue and review.

Overview of knowledge gained and managed within the schools is presented in table 7.

| Informants | Knowledge gained and managed within the schools |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ISS administrators | The information of emergency preparedness can be provided by the school handbooks, policy, HSSE procedures, training, annual strategic review via email, SMS, faculty meetings, small groups and home room. |
| BISS administrator | The school share information about injuries, accidents and safety issues through handbooks, policies, INSET (in-service training) days, a common office email address, SMS, meetings and discussion. |
| FSS principal | Everyone at FSS can get information and experience through evacuation procedures, regular meetings, and fire alarm practice with Kampen skolen. |
| ISS safety delegate | Safety delegates have casual conversations with HSSE coordinator, talk to students about “the fire drill, what we going to do and why” and “how we did”, about the lockdown procedures. |
| ISS teachers | Teachers always get information during the faculty meetings; feedback about the lockdown and fire drills right away via email. Teachers can send information to inform any mistake and complaints to school principal. |
| ISS students | Students learn about emergency preparedness from the school news, informers, student handbooks, and information via email. |
| ISS and BISS parents | Parents receive information via email, SMS, and talk with teachers and room mom if any mistake is noticed. |

Table 7: Overview of knowledge gained and managed within the schools

In general, to be able to gain and manage knowledge of emergency preparedness within the schools, the 3 schools have applied several different types of policies and procedures, and implemented a variety of activities/practices.

4.2.2.1 Internal policies

In accordance with Section 3-2 of the Working Environment Act, the schools have special safety precautions, in which staff, teachers and students are *informed of accident risks* and health hazards. That may be connected with their work and that they receive through necessary *training, practice and instruction*. In addition to comply with the Norwegian law and regulations, standards and accreditations of the international education organizations that the schools are recognized, the schools issues their own policies and procedures that are fundamental for implementing the school emergency preparedness.

ISS issues HSSE procedures, staff handbook, student-parent handbook, emergency crisis team booklets to involve every people in the school emergency preparedness. Health, safety, security and environment (HSSE) is specified in Parent/Student and Staff handbooks. Every handbook includes HSSE procedures (appendix 3), Fire and Building Evacuation Procedures and “Lockdown” procedures¹³. Additionally, ISS issues the complaints procedures to encourage communication between faculty members, parents and students to share their information and concerns about mistake, near-misses, accidents and other emergency situations. A reward policy is implemented to reduce the school recess duty, bus duty and activities after the school for those who are responsible for the school safety and security. The school has also applied its recruitment procedures based on looking for only those who are interest in safety works, willing to learn and exercise to ensure that “every employee has enough knowledge and skill in safety works to prevent injuries and accidents”.

¹³ *Lockdowns* are called for when a crisis occurs outside of the school and an evacuation would be dangerous. A lockdown may also be called for when there is a crisis inside and movement within the school will put students in jeopardy. All exterior doors are locked and students and staff stay in their classrooms. Windows may need to be covered (U.S Department of Education, 2003).

BISS issues staff handbook, parent handbook, the first aid and accident reporting policy, anti-bullying policy and the child protection policy with the safeguarding children (appendix). Accident procedures are made known to personnel through the staff handbook and during the school induction procedure. At BISS, considerable care is taken over the recruitment of staff that is properly trained in safeguarding, care, welfare, health and safety. The school requires that the necessary security checks are in place before any person is employed, or deployed to work with children in the school setting. Additionally, BISS also has complaints policy and procedures to encourage staff, teachers, students and parents, who have concerns or complaints about injuries, accidents, safety issues to feel comfortable about voicing issues and know that their concerns will be considered seriously.

According to FSS principal, the school delivers school project with accident – health rules with evacuation procedures (appendix 3) to every classes and parents at the beginning of every school year, and also posts the evacuation procedures in the front doors and classrooms.

4.2.2.2 Internal training

The ISS informants said that ISS have trainings and exercises 3 times per year with table top and at least 2 times per years with ongoing training program (*learning by doing*) for teachers, staff and students at the school. Every staff, teachers and students from grades 7-12 at ISS are required to go through general *first-aid training* course, CPR and AED trainings, and after every 2 years one must take the first-aid training again. Additionally, the lockdown practice is carried out 2 times per year. In the past years the *lockdown practice* was only for staff during the week before the student came, except this year it's done with student. *Practices of fire drill* also are organized 2 -3 times per year. A couple years ago the school set up a scenario for practice fire drills at the school under supervisor of local firemen to equip all staff with skills to use fire extinguished and fire blankets. ISS director said that the school practiced *fire drill scenarios* with flake flames by different doors and during the practice teacher; staff and students were trained to implement evacuation procedures, walk to appropriate exit and back behind school as in a real life fire situation. The *fire drills* can be practiced in different time during the days, in lunch time it's chaotic in different places out of class, but helpful for practitioner to adapt to various

emergency situations. An administrator of ISS said that when they practiced fire drills at the school by setting themselves, the school informed the local fire department that the school will do practice so don't send fire truck to the school in that day because the school's alarm system connect to the fire department.

At BISS, staff working with children will receive regular updates and *training "in house"* and when appropriate be offered opportunities to attend specified courses. Staff will receive training through the schools' induction procedures, which includes advice on Care, Control and Physical Intervention and allegations against professionals. The staff members are also afforded opportunities to attend *first aid* courses and INSET days (in-service training) at least every 3 years and regularly update their skills. The practice of fire alarm is organized 2-3 times per year, sometimes with the participations of local fire men.

At FSS, they had two training times with *fire alarm* per year, in which the safety representatives of Kampen skolen organize and manage the trainings.

Furthermore, I had a wonderful opportunity to participate to observe the "*Lock-down*" practice at ISS on 27th March, 2014. It is the first-time practice with students. ISS staff has had annual lock-down rehearsals for years, so they are responsible to explain to the pupils about the emergency situations that may occur as well as instruct parents to lock the doors and wait in the room for duration of the exercise. After the practice, the parents shared with me about their children practice that they were so excited to talk to parents about the exercise. One of ISS parents said that she got an email (see appendix 5) from the school that informs about the practice 3 days before the exercise. The information via email attracted students, teachers and many parents being part of the exercise. An administrator of ISS explained to me that the lock-down practice with students is organized with a lot of thought, a lot of scenarios. Before it happens, the school wanted to ensure the little students can learn from that, they contact parents to inform them, so the practice done well and the school will do that regularly in the coming years.

4.2.2.3 Internal publication

Through interviews and review of documents, I have realized that the faculty members, students and parents receive information and gain knowledge of emergency preparedness through the schools' website, reports, and newsletters.

The informants of ISS said that the information about preparation for emergencies is given via emails and documents on computer server at the school, from HSSE coordinator, staff meeting, meeting minutes and SMS. The school community provides information about health, safety and the environment, make risk assessments of work and school situations, records of accidents, near-miss and hazardous situations, and report on statistics on a monthly basis to the Board of Trustees. Also reports from nurse are issued every month about even minor injuries in the schools. HSSE informers are frequently published by HSSE coordinator (see appendix). Moreover, ISS increase the involvement of teachers, staff, students and parents by information of safety and emergency at the school, such as posters of safety procedures, exit maps and fire fighter schemes in every corners, entrances, class rooms, meeting rooms.

The administrator of BISS said that parents are well informed about the school and about their children's progress. They receive regular and informative newsletters, and benefit from the website and the open-door policy. Full information for parents, including policies and procedures, is posted on the website for the parents of current and prospective pupils. In addition, reports are thorough and detailed and include a short description of the work covered, although not all include targets for improvement. The BISS parent told me that she can see the information of the school through the parent webpage, in which each of parents has their own password to access to.

4.2.2.4 Internal dialogue

4.2.2.4.1 Dialogues between administrators, staff and teachers

Due to the characteristics of the international schools, employees are allowed to rotate to other positions within the school and to other schools within the international school system which the school is accredited. According to ISS administrator, the job turnover is really high, every 2-3 years many employees stay at the school and move to other schools. Last year the school had 15 new teachers. Some new teachers who have a wealth of experience from their previous jobs shared their knowledge with the school, gave suggestions and contributed to the “lock down” practice in April.

Regarding the participant rotation programs in different meetings, conferences, seminars and trainings, at ISS and BISS, not only principal, officer and safety representatives but also staff members are sent to specific training courses. They attended “safe school and safe staff” training and “child protection” conferences (for BISS), and “school crisis and emergency management plan and procedures” conferences (for ISS). Whenever the school representatives come back from conferences, meetings or trainings, they proactively inform to the administrators to share what they have learned. A safety delegates of ISS said that he has gone to a very interesting conference in 2008 at the school that one of the school members speak to compare to big emergencies and the happens in the world, and show the differences that how things was handled in order to “give us better ideas about how to handle the emergency in our school”. Also he said whenever he went to conference or training outside of the school, he tried to take note, and came back to find the way to share, and invited people to a meeting. At BISS, the school has a commitment that the school participates readily when sharing perspectives and experiences with practitioners from other agencies.

Moreover, the administrators of three schools also said that the schools encourage faculty members to bring safety issues to staff meetings, small meetings to tell things outside the building. A lot of opportunities for teachers bring up what they concern, administration will make final decision. At ISS, the safety delegate said that “safety representatives can talk directly with HSSE coordinator and school administrators. We do not regular meeting but contact them

by email and phone number of members”. Teachers contact safety delegate and school administrators during faculty meetings, in service days, in division, small groups, and via email. A teacher of ISS answered that “the managers have given us in writing as well as verbally explained the emergency procedures”.

At BISS staff will be informed and updated in good child protection practice through regular staff meetings and “in service” training.

At FSS, they have general meeting between principal and teachers at the beginning of the school year to explain about evacuation plan, and also the regular meetings to update the safety and security information at the school. Also, the school is in the same building with Kampen skolen, the school can talk directly with safety personnel, nurses of Kampen skolen whenever they want.

4.2.2.4.2 Dialogues between the school, students and parents

Through the interviews with students and parents of ISS, I realize that students only meet safety and security personnel in training days and can communicate with the principal via email; and parents liaise with the school about injuries, accidents and emergency situations via homeroom, email, via meetings of parents’ committee, and can come to talk to teachers whenever notice any problem. An ISS administrator also confirms that all of the parents and students are encouraged to contact the school via teachers, the home room and the parent association to report any mistakes, accidents or near-misses. The conversations through regular coffee morning, advice group and small groups, communities of parents who work for oil industry or NATO are also the ways to exchange information between parents and the school.

The BISS administrator states that the school has open, constructive and co-operative relationships with parents, between all those involved with their children’s safety. Health and Safety officer is responsible to contact teachers, students and parents to inform about injuries and accidents, and assist in emergencies. BISS also has a common office email address through which parents can contact with teachers and other employees. The BISS informants told me that the safety is important and handled strictly at BISS. Whenever the parents concern about

anything, the school encourage them to send email to a common email address of the school, not directly send to the teacher because the school want to ensure that, even in case the teachers are busy and cannot reply, the other faculty members can see it and are ready to answer, so that every concerns will be replied promptly and the school fix the problem immediately.

A FSS administrator said that FSS is a small school; it likes a department, so it is easy to manage and communicate with all teachers, students and parents by talking directly to each other, on phone, by message or via email. If they got any information from Kampen skolen, they will keep teachers updated through the regular meeting, and inform students and parents via email, meetings of classroom and discuss with parents' committee with representatives of the company Total E & P Norge AS about every school issues including injuries and accidents and emergency situations.

Furthermore, the informants of ISS, BISS, and FSS confirmed that the schools use SMS to enable all of faculty members, students and parents to receive the emergency messages quickly. Using email also is an easy way for parents to liaise with the school and with individual teachers. According to ISS director, SMS system play an important role to send emergency messages from the school to parents and students in the fastest and most effective manner. If the school wants to cancel the school, they send one SMS out, everyone can receive the same message quickly, "technology is helping us to keep everyone safe", especially in the severe weather days, snow chaos like the huge storm last December and the days of bus strike.

At BISS everyone can also receive the emergency information through email and mobile messages. By means of which, the school keep parents updated of any emergency information, such as about severe weather - bus delays (December, 2010), emergency situation of a broken water main in the vicinity of school (August 2012), large fire in Gausel with smoke affecting the school (January 2013), snow chaos (December 2012), virus alert (January 2013), etc.

4.2.2.5 Internal review

An ISS administrator told me that regarding the review to value the school's success, the school follows certain expectation and standard to evaluate the employees' competence every year, if

those who show the slow improvement comparing the expectation will be trained further. Online *surveys* about safety, injury or accident and emergency situation are carried out every 3 years for staffs, teachers and students from middle school to high school. ISS makes *survey* to involve all of teachers, staffs, students and parents for the new interest in safety and emergency preparedness. Every year the school also does *inspection* of different aspects of the building that the school team goes around and takes a look at all of the school wings. Additionally, the Staff Handbook and Parent-Student Handbook are *reviewed* annually and updated depending on situation with input from the ISS Advisory Council which has members from the students, parents, employees and the school board. The school also requests *risk assessments* whenever the Primary school, Middle school and High school takes field trips and feedback/reflections after the activity (appendix). Moreover, the school sends emails to require *feedbacks* right after meetings and trainings for emergency preparedness. Participants can send feedback *by email* to administrators to tell how the practice was organized and report any mistake and problem. Parents also are welcome to contact the director should they have any questions. HSSE Coordinator records about near-misses and hazardous situations. Every *concerns or complaints* about any problems arising at school will be seriously considered by teacher or other applicable school employee, director and Board Chairperson.

At BISS, the administrator states that the principal and school board members annually *review* and *revise* the school policy and procedure. BISS concerns with meeting the needs of pupils, parents and others who have a stake in the school through constant *feedback*. All of staff is expected to encourage pupils and parents who have concerns that cannot be addressed through initial discussion to follow the *complaints procedure*. Feedback will be actively sought from pupils and parents in order to minimize complaints and maximize accountability.

The FSS principal also said that after every practice with fire alarm, they also receive the *feedback* from Kampen skolen to tell them what they have done and what problems were.

4.3 Changes and improvements in the school emergency preparedness

My informants told me about the changes in policy, procedures, changes in their interest and knowledge and improvement in the school performance. An overview of changes and improvements in emergency preparedness is presented in table 8.

| Informants | Changes in emergency preparedness |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ISS administrator | The school reviews and updates the handbook, procedures depending on situation. The school changes the doors and camera system and slightly modifies the Lock-down drills with the students participating from this year onwards. |
| BISS administrator | The policies reviewed annually. The school staff members are more concerned about safety and emergencies at the school. |
| FSS administrator | The school keep good job every year. The school does not see any change. |
| Safety delegate of ISS | He said that his knowledge has improved since he started working at the school. |
| Teachers of ISS | The knowledge and desire to know has improved because the school keeps up with better routines. |
| Students of ISS | The students' knowledge is improved through CPR, AED training, Lockdown drill, evacuation practices with fire alarms. |
| Parent of ISS | Through informers, SMS and information of trainings, parents get a better understanding about the emergency preparedness at ISS. |
| BISS Parent | By communication, she knows the procedures better. |

Table 8: Overview of changes and improvements in emergency preparedness

4.3.1 Changes in the school policy and procedures

ISS administrators said that if staff handbook is revised, staff and teachers can see changes with highlights. The emergency and crisis response procedures are regularly reviewed and updated by

Crisis Response Team. Additionally, the news on HSSE (appendix 4b) is updated frequently by HSSE coordinator.

According to BISS administrator, the policies reviewed annually by the Principal and Board members responsible for child protection and first aid. The procedures described therein will be evaluated in the light of experience and where necessary modified immediately. Staff will be informed of changes to policy and procedures and updated in good child protection practice through regular staff meetings and “in service” training.

FSS administrator said that the school brochure does not change regarding emergency preparedness.

4.3.2 Change in knowledge and behavior

All of informants from ISS express their changes and improvements in knowledge since they came to the school. A safety delegate of ISS told me that before coming here, he had got no knowledge of emergency preparedness; after he became involved in safety delegate, he went to trainings, conference, did practice and from studying himself, his knowledge in emergency preparedness is improved. Other informants also said that they are more interested in the school safety; from the trainings they know how to use safety equipment (fire extinguisher) and know how to do first aid. Additionally, the administrators support for changes at the school by having small groups, expanding communities to involve more people, creating chances to go to other schools to see how they do safety, doing changes in reward policy become better, because “when I came here first time, there were nothing. A couple of years ago by becoming a safety delegate, I get some responsibility (school recess duty) reduction a little bit. I don’t have to do after school activities, once per year the safety representatives have one hour dinner out together”.

The administrator of BISS said that there have been different changes of competence among teachers and staff, some changes can be seen clearly as they are more concerned about safety and emergencies at the school.

According to the administrator of FSS, the school keep good job every year. She believes that “it’s perfect now”. The teachers and students are better at practicing fire alarms with Kampen skolen.

4.3.3 Improvement in performance

The informants of ISS confirmed that the school has improvements in school emergency preparedness. As an administrator of ISS describe, the school reinforces the windows with the safety and security window films (unbreakable glasses) and uses the surveillance camera system. Some years ago following the advices of some safety experts, the school did changes big rocks with carefully calculated distances around the school and flowers with roots going deep into the ground against cars coming closely to the school building. From this year onwards, ISS changes lockdown procedures with involvement of all students. The drills of evacuation, lockdown drill and fire drill are more organized. Teachers have done good job with keeping up with the school routines and information. ISS students’ skills are improved with trainings and exercises. The small pupils show their better skills by strictly following teacher instructions and going inline when the fire alarm sounds.

As for BISS, the latest inspection report reflects a significant improvement since the previous inspection. Pupils/students are more carefully supervised on the playground and when eating their lunch. The school has appropriate facilities for pupils who are ill. Staff skills are improved by regular staff training that takes care over health and safety and fire prevention with first-aid training and fire alarm practice.

Whereas, according to FSS principal, the inspection of French Secular Mission last May shown that although the school does not have any significant change it complies with the requirements of French Secular Mission about security and safety.

4.4 Motivation to share and exchange information and knowledge

The informants from three schools shared with me their opinions on how concerned they are regarding emergency preparedness and what their motivation to cooperate in preparation for emergencies. An overview of motivation is presented in table 9:

| Informants | Motivation |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Administrators of ISS | The administrators have “responsibilities for the school and societal safety” and encourage everyone to work in team; engage in training, willing to send email to inform any mistake and near-misses. |
| BISS administrator | In respect of its “duty of care”, the school has its clear responsibility to protect children in school. |
| FSS Administrators | The school objectives focus only on education. “The school is not in charge of organizing security”. Kampen skolen is responsible for safety procedures and the school building. |
| ISS Safety delegate | Safety delegates are concerned and take responsibility for the safety and emergencies within the school and interested in training programs with international schools. However the safety delegate had to refuse to attend in a seminar with some local schools because he was not fluent in Norwegian. |
| Teachers of ISS | The administration shares the information and “I am interested in these programs because of the desperate situations that have happened around the world”. Teachers are interested in training. In general, teachers are so busy with class and activities after school. |
| Students of ISS | Students are not concerned much, because they are busy with class and exam, but engaged in training and workshop for bus safety. |
| Parent of ISS | She thinks that “safety and security at the school is important”. |
| Parent of BISS | She is concerned about the safety of children at the school. |

Table 9: Overview of motivation to exchange information and knowledge

In addition to the above overview, administrators of ISS said that they think that safety is important, not afraid, not fear about the risks and emergency; everyone engages in training, willing to send email to inform any mistake; all members of the school community are encouraged to keep safety at the top of their agenda every day. However, teachers are so “busy”. Additionally, my informants told me that many people think that risk and accident are so rarely and maybe we now have many important things to do than dealing with emergency preparedness. The ISS safety delegate also thinks that the reason most people don’t concern much, don’t want to be the volunteer for HSSE is that they are busy and don’t want to spend time for the things may not happen. Additionally, most of my informants suggest that in order to increase the involvement, participation mandatory should be appointed and surveys with questionnaires should be made periodically.

At ISS, it is the responsibility of everyone in the school community to help build a safety conscious culture. The administrators have responsibility to go straight forward to those who are reluctant to take part in preparedness activities and encourage everyone work in team. Leaders of school listen and look at, discuss about teacher’s concern, everyone can come to talk. If any mistake, near-misses are reported, the school send employees to fix the problem immediately. A safety delegate of ISS told me a story about an email from a teacher to inform the door in the library that was not locked as usual, and the school immediate checked it to discover that the door had been opened over night and they informed everyone to pay attention to lock the doors. The school never considers separating who are newcomers and old employees. Although many of new teachers have knowledge and previous experience in emergency preparedness from their school before coming here, newcomers are introduced about emergency situations and safety issues at the school and they show their involvement in doing practice and paying attention at the school safety to prevent injuries and accidents. The ISS safety delegate also told me that when he first came, the school gave all information and instructed him emergency map and HSSE procedures, and due to his position now he is concerned and interesting in the school emergency preparedness. Moreover, all of informants from ISS told me that they have knowledge of school safety and emergency preparedness, and get First Aid, CPR and AED training and certificates. ISS director also said that she could be able to train another in CPR and AED and willing to share her experience about that.

At BISS, the school teachers and staff are busy, but nobody say “no” about the first aid training, evacuation practice and other activities because all staff through the staff handbook are advised on the physical handling of children and their performance are monitored closely by the Senior Management Team.

Whereas, the FSS principal shared her thought that it feels safe in Norway, and the school is small and only focuses on education, the teachers do what Kampen skolen ask them.

5. DISCUSSION

In this chapter I will discuss how the theoretical perspectives and the empirical data are linked up based on the thesis research questions and the assumptions which are presented at the end of chapter 2. The patterns of emergency preparedness cooperation and the process of learning from emergency preparedness cooperation are discussed to answer the research questions. In addition, the factors influencing the process of learning from emergency preparedness cooperation are revealed in a sequence of organizational culture and management of learning from cooperation.

5.1 Patterns of emergency preparedness cooperation

In the introduction, I raised the research question of *what are the patterns of emergency preparedness cooperation for the international schools in Stavanger*. Based on the theoretical framework, I also assumed in section 2.5 that the international schools in Stavanger (ISS, BISS and FSS) have cooperated with other schools and relevant organizations on emergency preparedness.

As mentioned earlier in section 2.1, the meaning of emergency preparedness is considered firstly and then combines with the meaning of cooperation in an assumed concept. Regarding to the emergency preparedness, Lindell, Prater and Perry (2006) have proposed the “pre-impact activities” which include procedures, available human and equipment resources (EMC, 2011). Also, other studies have addressed the readiness to prevent injuries, accidents and new crisis, and respond efficiently to emergencies (The Norwegian Directorate for Education and Training (2013); Kruke (2012)). The empirical results in section 4.1 indicate among other things that the schools have implemented pre-impact activities by applying policies and procedures (e.g. child protection policy, HSSE procedure and evacuation procedure) and various activities/practices (e.g. training, dialogues, inspection). By means of which, the schools establish a state of readiness of safety equipment (e.g. fire alarm system, surveillance camera, fire extinguishers, unbreakable window glasses), safety representatives (HSSE coordinator, HSE officer, security

personnel, safety delegate and nurse) and other skilled and knowledgeable staff, teachers, students and parents. The schools ensure that their information, knowledge and experience for emergency preparedness are regularly updated and improved to adapt to any emergency situations.

Regarding emergency preparedness cooperation, Kruke (2010) has suggested horizontal and vertical interaction patterns *or internal and external cooperation* before, during and after an emergency. In terms of horizontal interaction patterns or external cooperation that display the cooperation between different organizations (ibid.), the empirical data demonstrate that ISS communicates with CIS and NEASC and other American schools around the world. BISS contacts COBIS and British schools in Europe, and FSS has their international cooperation only with MLF. Additionally, the external cooperation also involves “local law enforcement, fire service, public safety and emergency management agency” (U.S. Department of Education, 2003). In fact, the schools expand the horizontal interactions with local authority (i.e. Stavanger municipality, local police, and local fire department), local oil companies, bus companies, NATO, embassies (and Kampen skolen for FSS) as in the table 3. The external cooperation (Kruke, 2010) in general reflects two directions of cooperation, one with the international education system and the other with the local bodies/organizations as I assumed for the findings based on the theoretical framework.

In relation to vertical interaction patterns or *internal cooperation* that denote the cooperation within an organization (Kruke, 2010), the schools establish their *internal control* system for safety, health and environment (Forskrift om miljørettet helsevern i barnehager og skoler). They also involve all of “students enrolled in that school, parents, teachers and other school employees” (U.S. Department of Education, 2003). Based on the requirements of the Norwegian law and regulations, each of the three schools develop their own internal cooperation between the school board, committees, safety representatives, teachers, staff, students and parents. In this manner, all of the schools’ members get familiar with the procedures and safety equipments for handling accidents and emergency situations (The Norwegian Directorate for Education and Training (2013)).

Furthermore, the cooperation is established based on “doing something together or of working together towards a shared aim” (Oxford University Press, 2013), for a common purpose and mutual benefit (Chatman & Barsade, 1995). The findings demonstrate that through the external cooperation (Kruke, 2010), the schools work together with the international education organizations and other international schools toward their common purpose of school safety. They share knowledge of school security, child protection and emergency management planning to create a social security system for the benefit of employees and support the continuous improvement. Additionally, the schools and the local authority as well as the other local companies can get benefit from exchanging experience and skills through trainings and sharing financial aid grants for safety equipment. Within the schools, teachers, staff, students and parents work together toward the school objectives that create a safe learning environment for their children (e.g. the families of oil companies, NATO) and promote safety awareness in the schools.

Therefore, by connecting the empirical data with the theoretical views and the assumptions, it can be seen that the patterns of emergency preparedness cooperation seem to be built through the interfaces between the school members, local authority, local organizations/companies and international organizations to prepare for emergencies. This internal and external cooperation could be based on the common purpose of the school safety and the mutual benefit from sharing information and experience.

The arguments of the external and internal cooperation in emergency preparedness of the 03 international schools can be summarized by patterns in the figure 5.

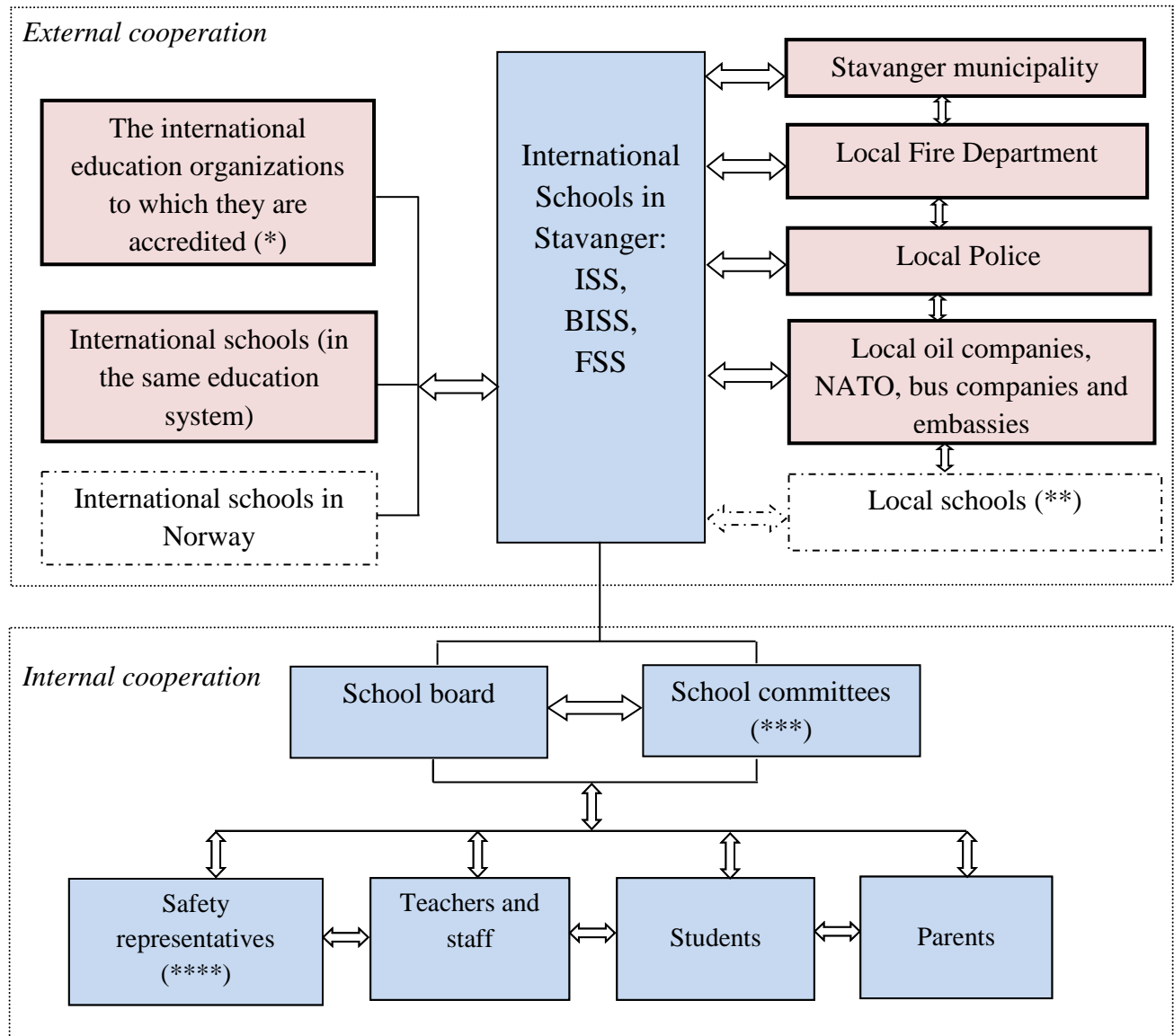


Figure 5: Patterns of emergency preparedness cooperation

Legend:



: External cooperation ((*): CIS, NEASC, COBIS or MLF)



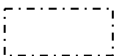
: Internal cooperation

(***) e.g.: Board of Trustees, AMU, FAU, SU, and Council of cycles or classes)

(****): FSS with safety representatives of Kampen skolen;

ISS has HSSE Coordinator, HSSE committee and Crisis Response Team;

BISS has a Health & Safety officer, First aid and Child Protection officers)



: Lack of cooperation ((**): except Kampen skolen that cooperates with FSS)

Explanation of the patterns

The patterns show that the international schools in Stavanger establish both external and internal cooperation. In term of external cooperation, each of the schools cooperates directly with the international education organizations to which the school is accredited – i.e.: NEASC, CIS for ISS, COBIS for BISS and MLF for FSS. Furthermore, the schools have cooperation with Stavanger commune, local police, local fire department, oil companies, embassies, bus companies, and (or) NATO. However, all three schools have no communication with other international schools in Norway and while FSS has closely contacted with Kampen skolen, ISS and BISS have not cooperated with local schools. Within the schools, the cooperation is formed between director, principal, administrators, school committees, safety representatives, teachers, staff, students and parents. Each school is accompanied by distinctive school committees and safety representatives.

5.2 The process of learning from emergency preparedness cooperation: knowledge creation and management

In order to understand the process of learning from emergency preparedness cooperation in the international schools, it is necessary to answer the other research question of *how is knowledge of emergency preparedness gained and managed by the schools*. The theoretical perspectives in section 2.3 suppose that knowledge are gained and managed through the process of sharing information and knowledge and exchanging past experience (Friedlander, 1983; Garvin, 1993; Stata, 1989) within and between organizations (Kruke, 2010) based on hallways of the organization and infrastructures for learning (Dixon, 1999). Moreover, the process of learning from cooperation relates to changes and improvement in knowledge, behavior and performance (Kolb, 1984; Dixon, 1999; Garvin, 1993; Fiol and Lyles, 1985).

Specifically, in relation to internal and external cooperation, or within and between organizations (Kruke, 2010), Garvin states that new knowledge and insights arrive from outside the organization and are communicated by knowledgeable insiders (Garvin, 1993). The findings show that receiving feedback and recommendations after the periodic reviews of CIS, NEASC,

COBIS, or MLF allow the schools to know the results they have done and how they should improve to increase their learning from past experience. Additionally, the hallways of learning (Dixon, 1999) in the international education organizations include various conferences/meetings, visit/tour and trainings. By participating in these events, the schools members (of ISS and BISS) gain a lot of new knowledge of school safety, risk assessment, crisis management, child protection and share their experience in the first-aid trainings. Moreover, through the external cooperation (Kruke, 2010) with the local authority and the other local organizations, the schools gain regular information in emergency situations, get support and advices for safety equipment, as well as receiving assistance for evacuations and practice scenarios. The hallways of learning and the infrastructure for learning (Dixon, 1999) have also been developed within the schools, including the school policies, procedures, website, email, SMS and activities/practices with trainings, publication of documents, dialogues and strategic reviews. The school members are thus motivated to share and update information, knowledge and experience, as well as encouraged to bring back what they have learned from outside of the schools to share.

All of the above relations between the empirical data, theory and assumptions demonstrate that the organizational learning cycle (Dixon, 1999) enters in 3 steps: (1) formation and generation of information (2) collective integration of accurate information into the organizational contexts, (3) collective interpretation of information. However, based on the theoretical view of Dixon, there must fulfill the fourth step of learning cycle in order to complete the process of learning. This last step, which related to authorization and responsibility of putting the interpreted meaning to use (ibid.), shows the need to change and improve (Kolb, 1984; Dixon, 1999; Garvin, 1993). Namely, the process of individual learning concerns *changes* in cognitive structure, personality, and personal habit (Kolb, 1984). The organizational learning process requires *changes* in strategy and policy (Argyris & Schön, 1996), *new ways of thinking and behavior modifications* and *improvement* in performance (Dixon, 1999; Fiol and Lyles, 1985; Garvin, 1993). The findings reflect that there are some changes in behaviors of staff members, teachers and students, and improvements in their knowledge of emergency preparedness and skills of fire practices. As a result, the individual learning might be facilitated to occur. Moreover, the information and knowledge of emergency preparedness are periodically updated and revised through the strategic reviews in the schools (e.g. survey, inspection, review of handbook, feedback). Thus there are

changes in the school procedures and policies (e.g. the revised handbooks and HSSE procedures), and improvements in the school emergency preparedness (e.g. the lockdown practice with involvement of all students). They all indicate that the organizational learning has been occurred.

It can therefore be concluded that the processes of learning from the emergency preparedness cooperation in the three schools are more or less achieved. The similarities and differences in the process of learning from cooperation among the schools indicate that the degree of learning, the quality of knowledge and the improvement seem to be influenced by the patterns of emergency preparedness cooperation and the other influencing factors in learning.

5.3 The influencing factors in the process of learning from cooperation

Many studies (e.g. Fiol and Lyles, 1985; Weick, 1987; Dixon, 1999; Chatman and Barsade, 1995; Schein, 1992; Ravasi and Schultz, 2006; Argyris and Schon, 1978) indicate that the *organizational culture* and *management of learning* through policies and activities/practices are assumed as the influencing factors in the process of learning from emergency preparedness cooperation.

5.3.1 Organizational culture

Organizational culture involves the informed (safety) culture (Reason, 1997) and the collective meaning as well as behavior (Dixon, 1999; Chatman and Barsade, 1995; Weick and Sutcliffe, 2011).

5.3.1.1 *Informed (safety) culture*

Reason (1997) indicates that a reporting culture, a flexible culture, a just culture and a learning culture are subcultures that interact together to create informed culture or safety culture as it applies to limit organizational accidents (Reason, 1997, p. 196).

The *reporting culture* as Reason has addressed is the good organizational conditions in which the organizational members willing to participate to report errors and near-misses. In fact, the schools have applied different kinds of methods and policies as the school climates (Reason, 1997) including the first aid and accident reporting policy (at BISS), requiring for feedback, complaints and risk assessment (at ISS). Reports, newsletters and informers related to HSSE issues (appendix 4) are periodically published. By means of which, the school employees, students and parents are encouraged to engage in emergency preparedness to detect and report errors, mistake, near-misses and hazardous situations (Reason, 1997). Most of my informants from the schools also express that they feel free to contact safety delegates, security personnel and teachers to share information via discussion, homeroom, email, and willingly participate in meetings of parents' committee whenever they notice any errors and near-misses (ibid.) at the school.

As for the *flexible culture*, Reason mentions the shifting from centralized control to decentralized work groups that require the skills, experience and motivation of the workforce (ibid.). The findings demonstrate that apart from the functional management of administrators, ISS and BISS elect skilled and motivated safety representatives (e.g. safety delegate, security personnel, nurse, HSSE Coordinator, HSE representatives and Crisis Response Team members). Otherwise, FSS follows the safety representative of Kampen skolen. The tasks of safety representatives are passed from the centralized control of their administrators (Reason, 1997). The safety representatives are thus responsible for the school safety and emergency preparedness. Whenever near-misses and hazardous situations are noticed, they record, inspect and fix the problems. The HSSE coordinator, HSE representative and nurses at ISS and BISS keep everyone updated of even minor injuries at the schools by making monthly newsletters or informers. Additionally, in respect for their skills, experiences and abilities (Reason, 1997), the safety representatives provide the school members with skills of fire drills, Lockdown practices and first aid trainings. They also are on behalf of the schools to attend in meetings and trainings outside of the schools and bring the knowledge they have learned to share with others within the schools.

Regarding the *just culture*, according to Reason (1997), the organization creates an atmosphere of trust (credibility, transparency) in which members are encouraged for providing safety-related

information and distinguish between the acceptable and unacceptable behaviors/actions (ibid.). Additionally, the trust involves the commitment, motivation and competence to fulfill the trust (Kruke, 2010, p.205, p.222). In fact, based on their commitments, the schools have trusted in the cooperation with the international education organizations to which they belong, the local authority and the local organizations to share information and experienced in emergency preparedness. They also establish the trust, credibility and transparency within the schools when they fulfill their commitment and increase their capability and responsibility for emergency preparedness (e.g. supplying the safety equipment, developing the training/practice, issuing the reports). In such environment, the administrators open to criticism and seriously consider any concerns/complaints, and the teachers, students and parents have confidence in the school abilities to provide their information about mistakes and near-misses. Additionally, in order to distinguish between the acceptable and unacceptable behaviors (Reason, 1997), ISS and BISS have applied complaint procedures and reward policy. By means of which, the school members are clear about what information are important and essential, how to behave acceptably and make appropriate decisions related to hazardous situations. Also, based on the reliable information, the school administrators process, report and correct errors (ibid.).

The last subculture, *learning culture* refers to competence and willingness to reform the basis of safety information system, which collects, analyses and disseminates information from incidents, near-misses and regular checks (Reason, 1997). Experiences in the schools show that not only the administrators but also teachers, students and parents express their willingness to exchange knowledge and experience with the other international and local organizations in order to upgrade their competence (ibid.) in emergency preparedness. They also engage in trainings within the schools to improve their skills (e.g. first aid trainings, fire drills, lockdown practice). As a result, at ISS and BISS, all of the faculty members have knowledge of school safety and emergency preparedness, and get certificates of First Aid training (or CPR and AED at ISS). Concerning the reform of the safety information system (Reason, 1997), the administrators, who have current knowledge of the school safety and emergency, are willing to call for feedback after trainings/practices, regularly update informer/newsletter, periodically implement the strategic reviews and annually revise the policies/procedures and handbooks. By these ways, the

information about injuries, accidents, near-misses and hazardous situations are collected, analyzed and disseminated to change and improve the school emergency preparedness.

Furthermore, Reason (1997) has also proposed that the informed (safety) culture is based on an effective *safety information system*, in which the information system is a computer-based or manual system including functions to generate reports, answer questions and support decision making (Stata, 1989). As a matter of fact, to be able to effectively collect, analyze and disseminate information, the schools develop their own *safety information system*, such as telephone, email, the mobile messages system (SMS). The schools use the SMS system to send out emergency messages to all of faculty members, students and parents in the fastest and most effective manner, so that they keep everyone updated of any emergency information, especially in the severe weather days and the days of bus strike. Using email and telephone is also an easy way for teachers, students and parents to communicate with the school, to report and answer the issues related to the occurrences of errors and near-misses.

Therefore, based on an effective safety information system, the informed (safety) culture with reporting culture, just culture, flexible culture and learning culture in each school might relate to how the school could create a school atmosphere in which their members could be encouraged to involve in the school emergency preparedness. The information and knowledge of emergency preparedness gained through cooperation might lead to changes in the school members' attitudes, perceptions, competencies and behaviors, as well as improvements in the school performance. As a result, the process of learning from emergency preparedness cooperation could be facilitated to occur in the schools.

5.3.1.2 Collective meaning

Within an organization, the ability of dissemination, integration and interpretation of information are based on the collective meaning structures (Dixon, 1999). Dixon has proposed the definition as “collective meaning is that meaning which all members hold in common”, including *shared values, vision, expectations (assumptions), agreements/commitments, working language and objectives* (Dixon, 1999; Argyris and Schon, 1978). Along these lines, Chatman & Barsade

(1995) has addressed the collective meanings in cooperation as collective goals and cooperative actions to meet organizational objectives. From the empirical data, ISS and BISS faculty members hold the meaning of local and global communities, meaningful multi-cultural relationships, caring for the environment and a safe learning environment as the *school value, vision and expectations*. Thus, they issue different kinds of procedures and policies as well as prioritize cooperative actions with the international and local organizations. Through which, the school members participate in a variety of international and local activities/practices regarding the school emergency preparedness. ISS and BISS also appoint their distinctive safety representatives, e.g. HSSE coordinator, safety delegate, HSE representative and child protection officers, who are responsible for the school safety. Whereas, by the school *objectives* of only focusing on French education, FSS totally depends on Kampen skolen practices to implement *cooperative actions* and follow Kampen skolen's evacuation procedure and its safety representative for emergency preparedness.

Additionally, the schools mostly enroll students from the expatriate families of oil companies (and NATO at ISS and BISS). Their members retain *collective meaning with objectives* (Dixon, 1999; Chatman & Barsade, 1995) of “multi-cultural relationships and providing support for internationally mobile families” in common. In this manner, the schools expand the cooperative actions with the major oil companies and NATO whose children are studying at the schools and supports finance for the school. Every year, the HSE experts of the oil companies (e.g. Conoco Philip, Total Norge) and NATO come over to the school to have several tabletop exercises and practice scenario as well as take a look what the schools have done and suggest what the schools should improve.

In terms of *agreements/commitments* that Dixon has also addressed as one of the collective meanings, all of the schools hold meaning of meeting the international accreditations as the agreements/commitments. Thus, the schools complete the strategic reviews every 5 – 10 years with the inspection and audition of the international education organizations to which the schools belong (i.e. CIS, NEASC, COBIS and MLF). Via the valuable recommendations and information from these international education organizations, the schools can learn from their successes and mistakes to improve the school performance.

Furthermore, the international schools maintain their *language* in education as their *objectives* which are presented in the school mission statement. This explains that, in term of emergency preparedness, ISS and BISS have a clear tendency to establish their cooperation with other English-speaking schools, whereas FSS contact only to the French Secular Mission. All of the three schools also have no communication among them and don't talk much with other international schools in Norway and local (Norwegian) schools. The only exception is that, FSS follow the Kampen skolen because they are located in the building of Kampen skolen. Additionally, the informants of ISS said that though they were invited to school-safety conferences organized by local schools they could not attend because of the problem understanding Norwegian. *Language* might pose a challenge for the cooperation between the schools.

It can be seen that *collective meanings* including the school value, vision, expectations, objectives, working language and agreements/commitments could influence the way the schools issue policies and procedures, establish patterns of cooperation and implement cooperative actions in the process of learning from emergency preparedness cooperation.

5.3.1.3 *Behavior*

The patterns of behavior and behavioral consequences are closely connected with motivation (Sæverud, 2009: p.49) such as *willingness*, *disposition* (wishes, desires) (Chatman & Barsade, 1995; Liebrand and McClintock, 1988) and *responsibility* to the collective goal (Dixon, 1999).

Cooperative behavior is also manifested in *willingness* to work with others (Chatman & Barsade, 1995) and influenced by *disposition* to pursue collective goals (Liebrand and McClintock, 1988). Regarding the school emergency preparedness, ISS and BISS have willingness to cooperate with other international schools and organizations and have disposition to have “a tendency of a global development” and “keep safety at the top of the agenda every day”. Thus, they participate in various international trainings and dialogues to gain information and share knowledge. The schools members are also willing to talk with others about risk and emergency, and willing to discuss and inform any mistake/near-misses. Additionally, ISS has competence in CPR and AED

trainings and willingness to share their publications, e.g. the film by the British network ITV which covered the ISS information of life-saving and first-aid training. On the other hand, with the goals of focusing on education, FSS principal has a *disposition* (Chatman & Barsade, 1995) to follow only Kampen skolen to get the emergency information and practice fire alarm. In relation to cooperate with the local schools, ISS and BISS don't talk much with the local schools because the information they spoke were not necessary and interesting. This means that there may have been several factors, e.g. *disinterest, lack of willingness, indisposition* (Liebrand and McClintock, 1988; Chatman & Barsade, 1995) that may lead to restrict the communication between international schools and local schools.

The *willingness* is also defined as foundation for the *learning culture* (Reason, 1997) in organization by the way to promote behavior via seeking feedback, sharing information and asking for help (Dixon, 1999; Weick and Sutcliffe, 2011). Most of my informants said that “safety is important, not afraid, not fear about the risks and emergency”, so the school members are interested in trainings and willing to send feedback, report and complaint regarding injuries, accidents and near-misses. Whenever coming back from conferences, meetings or trainings outside of the schools, they are willing to share what they have learned (Garvin, 1993) via email, during regular staff meetings, in service training days or small groups.

Moreover, Dixon has indicated that the *responsibilities* to collective have influence on how the organizational members fulfill their tasks and roles they take on. Managers possess most knowledge, conduct the most talking and have top responsibility in decision-making (Dixon, 1999). As a matter of fact, ISS administrators said that they have responsibilities for the school and societal safety to help build a safety conscious culture, while ISS safety delegate “takes responsibility for the safety, emergencies within the school”. The administrator and HSE representative of BISS also expressed “the responsibility to protect children in school in respect of its duty of care”. Thus, at ISS and BISS, the school leaders/administrators create an infrastructure for sharing information and take care for the safety facilities, training exercises and reviews of the school policies. Due to their responsibilities (Dixon, 1999) for the school emergency preparedness, the school leaders are willing to receive feedback, discuss safety concerns/complaints and willing to instruct everyone, including newcomer and those who are

reluctant to take part in preparedness activities. They also encourage everyone to engage in training and send employees (e.g. safety representatives) to fix the problem or correct error immediately if any mistake, near-misses are reported.

Furthermore, in relation to the responsibility of local authorities, the municipality of Stavanger, local police and local fire department are responsible to provide the schools with factual emergency situations, advices about the school safety system and fire evacuation skills. The dialogues via email or telephone, meetings and trainings among them display the responsibilities (Dixon, 1999) of both local authority and school leaders for the school emergency preparedness. The first official meeting between Stavanger municipality, local police and other schools demonstrates that the school emergency preparedness become more concerned and interested to get actors to take responsibility. This also means that the local authority and the schools have changed their behaviors since they have learnt about situations of several tragic shootings at schools in Germany, Finland and U.S. Likewise, the responsibility of the international education organizations through their periodic inspection and audition provides the schools with opportunities of learning from past experience to improve the school procedures and activities.

Consequently, willingness, disposition and responsibilities of the school leaders, safety representatives, local authorities, international organizations and the school members seem to be the conditions that motivate the schools to do actions and conduct themselves (behave) in the process of learning from cooperation.

5.3.2 Management of learning from cooperation

According to the theoretical perspectives of Garvin (1993) and Agrawal (2011), management of learning from cooperation refers to *police/procedures*, such as law, regulation, standard, guideline, procedure, reward and recruitment policies and *activities/practices* including training, publication of documents, dialogues, and strategic reviews.

5.3.2.1 *Policies for learning from cooperation*

Garvin (1993) states that an organization can manage successfully their learning processes by creating distinctive *policies*, which are defined as the set of law, standards and associated guidelines, procedures or instructions¹⁴. Within a system or an organization, the standards, guidelines and responsibilities are also considered as the “inner” contexts (Kruke, 2010) by which knowledge is created and managed. The findings show that the international education system or organizations to which each of the schools is accredited has distinctive accreditation *standards and requirements* for school safety and emergency preparedness. Complying with the CIS standards and NEASC requirements, ISS commits to “internationalism” and prepare school finances, facilities, measures, trainings and periodic reviews. Based on the BOS’s standards, BISS prepare the school policies relating to health and safety issues and participate in the council’s meetings and trainings to exchange knowledge and experience. Also, following the requirements of MLF, FSS prepare their first-aid kits and send safety requests to get approval for the school activities and field trips.

Additionally, being located in Norway, the schools must comply with the *Norwegian law, regulations* (e.g. the Norwegian Act of 19 June 2009 No. 45, Forskrift om Kommunal beredskapsplikt) and guidelines with the guidance in school emergency preparedness. Thus, the schools contact the local authorities (e.g. Stavanger municipality, the local police and fire department) and have dialogues and trainings with them to exchange experience and knowledge of emergency preparedness. Based on the Working Environment Act., the school staff, teachers and students are informed of accident risks and health hazards through the school information system and receive necessary trainings, practices and instructions. According to the Working Environment Act., the safety representatives are elected to take responsibility for the school safety. Also, in accordance with the Norwegian Children Act and Education Act, the representatives of parents’ council working committee are established to involve in the school operation. Thus, the skilled and knowledgeable parents from the oil companies or NATO engage in the school safety and emergency preparedness to share experience with their school.

¹⁴ Retrieved from www.businessdictionary.com/definition/policy

Within the schools, ISS and BISS staff, teachers, students and parents can receive information about emergency preparedness through different kinds of publications of *handbooks*, *booklets*, *HSSE procedures* and *evacuation procedures*; while everyone at FSS can know about emergency preparedness through evacuation procedures. Additionally, ISS and BISS apply the policies of *first aid*, *child protection*, *recruitment*, *reward* and *complaint* to encourage the school members to share information and experience, and ensure enough competence for prevention of injuries and accidents.

In essence, the Norwegian law and guidelines, the international standards, the school handbooks, HSSE procedures and other school policies could be the factors facilitating the process of learning from emergency preparedness cooperation in the schools.

5.3.2.2 *Activities/Practices*

Based on the theoretical views of many studies (e.g. La Porte , 1996; Reason, 1997, Saga, 1993; Dixon, 1999; Stata, 1989; Garvin, 1993; Wenger and Snyder, 2000), the activities/practices including the training, dialogue, publication of documents, strategic review are assumed as the positive factors influencing the process of learning from emergency preparedness cooperation.

Trainings with ongoing programs (La Porte, 1996), exercises, simulation, imagination of trials and errors (Saga, 1993), instructions (Reason, 1997) provide employees with more accurate and detailed attention and thinking (Garvin, 1993). The empirical results show that by attending in a variety of annual instructions and continuous training courses of international organizations, ISS and BISS staff get a broad knowledge and experience in “what preparation should the school make”, “how prepared is the school”, risk assessment, etc. In addition, the exercises with the local fire department, the local oil companies or bus companies provide the school members with skills of evacuations, fire practices and experience on tabletop exercises and practice scenario. Moreover, the ongoing programs involving continuing series of small experimentation set up by efforts of “*learning by doing*” (Dewey, 1938; Garvin, 1993) to transfer knowledge and improve the staff’s skills. Within the school, the teachers, staff and students can improve their knowledge and skills by being continually trained or the continuous (ongoing) trainings, e.g. first-aid

training courses, CPR and AED trainings, fire drills and lockdown practices, with 2-3 times/year for each. Additionally, regarding imagination of scenario involves new approaches (Garvin, 1993), ISS set themselves several times with fire drill scenarios to make everyone at the school ready for emergencies and adapt to various emergency situations.

Publication of documents, e.g. reports, newsletters (Stata, 1989; Garvin, 1993) can be seen as the most powerful methods to transfer information and ideas throughout the organization (Garvin, 1993). As a matter of fact, the official information about policies, procedures, emergency situations and even minor injuries at the schools are broadly and efficiently published (Garvin, 1993). The school publications include the schools' website, monthly reports from nurse and safety representatives (HSSE coordinator), regular newsletters, informers (appendix 4) and posters of safety procedures, exit maps and fire fighter schemes. By means of which, the faculty members, students and parents are well informed and kept updated of the emergency situations. Additionally, ISS can gain a lot of the reliable information about “well-prepared for a successful attack”, “plan for emergency situations” from the publications of international organizations, e.g. Security Guide for International Schools, the emergency procedures handbook of American-sponsored Overseas Schools, etc.

Dialogue can be seen as the most popular methods of learning from others to gain a new perspective and abundant sources of ideas (Garvin, 1993) through conferences, meetings (Dixon, 1999), visits, tours and communities of practice (Wenger and Snyder, 2000). The findings show that by having dialogues with the international schools and organizations in various international conferences, visits and meetings, ISS and BISS learn a lot about “safe school and safe staff”, “child protection”, “school crisis and emergency management plan and procedures”, etc. Via dialogues in several visits and meetings on phone with Stavanger municipality and local police, the schools get timely information about emergency situations (e.g. the severe weather) and other advices about the school security system and fire alarm system. Within the schools, during the regular faculty meetings, in service days or small meetings, the staff members get new information from their administrators and colleagues. They also obtain ideas about “how to handle the emergency in our school” from those who have just come back from visits, tournaments, conferences or meetings outside of the school. Additionally, via teacher-parent

conference, home room or common office email (i.e. at BISS), teachers, parents and students can exchange their information related to injuries, accidents and near-misses. Moreover, through dialogue, tacit or implicit assumptions are discussed in open, so that accurate and complete information are provided (Dixon, 1999). At ISS and BISS, through meetings of administrators, safety representatives, school board and committees (AMU, SU), the concerns/complaints about injury, accident and other safety issues are discussed in open to get satisfaction with the resolutions.

Communities of practice refer to groups of people informally jointing together for shared expertise and passion by meetings (e.g. for lunch) or email networks (Wenger and Snyder, 2000). In ISS and BISS, the advice groups, small groups, communities of parents, who either are working for the oil companies or NATO or have a wealth of experience in safety and emergency preparedness, have regular coffee morning (e.g. every Tuesdays morning at ISS, every Thursday, and Friday at BISS). Whenever gathering together, the parenting communities of practice talk about the child progress and the school safety. In order to transfer best practices and develop professional skills (Wenger and Snyder, 2000), they are willing to discuss with teachers and administrators via email, during the regular meetings of FAU, AMU, G.I.E, Parent Association or parent-teacher conferences. They are also willing to share their experience and knowledge to help their teachers and schools to solve the problem, e.g. for injuries, near-misses, fire alarm, evacuation and lockdown practices.

Moreover, job rotation programs (Garvin, 1993) are equally popular means of transferring knowledge. Through daily conversations or network meetings (Dixon, 1999), the faculty members can approach to new ideas and experience from new teachers who have a wealth of experience from their previous jobs in terms of job rotation (Garvin, 1993). During the “lock down” practice in April at ISS, some new teachers who have a wealth of experience shared their knowledge and helped out the school with their suggestions. Additionally, the participant rotations of Director, principal, administrators, safety representatives, child protection officers and teachers in different visits, tours, conferences, meetings, and trainings seem to be the powerful method of widely sharing information and transferring knowledge. The effectiveness of these activities/practices is that participants approach to different perspectives, new ideas and

needs, and then have opportunities to bring what they have learned back to their schools. This matches to the perspective of Garvin (1993) about transferring knowledge in a learning organization.

Strategic reviews are considered as the learning process of detection and correction of error (Argyris, 2002), regular check, report errors and near-misses (Reason, 1997), and from past experience, history and mistakes (Stata, 1989; Garvin, 1993). The empirical results show that the schools can learn from the periodic review, inspection and audition of the international organizations, i.e. CIS, NEASC, COBIS and MLF. Additionally, ISS and BISS implement periodically their evaluations of employees' competence, surveys and inspections and review the school policies, procedures and handbooks. They also require risk assessments for the school field trips with constant feedback and call for concerns or complaints. These activities enable them to regularly check (Reason, 1997) to value their successes and failures/errors and learn from the past experience and mistakes (Stata, 1989; Garvin, 1993) to change or update (Fiol and Lyles, 1985; Garvin, 1993; Dixon, 1999) the school emergency preparedness.

Therefore, during the process of learning from emergency preparedness cooperation, activities/practices of training, dialogue, publications of documents and strategic reviews could be essential factors for learning from others, developing skills, approaching and managing practical information and new ideas. As a consequence, the schools could adapt to actual emergency situations.

5.4 Illustration of the discussion by a diagram

Based on the summary of theoretical framework that is illustrated by the diagram in figure 4, the discussion is then summarized by a diagram in figure 6 to illustrate the relation between theories and findings of empirical data in order to answer the research questions and solve the research problem.

The process of learning from emergency preparedness cooperation in the international schools in Stavanger seems to be influenced by the mutual relationship between the patterns of *emergency*

preparedness cooperation and the *process of individual and organizational learning*. **Both** of which involve **both** the *organizational (safety) culture* and the *management of learning from cooperation* that could be implemented and achieved in the three schools.

The organizational (safety) culture involves **all of** the *informed (safety) culture, collective meaning and behavior*. Among them, the *informed (safety) culture* includes the reporting culture, the just culture, the flexible culture and the learning culture in the schools. The *collective meaning* involves the school values, vision, objectives and agreements/commitments with the international education organizations to which the schools belong and are accredited (CIS, NEASC, COBIS or MLF). The *behavior* characterized by the willingness to share the knowledge and experience between and within the schools/organizations, the disposition to pursue the school collective and to contact with the local schools, as well as the responsibilities of the school leaders (administrators, safety representatives) and the local authorities (Stavanger municipality, local police, fire department).

The management of learning from cooperation involves **both** the *policies* and *activities/practices*. The *policies* includes the Norwegian law, regulations and guidelines for the school safety and emergency preparedness, the international accreditations, standards and requirements, the school handbooks, HSSE procedures, reward, complaint and recruitment policies. Through which the faculty members, students and parents interchange for sharing ideas and gaining values and skills. The *activities/practices* relate to **all of** the trainings with the international organizations and local fire department, the publications of documents, the dialogues with meetings, visit or tour, job rotation, community of practice, and the strategic reviews. All of these variables interact with others to constitute the process of learning from emergency preparedness cooperation.

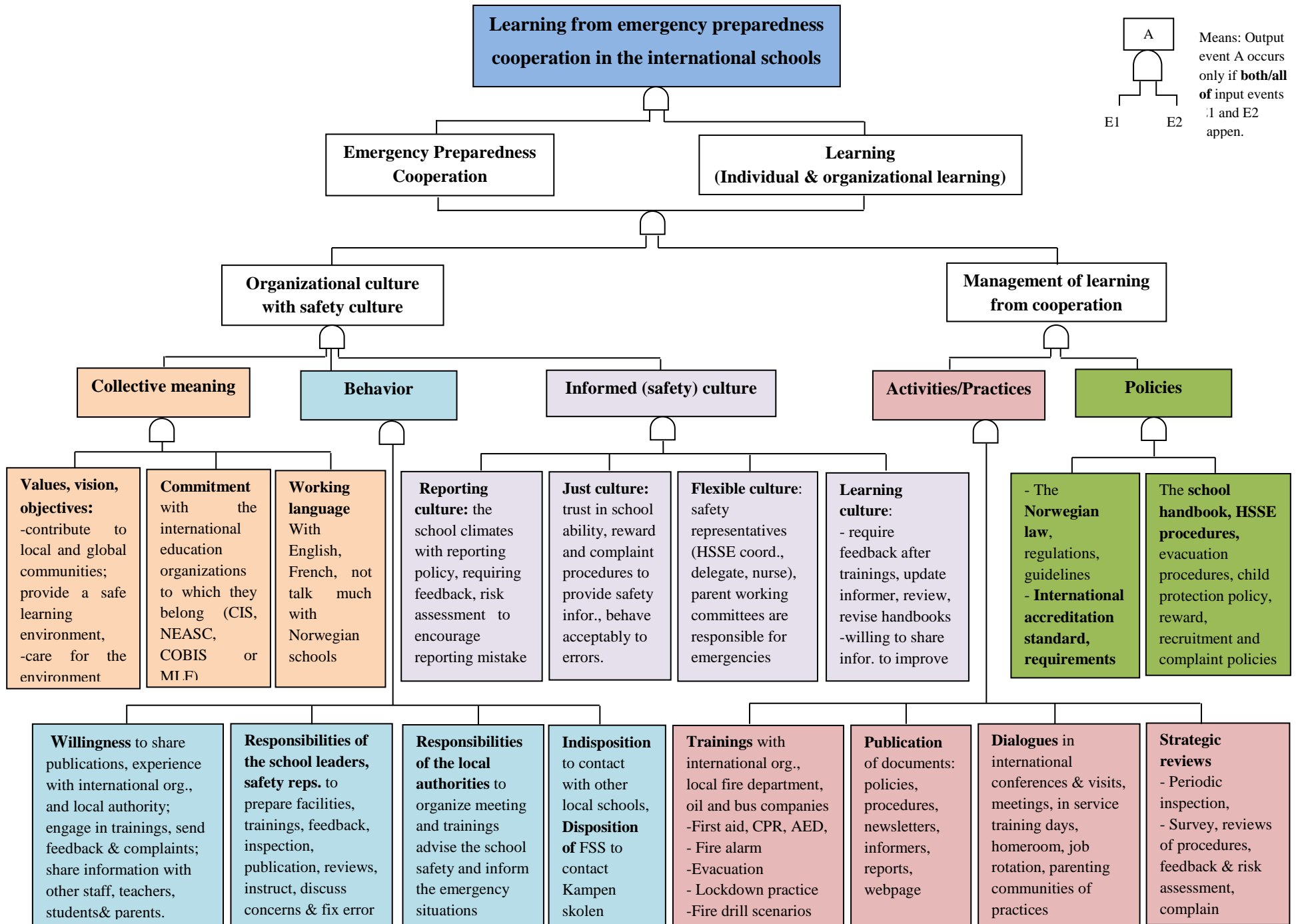


Figure 6: Illustration of the discussion

6. CONCLUSIONS AND RECOMMENDATIONS

The thesis is constructed based on a theoretical background of the process of learning from emergency preparedness cooperation in the schools, along with the factual situations in Norway and the World in general, as well as in the international schools in Stavanger specifically. By support from the theoretical framework and the assumptions for finding data, the research methods were carried out, which include 14 semi-structured interviews with 14 informants at the schools and Stavanger municipality, along with review of relevant documents and the participant observation at ISS. As a result, the empirical data involving emergency preparedness cooperation; policies, activities and motivations within and between the schools were collected. By connecting the theories and the findings, the discussion provides fundamentals to reveal the research questions related to the emergency preparedness cooperation, knowledge gained and transferred and changes and improvements in the school performance. Furthermore, I propose the solution to the research problem which concerns the factors influencing the process of learning from cooperation.

Therefore, in this chapter, I am coming to the end of the thesis by synthesizing the answers for the thesis conclusions and presenting recommendations and future research.

6.1 Conclusions

In this thesis, I have raised and addressed three research questions regarding the patterns of emergency preparedness cooperation and how the knowledge of emergency preparedness have been gained and managed as well as what kind of changes and improvements occurs during the process of learning from cooperation.

Firstly, regarding the first research question, the thesis has documented both meanings of the emergency preparedness and the cooperation in the international schools in Stavanger. All of the schools have prepared for the school emergencies with available human and equipment resources by complying with the *Norwegian law, regulations* and the *accreditation standards* of the international education organizations to which they are accredited. Based on common purpose and mutual benefit to prepare for emergencies, the schools establish both *internal*

and *external cooperation*, involving the school board, school committees, safety representatives, teachers, staff, students and parents, the international schools, the international education system to which they belong, and local authority and local organizations.

Secondly, the theoretical perspectives on *learning* and *learning from cooperation* have been introduced to play the foundation for the research assumptions about knowledge of emergency preparedness gained and managed within and between the schools. This thesis has shown that the *knowledge of emergency preparedness is gained* when the schools' members share information and exchange experience through policies, trainings, dialogues, publications and reviews in the context of the external cooperation with the international schools/organizations, local authority/organizations as well as the internal cooperation between the school members. Furthermore, the process of individual and organizational learning occurs along with the *knowledge managed* in light of the *changes* in knowledge, behavior, policy/procedures and *improvements* of skill and performance. The thesis can thus conclude that the process of learning from emergency preparedness cooperation has occurred in the international schools in Stavanger.

Finally, the thesis, in conjunction with introducing the research problem, has shown that organizational culture characterized by informed (safety) culture, collective meanings and behavior, and management of learning from cooperation with policies/procedures and activities/practices are *the factor influencing the process of learning from emergency preparedness cooperation*.

- *An Informed (safety) culture* including a reporting culture, a just culture, a flexible culture and a learning culture based on an effective safety information system (e.g. email, telephone, SMS) relates to create a school atmosphere to encourage the school members to report errors/near-misses, share essential information, shifting responsibilities and improve competence to reform the school emergency information.
- *Collective meanings* including the school value, vision, expectations, objectives and agreements/commitments could be concluded as the factors influencing in issuing the school policies and procedures, establishing the cooperation patterns and carrying out the emergency preparedness activities.

- *Willingness, disposition and responsibilities* seem to be the conditions that motivate local authorities, international education organizations, school leaders, safety representatives and school members to work with others, engage in communication and inspection and create a learning culture regarding the school emergency preparedness.
- As for *policies*, the Norwegian law and regulations, the international standards and the school handbooks are concluded as the fundamental factors for management of learning from cooperation. Based on that, the schools build up their own internal and external cooperation and prepare human and equipment resources. Also, the HSSE procedures, evacuation procedures and policies of recruitment, reward and complaints provide the school members with the initial information and allow them to get involved in the school emergency preparedness activities.
- *Activities/practices* of the trainings (e.g. first aid, fire alarm, evacuation, and lockdown) and dialogues (e.g. faculty meetings, homeroom, parenting communities of practices) are tentatively confirmed as the influencing factors for providing skills by “learning by doing” and approaching a plentiful source of practical information. Also, the publications of documents (policies, procedures, newsletters) and the strategic reviews (e.g. inspection, feedback, risk assessment) are concluded as the school conditions by which the schools broadly share knowledge and learn from past experience to make changes and improvements in the school emergency preparedness.

6.2 Recommendations

During the process of data collection at the international schools in Stavanger and Stavanger municipality, my informants express their opinions about cooperation and individual involvement in the school emergency preparedness. Therefore, I recommend that participation mandatory should be appointed and surveys with questionnaires should be made periodically as well as workshops for bus safety need to be organized annually in the schools. These will increase the involvement in the school emergency preparedness. Additionally, all of local schools in Stavanger approach to techniques of risk assessment and tabletop training organized by Stavanger municipality from this year onwards. Meanwhile, communication between international schools and local schools should be strengthened to allow for exchange

of experience in mapping of causes and consequences of risk and crisis, and exploit the detailed knowledge of local existing conditions in emergency situations that the international schools may not have.

6.3 Future research

The thesis has focused on the patterns of emergency preparedness cooperation, knowledge gained and managed by the schools as well as changes and improvements. The limitation of the research is that the quality of emergency preparedness cooperation in the schools could not be revealed and the research focuses only on the international schools in the area of Stavanger. As mentioned in the method chapter, the external validity (section 3.4.2) has showed that the findings and conclusions have the potential to be transferred from the international schools in Stavanger to the international schools in the same international education system which ISS, BISS and FSS are accredited. Likewise, the transferability is also possible to the international schools in Norway which comply with the same system of Norwegian law and regulations. Therefore, I recommend the following future research to study the process of learning from emergency preparedness cooperation in the international schools in Norway and in the international schools belonging to the international (American) education system, the British international schools system and the French education system. Also, the future study should present the quality of emergency preparedness cooperation in the international schools.

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APPENDIX

Appendix 1: Interview guides

- 1a: Interview guide for administrators
- 1b: Interview guide for Safety representatives
- 1c: Interview guide for teachers, students and parents
- 1d: Interview guide for Stavanger municipality

Appendix 2: The school organizational chart

- 2a: ISS Organizational Chart
- 2b: BISS Organizational Chart
- 2c: FSS Organizational Chart

Appendix 3: Policies and procedures

- 3a: CIS standards for ISS
- 3b: HSSE and complaint procedures of ISS
- 3c: BOS standards for BISS
- 3d: First Aid & Accident reporting Policy of BISS
- 3e: Accidents – Health rule of FSS
- 3f: Evacuation procedures of FSS

Appendix 4: Publications of Newsletter, Informer, Risk assessment

- 4a: Publication of U.S. Department of Education, 2003
- 4b: Informers of ISS
- 4c: Risk assessment at ISS

Appendix 5: Emergency preparedness training at ISS

Appendix 6: Communication, meeting and conference

- 6a: An SMS from ISS during snow days
- 6b: Meeting with Stavanger municipality
- 6c: ISS conference with U.S embassy

Interview guide for administrators

Introduction

In the context of the interview questions, emergency preparedness refers to the process of preparing for emergencies and disasters due to natural hazards or man-made causes, in order to protect individuals from personal injury and loss of life as well as to minimize damage to school property. During the emergency preparedness activities, the cooperation between the school and other schools, teachers, staff, parents and students can provide opportunities for learning about safety procedures and how to prepare for emergencies through the exchange of information. Knowledge gained from such experience will contribute to improvement in school safety and emergency preparedness.

Interview questions:

I. General data:

1. Your educational background:
2. Your current position
3. How long have you been working in your current position?

II. Emergency preparedness cooperation

1. Can you tell me about the cooperation in emergency preparedness between the school and other schools and organizations (e.g. Stavanger municipality, local police, fire department, international education system, etc.)?
2. How often does the school get in contact with them?
3. What kinds of policy (standard and guideline) has the school applied for emergency preparedness cooperation?

III. Learning from emergency preparedness cooperation?

1. Do you think your school gets benefit from cooperation with Stavanger municipality, other schools and organizations in emergency preparedness? In which areas can the school obtain and share information and knowledge?
2. What kinds of meeting, training or seminar have you participated in? How often are they organized?
3. What do you contribute to and learn from those activities?

IV. Knowledge transfer

1. Do you think employees have enough competence and training for emergency preparedness? And in what area and to which extent does the school need competence and training?
2. How can information of emergency preparedness be shared and transferred within the school?
3. What policies has the school used to encourage employees to engage in the emergency preparedness cooperation process to exchange information and knowledge?

V. Changes in emergency preparedness

1. Have the school had any changes in the safety procedures and/or preparation for emergencies at the school? If so, what are these changes?
2. Do you think staff, teachers and students have had any changes in their behavior and competence regarding emergency preparedness? If yes, how's so?

Other comments

1. Do you have any other comments regarding the emergency preparedness cooperation in international schools?

Interview guide for Safety representatives

Interview questions:

I. General data:

4. Your gender:
5. What languages do you speak?
6. Your educational background:
7. Your current position
8. How long have you been working in your current position?
9. How concerned are you regarding emergency preparedness?

II. Emergency preparedness cooperation

1. How do you get contact with other members of HSE committees or Crisis Response Team and school managers?
2. What do you know about the cooperation in emergency preparedness between the school and other schools, Stavanger municipality, fire department, local police?

III. Learning from emergency preparedness training?

1. What kinds of meeting and training for preparedness have you participated in? How often are they?
2. What do you learn from those activities?

IV. Exchange of information and knowledge

1. Where can you get information about safety and emergency preparedness?
2. If you have learned about emergency preparedness from outside the school, have you shared this information and knowledge with others at the school? If so, how were you able to do it? If not, how would you do it, or why not?

3. What do you think would motivate you to engage in the emergency preparedness cooperation process to exchange information and knowledge?

V. Changes in emergency preparedness

1. Have you seen any change about the safety work and preparation for emergencies at the school? If so, what are the changes?
2. Do you think your knowledge and your behavior have been changed since you worked for this position? If yes, how's so?

Closing question

1. Do you have any other comments regarding the cooperation in emergency preparedness at the school?

Interview guide for teacher, student and parent

Introduction

In the context of the interview questions, emergency preparedness refers to the process of preparing for emergencies and disasters due to natural hazards or man-made causes, in order to protect individuals from personal injury and loss of life as well as to minimize damage to school property. During the emergency preparedness activities, the cooperation between the school and other schools, teachers, staff, parents and students can provide opportunities for learning about safety procedures and how to prepare for emergencies through the exchange of information. Knowledge gained from such experience will contribute to improvement in school safety and emergency preparedness.

Interview questions:

I. General information:

10. Your gender:
11. What languages do you speak?
12. Your educational background:
13. Your current position
14. How long have you been working in your current position?
15. How concerned are you regarding emergency preparedness?

II. Emergency preparedness cooperation

1. How do you get in contact with the people responsible for safety and security at the school?
2. What is your motivation to cooperate with other teachers, staff, students and parents in preparation for emergencies?

III. Exchange of information and knowledge

4. Where can you get information about safety and emergency preparedness?

5. What kinds of meeting and training about emergency preparedness have you participated in? How often are they? What do you learn from those activities?
6. Do you often exchange information about safety and emergency preparedness with other teachers, staff, students and parents? Why or why not?
7. What do you think would motivate you to engage more in the emergency preparedness cooperation process to exchange information and knowledge?
8. What factors do you think can influence the communication between you and faculty members, students and parents regarding emergency preparedness?

IV. Changes in emergency preparedness

3. Have you seen any changes in the safety procedures and/or preparation for emergencies at the school? If so, what are these changes?
4. Do you think your knowledge and your behavior have been changed since you started working at the school? If yes, how's so?

Thank you very much for your help.

Interview guide for Stavanger municipality

with Unni Sjølyst-Kverneland and Reidun Vevle

Interview questions

Emergency preparedness cooperation

1. How about the guideline and procedures for emergency preparedness cooperation, and activities, such as meeting, seminar, and training for school preparedness? How often are meetings and training for schools in Stavanger implemented?
2. Can I have some examples about the program of activities for seminar and training courses?
3. What does Stavanger municipality support for the cooperation between schools in emergency preparedness?
4. Have you ever participate in any meeting or training/exercise with the International school of Stavanger (ISS)?
5. What do you think of emergency preparedness at ISS?
6. How ISS contact or interact with Stavanger municipality, police, other schools and organizations? To what extend do you evaluate its cooperation (very good, good, medium or not good)?
7. Can you evaluate the cooperation btw the international schools and local schools?

Learning from cooperation

8. Do you think schools in Stavanger have enough competence and training for emergency preparedness? And in what area and to which extent does the school need competence and training? Is there any difference of competence btw the international schools and local schools?

9. Can you give your opinion about sharing information, experience, and equipment btw schools, especially btw local schools and international schools?

10. What facilitate and hinder the exchange of ideas, knowledge, and experience btw the schools? Or between international schools and local schools?

Kind of changes

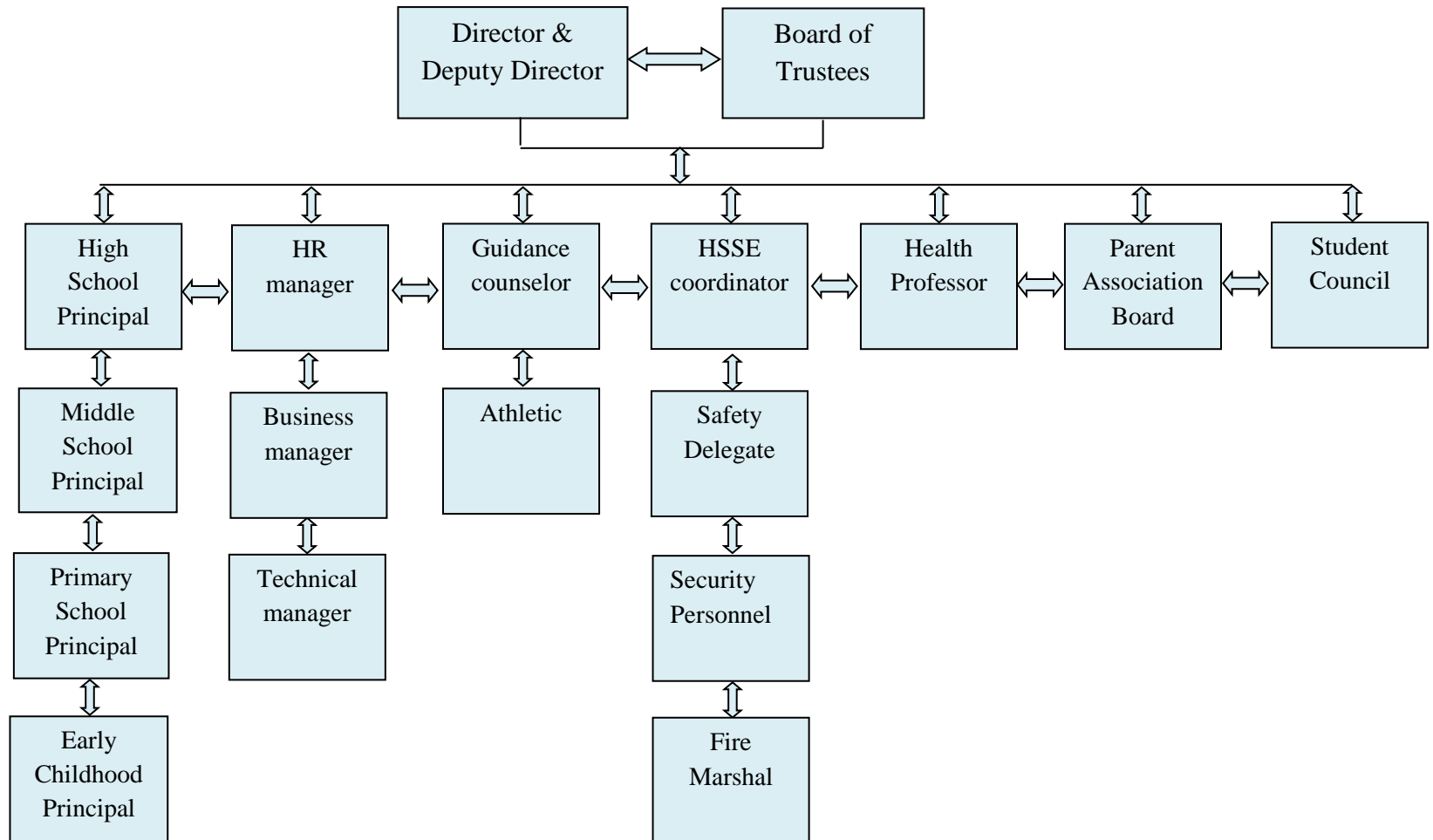
11. How do the schools improve and change in emergency preparedness since having cooperation with Stavanger municipality others?

12. What factors do you think are important for changes in preparedness process?

Thank you for answering my questions!



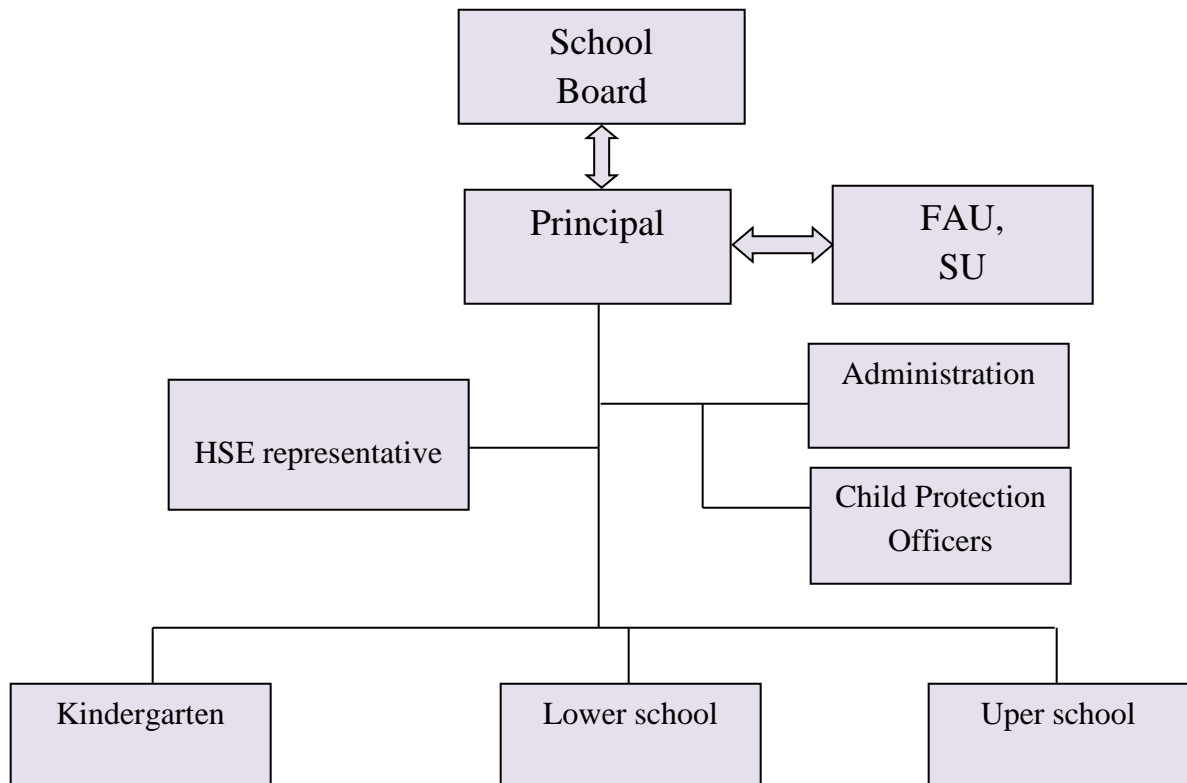
The international school of Stavanger (ISS) Organizational Chart





The British International School of Stavanger (BISS)

Organizational chart





Mission laïque française

Lycée Français de Stavanger – Norvège

STRUCTURES PÉDAGOGIQUES - CYCLES D'ÉTUDES :

Le Lycée Français de Stavanger comprend :

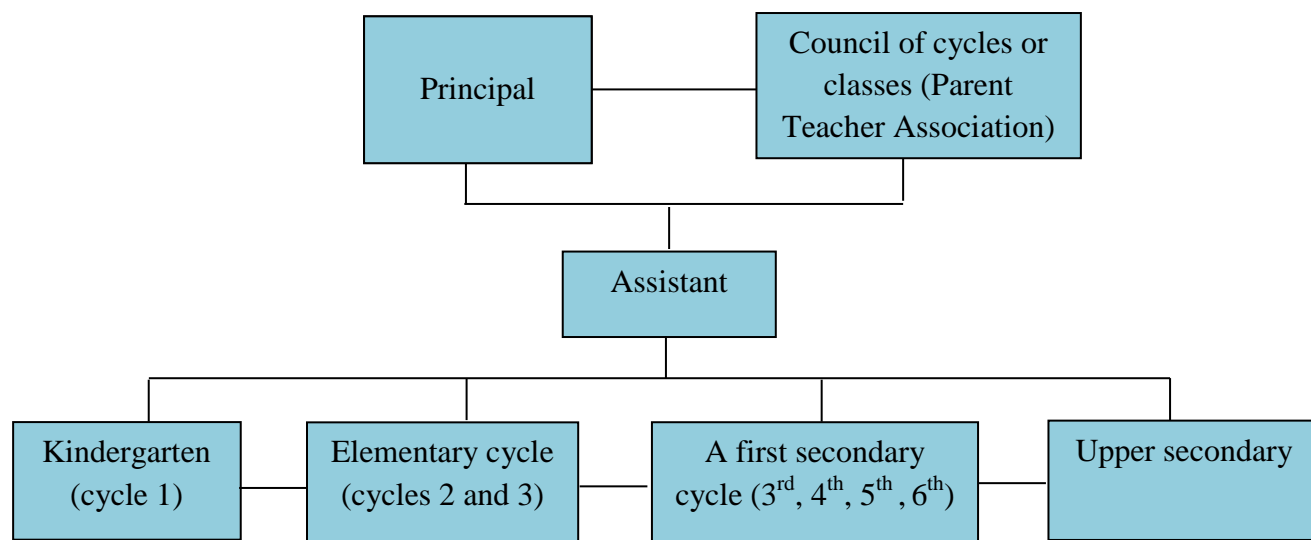
Un cycle préélémentaire (cycle 1) ;

Un cycle élémentaire (cycles 2 et 3) ;

Un premier cycle secondaire (6e, 5e, 4e, 3e) ;

La première année du second cycle secondaire (2nde) ;

The French School of Stavanger (FSS) Organizational Chart





**COUNCIL OF INTERNATIONAL SCHOOLS (CIS)
SCHOOL IMPROVEMENT THROUGH ACCREDITATION**

**Guide to School Evaluation and Accreditation - 8th Edition (Version 8.2)
STANDARDS AND INDICATORS**

**SECTION A
SCHOOL GUIDING STATEMENTS**

Note: The term "governing body" includes any school ownership structure.

STANDARD A1

The school shall be guided by clear and broadly accepted Guiding Statements of vision, mission, and educational objectives (or the equivalent using the school's chosen nomenclature and format) for students.

INDICATORS RELATED TO STANDARD A1

A1a

The school's Guiding Statements establish clear expectations for student learning and guidelines for the well-being of the whole school community.

A1b

Monitoring procedures exist which show that the school's Guiding Statements enjoy a high degree of support from the governing body, school leadership, staff, parents and students with this support being demonstrated by the actions of all these school sectors.

A1c

There is evidence which shows that the school's Guiding Statements drive decision-making, planning, action and review at multiple levels of school life.

A1d

There are periodic, data-driven reviews of the school's Guiding Statements which involve the broad school community and which ensure that the statements remain vibrant and relevant.

A1e

A formal process and defined indicators are used to assess the school's success in achieving its aims as laid out in its Guiding Statements.

STANDARD A2

The school's Guiding Statements shall clearly demonstrate a commitment to internationalism/interculturalism in education, and this shall be reflected throughout the life of the institution.

INDICATORS RELATED TO STANDARD A2

A2a

The school has created an engaging and contextually appropriate definition of internationalism/interculturalism in education.

A2b

The school puts into action its definition of internationalism/interculturalism in education, both inside and outside the classroom, as evidenced by impact on students.

A2c

The school expresses its commitment to internationalism/interculturalism in education through as many avenues as possible.



STANDARD A3

The school's Vision for Students (or similar) shall demonstrate a clear commitment to fostering desirable traits related to internationalism/interculturalism, and this shall impact upon all students.

INDICATORS RELATED TO STANDARD A3

The school is committed to, and is actively promoting in its students, internationalism/interculturalism in education through

A3a

.... discussion of substantive matters of principle from multiple perspectives.

A3b

.... the understanding of the histories, cultures, beliefs, values and perspectives of a range of individuals and peoples.

A3c

.... the understanding of current issues of global significance relating to geopolitics, the environment, health, trade, sustainable development and human rights.

A3d

.... development of fluency in the language(s) of instruction, in another language, and - with as much support as the school can offer - in student mother tongues.

A3e

.... the development of their disposition to serve the community - local and global - through engagement in meaningful and reflective service.

A3f

.... the acquisition and refinement of the skills of leading and following, collaborating, adapting to the ideas of others, constructive problem-solving, and conflict-resolution through experiencing leadership in authentic contexts.

STANDARD A4

The school's admissions policies and practices shall ensure there is alignment between its Guiding Statements, its programmes, and the students admitted to and remaining at the school.

INDICATORS RELATED TO STANDARD A4

A4a

The school's promotional materials and activities project a realistic picture of the school and its mission, objectives and programmes, hence enabling parents to appraise the school's suitability for their children.

A4b

The school's admissions policies and practices require that adequate information be obtained, and that appropriate evaluations be carried out, to ensure that there is alignment between a student's needs/abilities and the programmes offered.



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| STANDARD G2 |
| Grounds, buildings, technical installations, basic furnishings, and equipment shall effectively support delivery of the programmes required to put the school's Guiding Statements into practice. |
| INDICATORS RELATED TO STANDARD G2 |
| G2a The school's facilities/equipment provide for effective delivery of educational programmes and a positive context for learning while promoting student, staff and visitor well-being. This includes satisfactory provision of indoor and outdoor spaces, air quality, heating and cooling, shade, shelter, lighting and acoustical comfort. |
| G2b Teaching, storage and work spaces are suitable in size and layout for the age, number and needs of students and for the effective delivery of programmes. |
| G2c Governing body policies and school practices effectively address the adequacy, maintenance and improvement of school facilities/equipment. |
| G2d If the school admits handicapped students or personnel, all reasonable provision is made for them. |
| G2e Information and Communication Technology provisions (hardware, software, networks, training and maintenance) effectively support the management and operational functions of the school. |

| |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| STANDARD G3 |
| The school shall ensure that its grounds, buildings, technical installations, basic furnishings, equipment and systems provide for the health and safety of students, personnel and visitors. |
| INDICATORS RELATED TO STANDARD G3 |
| G3a School facilities meet the health and safety codes of local authorities and any reasonable stipulations which may be required by the accrediting agency/agencies. |
| G3b Certificates of inspection and regulations required by law are available on file and/or posted in prominent places as appropriate. |
| G3c An internal health and safety committee (or its equivalent) actively monitors conditions at the school and is effective in ensuring any deficiencies or anomalies are rapidly resolved. |
| G3d Maintenance services are effective in ensuring that school premises and equipment remain in a safe and healthy condition. |
| G3e Effective measures, including regular rehearsals, are in place to address fire or other emergency situations requiring evacuation. |
| G3f Effective measures, including regular rehearsals, are in place to address emergencies requiring "safe haven/lock down". |
| G3g The school takes all reasonable steps to operate its facilities and related services using environmentally responsible practices, hence acting as a positive model for students and the wider community. |



STANDARD G4

The school shall provide or arrange for auxiliary services as required to support its declared objectives and programmes, and shall ensure that such services meet acceptable standards of safety, efficiency and comfort.

INDICATORS RELATED TO STANDARD G4

G4a

Facilities for preparing, serving and consuming food and beverages meet appropriate standards of safety, comfort, hygiene and good dietary practice.

G4b

Appropriate and regularly reviewed arrangements exist to cover threats to the security of people and premises as well as to support – to the extent possible – programme continuity under exceptional circumstances.

G4c

Vehicles used in student transportation are mechanically sound, clean, well-maintained, properly licensed and appropriately insured.

G4d

School premises are kept in an acceptably clean state at all times of the school day.

G4e

School trips are well planned and executed, ensuring a positive learning environment and supporting the school's academic or activities programme. Appropriate consideration is shown for the comfort, welfare, security and safety of students and accompanying adults.

G4f

Support staff members and employees provided by contracted suppliers who are involved in the delivery of any auxiliary service are employed in suitable numbers.

G4g

Support staff members and employees provided by contracted suppliers are properly qualified and experienced, in appropriate health, well trained, and adequately assigned and supervised.

G4h

Support staff members and employees provided by contracted suppliers make a positive and well appreciated contribution to school life.



The International School of Stavanger (ISS) HEALTH, SAFETY, SECURITY AND ENVIRONMENT (HSSE) PROCEDURES

ISS has a Crisis Response Team regularly reviews and updates emergency and crisis response procedures. However, it is the responsibility of everyone in the school community to help build a safety conscious culture.

CPR/Defibrillation Training

All staffs and students in Grades 7, 8 and 9 receive periodic training in CPR and defibrillator use.

Fire and Building Evacuation Procedures

It is the primary role of the teachers to ensure that the students in their classes evacuate the building as quickly and quietly as possible.

Procedures: When the fire bell rings (a short repeated ringing of the metallic bells), teachers should do the following:

1. Make certain that all windows are closed.
2. Teachers should collect their grade book or a class list; receptionist will take guest sign-in clipboard outside.
3. Leave the room quickly, but in a quiet and controlled manner. Do not take coats.
4. Close the classroom door, but do not lock it.
5. Students should proceed to the appropriate exit as shown on the exit chart found on the wall in each classroom.

Each classroom has a variety of optional escape routes and in an emergency the closest exit could be blocked.

The gathering points for primary, middle and high schools are on the recess grounds at the back of the building as follows:

Primary School – Students will line up by grade level on the playground basketball court.



Middle School – Students will line up on play area south of the playground basketball court in their homeroom.

High School – Students will line up on play area south of the playground basketball court by homeroom.

6. If there is smoke, stay low to the floor. If possible, cover your nose and mouth with a wet cloth. When approaching a closed door, use the back of your hand to feel the lower, middle, and upper parts of the door before deciding to open it. Never use the palm of your hand or fingers to test the door for heat: burning those areas could impair your ability to escape a fire either using a ladder or crawling.
7. Remember that all windows in ISS classrooms can be opened out to allow safe exit if necessary. If exiting from second floor windows, one should climb out holding onto the windowsill and dangle down as low as possible to the ground before letting go. When letting go, attempt to push away from the wall to avoid hitting the window ledge below. When landing, attempt to land on one's toes instead of heels. Quickly move away from the building so the next person coming down will have a clear space to land.
8. Students should stand in silence at their gathering point in a line by grade/homeroom, while teachers are taking roll. Employees not involved in taking roll should also stand in silence.
9. The teachers will report on attendance to the designated administrative assistant who notifies the Fire Marshall.
The Fire Marshall is responsible for verifying that all students are out of the building.
Two blasts of the whistle from the Fire Marshall is the all-clear signal allowing students to re-enter the building.
10. If it is determined unsafe for students to re-enter building, teachers will be instructed to take their groups to one of two longer-term assembly points:
Bleachers overlooking the sports field Hafrsfjord Skole gymnasium.
11. If it is necessary to evacuate the school, the following steps will take place in re-opening the school after a short - term closure:



- a. Confirm safe conditions through primary sources.
- b. Inform the school staff.
- c. Parents should have been advised beforehand (in the Parent/Student Handbook), that, unless the school has announced otherwise, classes will resume on the following regular school day.
- d. If for any reason either the political situation or a natural calamity in Stavanger becomes life threatening to the ISS school population, the ISS School Board will conduct an emergency session to decide whether or not to close ISS on a long term or permanent basis.

Lockdown Procedures

Staff are trained and informed on lockdown procedures. These procedures are developed in line with advice from local authorities and using best practice in international schools.

Accident File

(1) In the event of a student or employee being involved in an accident while at school, an accident report form **MUST** be completed the same day and submitted to the school nurse. The forms are available from the offices.

(2) This form will include the following:

- a) Individual's name
- b) Location and time of the accident
- c) The cause of the accident
- d) Which member(s) of staff attended the accident
- e) What steps were taken
- f) Which parent/administrator was informed
- g) A question asking employees to indicate if there were lessons to learn from this incident to avoid similar accidents in the future.



Process for Reporting of Illness and Injuries, Near Miss and Unsafe Situations at ISS

The HSSE Coordinator records near misses and unsafe situations. The situations are categorized by type of deviation: broken equipment, human mistake, incorrect/lack of or unclear procedure, mechanical deficiency, unanticipated event, or other event. The location of incident/situation is also highlighted to easily identify high risk areas. Where situations have been fixed/dealt with, this will be recorded as 'action taken'.

Reporting of unsafe situations and near misses by parents and visitors is welcomed via an Irregularity Report/ Improvement Report form that can be requested in the main office.

Risk and Vulnerability Analysis

Staff regularly make risk and vulnerability assessment for situations regarding their workplace.

Other Safety Issues

No candles can be lighted in classrooms or hallways. Flames may only be used in Science laboratories when sufficient safety equipment is in place.

No posters or notices should be placed on the centre front doors of the main entrance—this blocks the view of the receptionist to determine who is approaching the school.

Do not place posters on either side of the glass doors that open in the hallways as everyone needs to see who is on the other side. Please respect the “on this side only” signs on the doors as this protects the safety coating on the glass of the doors.

HSSE Coordinator Role - Work Areas for the HSSE Coordinator

Tasks:

- Maintain and document school guidelines according to Regulation on systematic Health-, Safety- and Environment in Enterprises (Internal Control Regulations)
- Assist administration and employees by providing information about health, safety, and environment. Act as director's assistant in HSSE cases.
- Assist Safety Delegates in the performance of their roles; safety audits, meetings (if requested) and follow-up of cases related to HSSE
- Assist in making risk assessments of work situations



- Assist in the preparation of guidelines for use of chemicals, machines and equipment
- Assist in making surveys regarding work environment; both physical, organizational and social factors
- Assist in individual adaptation of tasks; Participate in planning of new work areas and improvements/changes of already existing areas. Consider possible improvements in situations of heavy and monotonous work.
- Maintain contact with Centre for Inclusive Workforce, for active participation in IW-work. Assist in necessary follow-up of individual employees
- Keep records of accidents, near miss and hazardous situations, and report to Board of Trustees
- Participate in AMU (non-voting)

Health Services

The health service seeks to ensure a healthy school environment where children are regarded as individuals whose emotional, social, cultural identities and values are respected. Health services offered include, student growth and development assessment, a vaccination programme following Norwegian guidelines, vision and hearing testing, administration of medications taken during school hours, assessment/ administration of first aid to injured students and the dissemination of information to the school community regarding health care in Norway. A doctor is available at ISS for screening purposes only. Confidentiality for all those making use of the ISS health service is respected and ensured. As appropriate, medical information given to the nurse will be shared with the teachers responsible for the safety and well-being of the child unless otherwise requested by the parent.

Security

Everyone should contribute to a school community security culture. When staff, parents and guests attain and wear ID badges, they contribute to an important part of maintaining security. ISS does not comment publicly on security, but parents are welcome to contact the director should they have any questions.



Surveillance Cameras

ISS operates a number of surveillance cameras in order to assist with security for members of the ISS community and in respect of school property. The cameras are registered with Datatilsynet and the school follows Norwegian law regarding the length of time recordings can be held in the school's possession.

The camera recording will be used for no other purposes than the security of the pupils and employees and protection of school property.

Complaints

Good, consistent, and timely communication between faculty members, parents and students is encouraged and expected. Since both the faculty and parents have the best interests of the students in mind, it is important that communication be open and constructive.

When students or their parents experience any problems arising at school, it should first be discussed in a conference with the teacher or other applicable school employee. It is anticipated that most problems can be solved at this level. If not, the parent or student should speak with the principal. If the problem is unresolved after this effort, the problem should be put in writing and submitted to the director. The director, working with the parties involved, will try to resolve the matter. If the student or parent is not satisfied with the resolution at this stage, they may refer the matter in writing to the Board Chairperson who will decide whether the item should be added to the Board's agenda at its next meeting. If it is added to the Board agenda, the Board's decision regarding the issue shall be final. Complaints regarding personnel shall be considered by the Board only in executive session and only when the complaint is written and signed by the complainant. Please see Appendix A: Communications Flowchart, for an illustration of the process.

3. The welfare, health and safety of the pupils

| The measures to promote the welfare, health and safety of the pupils, including child protection, taking into account the regulatory and cultural requirements of the host country. | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3(2)(a) | 3.1 | Has the school prepared and implemented an effective written policy to prevent bullying? |
| 3(2)(b) | 3.2 | Has the school prepared and implemented effective written policies to safeguard and promote the welfare of children who are pupils at the school? |
| 3(2)(c) | 3.3 | Has the school prepared and implemented an effective written policy relating to the health and safety of pupils on activities outside the school? |
| 3(2)(d) | 3.4 | Has the school prepared and implemented a written policy to promote good behaviour amongst pupils which sets out the sanctions to be adopted in the event of pupils misbehaving? |
| 3(4) | 3.5 | Can the school demonstrate that it has proper regard for health and safety issues which at least conforms to local regulatory requirements? |
| 3(5) | 3.6 | Can the school demonstrate that it has a satisfactory level of fire safety which conforms to local regulatory requirements? |
| 3(6) | 3.7 | Does the school have a satisfactory written policy on first aid and does it implement this? |
| 3(7) | 3.8 | Are school staff deployed in such a way as to ensure the proper supervision of pupils? |
| 3(8) | 3.9 | Does the school keep written records of sanctions imposed upon pupils for serious disciplinary offences? |
| 3(9) | 3.10 | Can the school demonstrate that it maintains an admission register and an attendance register which conform to local regulatory requirements? |

5. The premises and accommodation

| The adequacy of the premises and the educational accommodation for securing the health and safety of all pupils. | | |
|------------------------------------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5(a) | 5.1 | Is there any reason to believe that the water supply does not meet local regulatory requirements or is otherwise not fit for purpose in relation to the premises of an educational establishment? |
| 5(b) | 5.2 | Is there any reason to believe that the drainage system is inadequate for hygienic purposes and for the disposal of waste water and surface water? |
| 5(c) | 5.3 | Is there any reason to believe that any load bearing structure does not have regard to local regulatory requirements (including, where applicable, earthquake measures and other measures to militate against natural disasters)? |
| 5(d) | 5.4 | Does the school have adequate security arrangements for the grounds and buildings? |
| 5(e) | 5.6 | If the premises which are used by the school are also used for another purpose, other than conducting the school, are they organised in such a way that the health, safety and welfare of pupils is safeguarded and their education is not interrupted by other users? |
| 5(f) | 5.7 | Do the school buildings provide reasonable resistance to penetration by rain, snow, wind, sand and dust, and moisture from the ground and have regard to temperature control, heating and cooling? |
| 5(g) | 5.8 | Is there sufficient access so that emergency evacuations can be accomplished safely for all pupils, including those with special needs? |
| 5(h) | 5.9 | Is access to the school such that it allows all pupils, including those with special needs, to enter and leave the school in safety and comfort? |
| 5(i) | 5.10 | Can the school give reasonable assurances that the premises have not been condemned by relevant local agencies? |



The British International School of Stavanger

FIRST AID & ACCIDENT REPORTING POLICY

Aims:

To be able to provide basic first aid or emergency lifesaving aid to all members of staff, pupils and visitors to the school.

To ensure that procedures are in place and regularly monitored to maintain a safe working environment for personnel and pupils.

Objectives:

To provide regular first aid training for all members of staff.

To designate at least two members of staff as first aiders and provide advanced training to support their role.

To provide a comprehensive range of readily available first aid materials at various locations throughout the school premises.

To maintain and monitor first aid boxes.

PROCEDURES

All staff are afforded opportunities to attend first aid courses and regularly update their skills.

Designated first aid officers for the school – Patricia Svendsen & Jackie Bårholm. The school ensures that a designated first aid officer is available on site at all times.

Accident procedures are made known to personnel through the staff handbook and school induction procedures.

First aid boxes are placed in designated areas (Upper School office; Pre School and Gymnasium) and regularly checked by designated first aiders and the school Health & Safety Officer.

In the event of an accident, the member of staff on duty will summon a first aider and return to their normal duties.

All staff will use protective gloves when handling spillage's of body fluids.

Injured persons should be taken to the medical room for treatment. If medical/hospital treatment is considered necessary, the Principal/Deputy Headteacher must be informed and an ambulance called. Parents or guardians should also be contacted at the first opportunity. A member of staff should accompany children being transferred to hospital in the absence of the parent/guardian.



All accidents requiring first aid must be recorded in the accident book located in the Lower School Staffroom or Medical Room.

Removals to hospital at the time of the accident, or hospital admissions subsequently reported must be recorded on Form: Incident 1. *Acts of physical violence, emotional and racist abuse are reported on the same form.*

Head injuries, not requiring hospital treatment must be reported to parents/guardians, on the day of the accident. *See Head Injury Note.* All head injuries will be monitored in school at regular intervals for the remainder of the school day.

In the event of a child becoming distressed following an accident, or requiring more attention than it is possible to provide they can, at the discretion of the Principal/Deputy Headteacher be sent home. The Principal must be informed of any child, or staff member who is sent home, or moved to hospital.

Educational Visits:

When children and staff are working away from the school premises, we will endeavour to have a designated first aider with the party. A portable first aid kit must accompany the school party at all times. All children recorded as having asthma must have their emergency inhalers with them at all times. Similarly those children recorded as suffering from allergies and being liable to anaphylactic shock must have epipens with them at all times. Details of emergency first aid arrangements should be included in the visit risk assessment and recorded on the educational visits risk assessment form.

Specific Medical conditions:

Where a child has a medical condition requiring the regular intake of medication; daily physiotherapy, daily medical procedures, or one with life threatening consequences i.e. anaphylactic shock, a Health Care Plan is necessary.

Out of Hours Use of the School Building:

The organiser/leader must make adequate provision for dealing with accidents and medical emergencies. The organiser must familiarise themselves with the position of First Aid boxes. All accidents must be recorded in the school's accident book. Group organisers must report any accident to the school office at the earliest opportunity. Serious accidents should be reported on the same day to a member of staff who is on call for emergencies. The full details of accidents/medical emergencies requiring the removal of a person to hospital must be reported on Form: Incident 1.

Policy Review

This policy is reviewed annually.

Principal Anne Howells



Mission laïque française

LYCÉE FRANÇAIS DE STAVANGER

RÈGLEMENT INTÉRIEUR

Version 5 – 03/09/2013

7. ACCIDENTS - SANTÉ

- 7.1 Les familles doivent signaler à la rentrée les problèmes de santé de leurs enfants (maladies chroniques ou allergiques, traitement de longue durée, port d'appareillages médicaux, difficultés d'audition ou d'acuité visuelle, épilepsie, etc...) et au cours de l'année les cas de maladies contagieuses entraînant une éviction momentanée (rubéole, varicelle, impétigo, conjonctivite ...).
- 7.2 Si un élève présent au lycée n'est pas en mesure de suivre la classe dans des conditions normales, la famille sera informée sans délai et devra venir le chercher.
- 7.3 Les parents communiqueront un numéro de téléphone, si possible mobile, où ils pourront être joints immédiatement ou celui de la personne à laquelle ils délèguent leur autorité en cas d'absence.
- 7.4 Tout accident, même bénin, doit être immédiatement signalé à l'administration ou à un professeur par l'élève intéressé (ou par un élève témoin).
- 7.5 En cas d'accident, l'administration du lycée prend toute disposition dans l'intérêt de l'élève. Si après avoir reçu les premiers soins, un enfant est dans l'incapacité de retourner en classe, la famille sera informée sans délai et devra venir le récupérer au lycée.

7 ACCIDENTS - HEALTH

- 7.1 Families must report back to the health problems of their children (chronic or allergic, long-term treatment, wearing medical equipment, hearing difficulties or acute visual, epilepsy, etc ...) and during cases of contagious diseases causing crowding momentary (rubella, chickenpox, impetigo, conjunctivitis ...).
- 7.2 If a student in this school is not able to keep the class under normal conditions, family will be informed immediately and will pick it up.



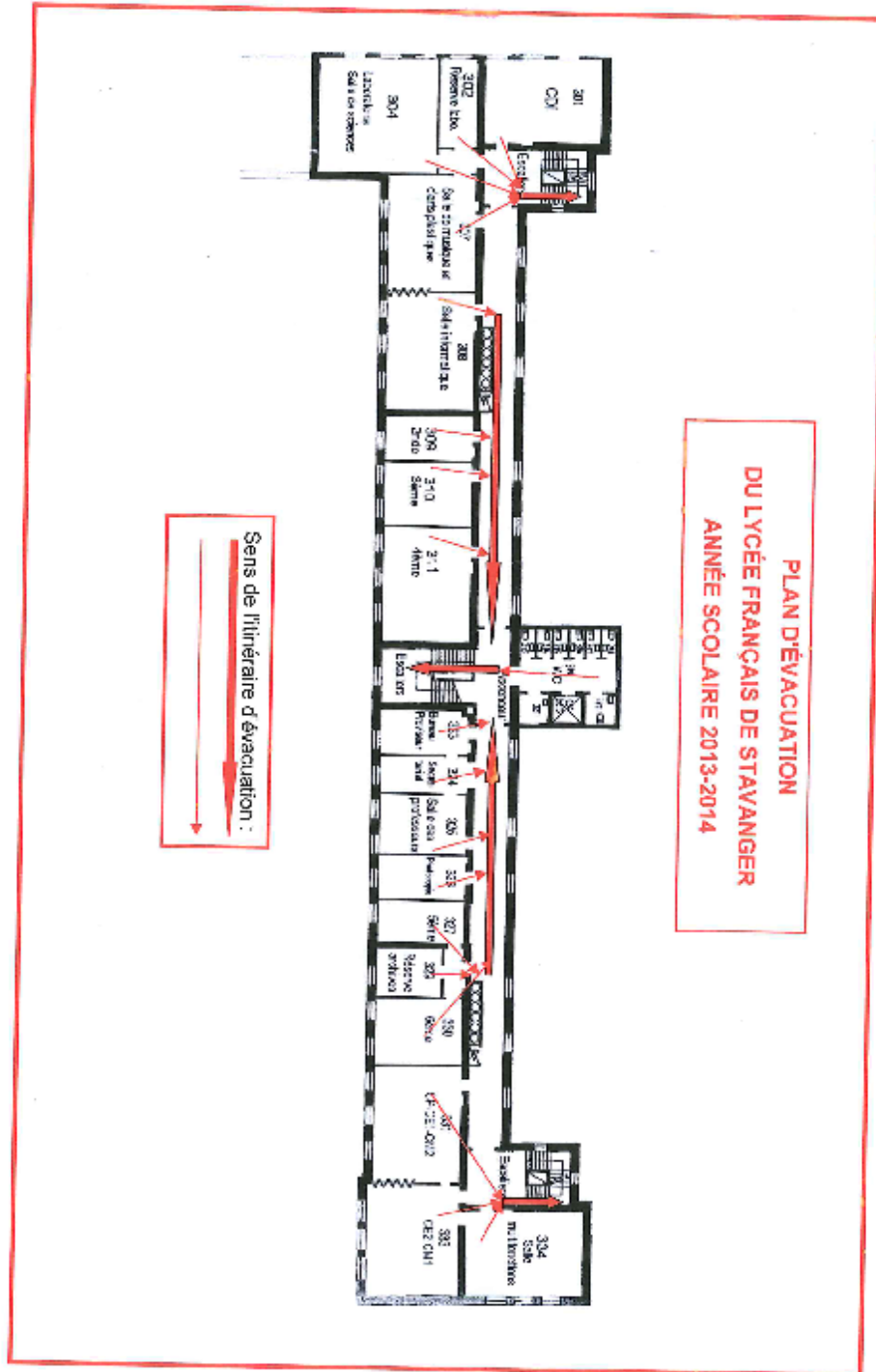
Mission laïque française

- 7.3 Parents communicate a phone number if possible mobile where they can be reached immediately or that of the person to whom they delegate their authority in case of absence.
- 7.4 Any accident must be reported immediately to the administration or teacher by the student interested (or a witness student).
- 7.5 In case of accident, the school administration must take steps in the interest of the student. If after received first aid, a child is unable to return to class, the family will be informed without time and will pick it up in high school.



Mission laïque française

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Preparedness



Crises have the potential to affect every student and staff member in a school building. Despite everyone's best efforts at crisis prevention, it is a certainty that crises will occur in schools. Good planning will facilitate a rapid, coordinated, effective response when a crisis occurs. Being well prepared involves an investment of time and resources—but the potential to reduce injury and save lives is well worth the effort.

Every school needs a crisis plan that is tailored to its unique characteristics. Within a school district, however, it is necessary for all plans to have certain commonalities.



PREPARING STUDENTS, K STAFF, AND STAKEHOLDERSK TO RESPONDK

Experts have noted that when a crisis occurs, individuals involved tend to go on autopilot. Therefore, when a crisis occurs staff immediately need to know how to react. They need to know, for example, the signals for crisis, the protocol for lockdown and evacuation, how to dismiss students, and what to do if staff or students need help. They should know these things ahead of time. There will not be a time during the crisis to think about what to do next. Chances of responding appropriately in a crisis will be much greater if all players have practiced the basic steps they will need to take. Training and drills are crucial.

In the San Diego, California, school district, staff feel that practice and training should constitute the majority of the crisis planning process. In their “formula for success,” practice accounts for 50 percent of the process, training for 30 percent, and planning 20 percent. While the percentages are flexible, training and drills are essential. Key components to facilitate training, and thus a successful reaction, are as follows:

- ▶ **Provide regular, comprehensive trainings for teachers and staff.** At least once a year, provide crisis response training for teachers and staff. Also provide make-up trainings for those unable to attend the regular training session. Go through the crisis plan and procedures in order to familiarize all school personnel with it. Periodically remind staff of signals and codes.

- ▶ **Visit evacuation sites with staff and stakeholders.** Show involved parties not only where evacuation sites are but also where specific areas, such as student reunification areas, media areas, and triage areas will be.
- ▶ **Give all staff, stakeholders, and families literature corresponding to the crisis plan.** While all staff should have a copy of the crisis plan, it will also be helpful to provide them with pamphlets reminding them of key principles. Families and community members should also receive literature summarizing crisis procedures and information pertaining to them. Provide each classroom with a copy of the crisis plan and any relevant materials, supplies, and equipment.
- ▶ **Require a specific number of crisis drills every year.** Most states require fire drills; the same should be true of crisis drills. This need not be an extra burden; work with state and district laws for possible options. In Arizona, for example, schools are permitted to use some of the mandated fire drills for crisis drills. Also, speak with students about the importance of drills and explain that while they are serious, students should not be frightened.
- ▶ **Conduct tabletop exercises and scenario-based drills regularly.** While actual drills and training are essential, it is also helpful to have group brainstorming activities that can be done informally around a table. These can be held with stakeholders, staff, community members, and first responders. Students can be involved as well.

News from the Health, Security, Safety and Environment (HSSE) Committee

Ms Solve Ims Ottesen SOttesen@isstavanger.no

For this school year, the HSSE (Health, Safety, Security and Environment) has three priority areas:

- Bus safety
- Lock down procedures
- Risk assessment

We have had a safety walk with Bedriftshelsetjenesten and I am glad to inform that the overall impression was good.

Our aim is as always – a safe and healthy working place for both students and staff - zero incidents, zero injuries and zero harm to the environment.

To reach this we need involvement from everybody and I invite you to send me a message if you see something that could be a risk. In that way we can take action before something happens.

Thank you for your cooperation – together we will reach our goal!

*Solve Ims Ottesen
sottesen@isstavanger.no
HSSE Coordinator*

News from the Health, Security, Safety and Environment (HSSE) Committee*Ms Sølve Ims Ottesen S0ttesen@isstavanger.no*

As I informed earlier this school year, one of our priority areas will be our Lock-Down procedures. We have now updated the procedures for ISS and will have them evaluated both by the Police and by Stavanger Kommune.

For the first time we will carry out a Lock-Down exercise together with the students. Before this, the Crisis Team will carry out a tabletop exercise to go through a scenario. And let us hope we never come into a real situation.

There has been a safety audit recently to the High School and Science lab. Only minor deviances werw noted and will be quickly addressed.

The fall is here with dark mornings and afternoons. I join the Director in her concern for use of any kind of reflex – or more correct – lack of use. This is a simple and inexpensive way to make the day safer for everyone who is out in the open. There are many different items to use – sometimes a combination can be the best.

*Sølve Ims Ottesen
HSSE Coordinator
sottesen@isstavanger.no*



News from the Health, Security, Safety and Environment (HSSE) Committee

March 2014

At the end of February/beginning of March we have conducted safety audits in both the cafeteria and the playground with no serious findings, but with items that have been identified and added to our regular maintenance schedules, so that they can be addressed in short order.

Next month we will continue our safety audit schedule with the Early Childhood and Primary School, Physical Education facilities and basement.

As outlined in December we have a continuous challenge to ensure that students are wearing seatbelts on the school buses. We continue to conduct random inspections on the buses, but would ask that you reinforce the importance of wearing a seatbelt on the bus with your child/children.

We informed earlier this school year, one of our priority areas was to review our Lockdown Procedures. Over the course of the year we have had our procedures evaluated by the Police, Stavanger kommune and the HSSE Department at Conoco Phillips, who also conducted a table top lockdown exercise with our Crisis Response Team.

As a result of feedback from each of these organisations we have made appropriate updates and are now making preparations to conduct a pre-announced lockdown practice with students present in the building during the week of the 24th March. We will be approaching the lockdown in a form of low stress educational perspective, talking the students through the process in a formative way.

If you have any questions about the process please do not hesitate to contact your section principal or me at school.

With kind regards

*Gareth Jones
Deputy Director*

ISS RISK ASSESSMENT & MANAGEMENT

Identifying & Mitigating Risk

RISK RATING – Risks need to be prioritized at ISS to ensure the most serious risks are dealt with first. There are many methods of risk rating and the following is an example that can be used. Risk rating usually uses a formula to help prioritization. The formula given below is based on an assessment of the consequences and likelihood of the hazard resulting in harm.

USING THE RISK RATING FORMULA / CHART

Assign a rating by making an assessment regarding Probability / Likelihood and Impact / Harm

Extremely Harmful
 Death, major injury, major damage or loss to property or equipment.
 Involves external agency

Harmful
 Injury lasting over 3 days, damage to property or equipment. Could affect group itinerary

Slightly Harmful
 Minor injury, minor damage to property or equipment. Can be dealt with by group

| | | | |
|------------------------------------------------|-------------------------|-------------------|-------------------|
| High Probability Extremely or highly | Unacceptable (U) | High (H) | Medium (M) |
| | High (H) | Medium (M) | Low (L) |
| | Medium (M) | Low (L) | Low (L) |

- U – Unacceptable: Must receive immediate attention –activity should not be undertaken, or halted until adequate controls are implemented
- H – High High Priority - urgent attention is required to reduce or manage the severity and or likelihood to make the activity acceptable
- M – Medium Medium Priority – risk factors must receive attention to ensure effective control measures are in place.
- L – Low Lower Priority, risk factors must receive attention to ensure effective control measures are in place



"Lock-Down" practice Thursday March 27, 2014

Dear Parents,

This message is to inform you that ISS will conduct a "lock-down" practice on Thursday, March 27 at 8:40am.

During the practice, all ISS students will be locked inside their classroom with their teacher and teacher assistants. The classroom teacher will be talking with the children about the exercise and what is expected of them. The practice will last approximately 10 minutes.

I encourage you to either drop your child off at school before 8:30 or come to school later and drop your child off at 9:00.

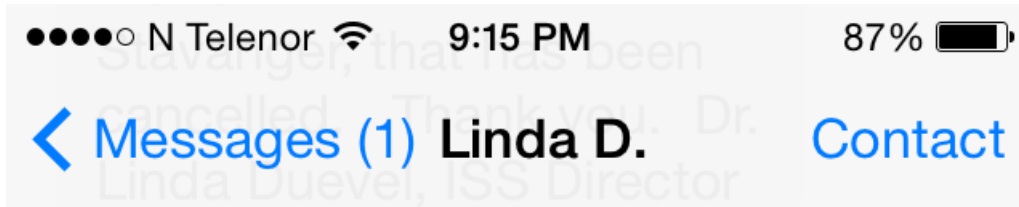
If you are in the building during the lock-down practice, you will be part of it and also be locked in for the duration of the exercise. Parents in the Early Childhood corridor will be locked in another room, (not your child's classroom). Once the exercise has started, you will not be able leave the school until the lock-down practice has been completed.

Here at ISS, the safety and well-being of your children is very important to us. For years, the ISS staff has had annual lock-down rehearsals during in-service days when students are not present. The next logical step is to run the practice on an annual basis with students in the school, as this is a more realistic scenario. Many of our students have already experienced lock-down exercises in their previous schools. We are running the practice not because there is any threat to the Stavanger Region or any school in the area, but because planning and preparation are always good things to do. Just as we have fire drills, it is also important to have lock-down experiences.

If you have any questions, please feel free to contact me.

Thank you for your consideration.

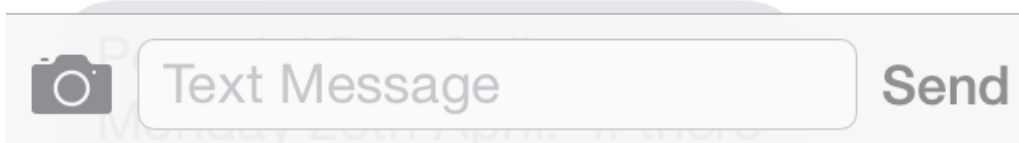
An SMS from ISS during snow days



Fri, Dec 6, 6:53 AM

ISS closed on Friday. Because of continued high winds plus forecasted snow, ISS will be closed today. The Middle School Dance will not take place Friday night. There will be no extra-curricular activities Friday. The High School Dance WILL take place Saturday night. Thank you. Dr. L. M. Duevel, ISS

Fri, Apr 25, 5:58 PM



Møtet mellom politi, skole og beredskap

På bakgrunn av bl. a flere tragiske skyteepisoder ved skoler i Tyskland, Finland og senest i USA, har rådmannen i samarbeid med politiet utarbeidet egne retningslinjer for Stavanger kommune for hvordan skolene skal håndtere trusselsituasjoner og reelt skarpe situasjoner.

Beredskapsavdelingen og politiet vil presentere disse for alle rektorene i **foredragssalen på rådhuset torsdag 29. august klokka 08.30 – 10.00.**

Det vil særlig bli lagt vekt på ansvarsfordelingen mellom politi, skole og beredskap.

Med vennlig hilsen

Per Haarr
Direktør
Oppvekst og levekår
www.stavanger.kommune.no

51 50 7114 / 900 72 197
per.haarr @stavanger.kommune.no



Er til stede – vil gå foran – skaper framtiden

ISS Conference with U.S embassy



Security for Your Schools

Balancing Safety with Education



Security tips for schools administrators

- Does your current security plan protect every access point
- Does the school have a visitor- management program to cover unauthorized access
- Does the current plan take into account community activities on school grounds
- Does the security plan take into account time periods when students and staff are arriving and leaving?
- Are computers, important equipment and student records secured properly against theft?

