

Teacher Education in Norway and Finland Compared

What can Norway learn from the Fininnish teacher education about curriculum, recruitment and attitude to globalization?

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Abstract

The purpose of this thesis is to investigate if Norway can learn from the Finnish teacher education system, with focus on curriculum, recruitment and attitude to globalization. The study compares the teacher education systems in the two countries. The research is based on qualitative research approach, with content analysis of documents and literature. To explain globalizations influence on the two countries teacher education systems, central concepts in globalization and reform theory are presented.

The curriculum of the Finnish teacher education provides students with the opportunity to specialize on specific grade levels and subjects in the compulsory school. Further, the education offers the students an education with profound knowledge. The Norwegian education does not offer the opportunity to specialize on subjects or grade levels in the compulsory school, although it provides the students with insight in all subjects.

The Finnish teacher education recruits the nations best secondary school graduates, while the recruitment to the Norwegian teacher education is described as low quality. Further, there is a more complex admission and selection procedure for entering the teacher education in Finland than in Norway. Globalization has produced common educational reforms in Norway, contrary to Finland, that has implemented other types of educational reforms.

It is possible to conclude that there is a lesson to be learned from Finland's organization of the content and structure of their teacher education. In addition, Norway can gain knowledge from the procedures of admission and selection for recruitment to the Finnish teacher education. Norway can also learn from how Finland has managed the pressure for educational reforms as a result of globalization.

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List of Acronyms

BEd	Bachelor of Education degree
ECTS	European Credit Transfer System
GNI	Gross National Income
IEA	International Association of the Evaluation of Educational Achievement
MEd	Master of Education degree
NOKUT	Nasjonalt organ for kvalitet i utdanningen, in English: The National Organization for Quality in Education
OECD	Organization for Economic Co-operation and Development
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for international student assessment
TIMSS	Trends in international mathematics and science study

1. Introduction

For my Bachelor's degree I studied at a teacher college in Norway. There I often heard Norwegian teacher students (students refer to people attending higher education) say and I quote: "I didn't know what I wanted to do with my life, so I applied for admission to the teacher education program". This statement has always surprised and disappointed me. To me it illustrates a lack of motivation for entering the teacher education. When I hear somebody state this I reflect on the fact that their lack of motivation may be unfair to the children they are going to teach. This thought is based on my belief that high quality teachers originates from motivated and hard working students. Further I have questioned the quality of the teacher education in Norway and speculated about why the teacher education in Norway does not recruit highly motivated students. Does the quality of the teacher education in Norway provide our children with sufficient, competent teachers? Because of these ponderings I have developed an interest in education, especially teacher education.

Finland, a country that Norway often compares itself to, has excellent results on international tests of their pupils. Pupils referred to children and young people that are attending compulsory school and secondary school. In comparison Norway has not achieved high results. This has made me wonder about the differences in the teacher education in Norway and Finland. Why are pupils doing so much better in Finland? This topic of this research is comparing the teacher education in Norway and Finland with the focus on what the teacher education system in Norway can learn from Finland. There are many aspects of the teacher education that are important. The areas of the teacher education that I have taken an interest in are curriculum, recruitment and how globalization has effected the teacher education in the two countries. Additionally if there is a difference in these areas, is there any possibility that Norway can benefit from this study?

1.1 Background for the research

In today's society the ability to compete internationally is becoming increasingly important. The government in Norway has a growing focus on the country's ability to achieve the best results in competition with other countries. In field of education one result of this trend is a

large-scale cross-national assessment of pupils such as PISA (Programme for International Student Assessment), TIMSS (Trends in International Mathematics and Science Study), and Progress in International Reading Literacy Study (PIRLS) organized by International Association for the Evaluation of Educational Achievement (International Association for the Evaluation of Educational Achievement 2008a). These tests are often used to pinpoint the education level of the pupils in each nation. Since the results from PIRLS are not used in this thesis, this test will not be further mentioned. I will use results from the PISA tests and comment about the level of scores for Norwegian pupils from TIMSS. TIMSS is a test organized by the International Association for the Evaluation of Educational Achievement and it assesses the pupils' achievement in mathematics and science (International Association for the Evaluation of Educational Achievement 2008b).

In Kjærnsli *et al.* *Time for heavy lifts* published in 2007 the PISA tests and results from PISA 2006 are described. PISA is an international comparative test given by OECD (Organization for Economic Co-operation and Development). The test measures 15-year olds literacy competence in reading literacy, mathematic literacy and science literacy. In addition, the test is repeated every third year, always investigating each subject area. The purpose is to follow the development in each country in each area, although the test always has a different focus. PISA-2000 had reading literacy in focus; PISA-2003 had mathematics literacy in focus while the focus in PISA-2006 was science literacy. It is a two hour test where the pupils have to answer questions from each subject area. A half hour of the test is dedicated to questions about family background, attitudes, learning strategies, and learning environment at the school. In addition there is a questionnaire for the schools' administration. The test is organized in cooperation with the member countries of OECD. The test does not take into account the curriculum of the different member countries' schools. It is constructed to measure the pupils' ability to actively use knowledge and experiences in a topical situation (Kjærnsli *et al.* 2007:14). This means that the test is designed to assess the pupils' ability to use their knowledge to meet real life challenges (Väljörvi *et al.* 2007:1).

In Norway, concerns have been expressed about the Norwegian pupils' lack of satisfactory results in the international tests TIMSS and PISA. There is therefore, a concern that the Norwegian pupils are unable to compete adequately at an international level (Stray 2006). In the TIMSS and PISA tests from 2003 the Norwegian pupils scored lower than the rest of the Nordic countries. Finland for example achieves significantly better results than Norway. In

the PISA-2003 test, the Norwegian scores in the subject of mathematic literacy are average compared to other countries in the OECD. These results are poorer than those from 2000. In the PISA-2003 test in science literacy, Norway is far behind the average of OECD countries. In addition, Norwegian pupils scored lower than the average OECD countries in problem solving. Further, in the PISA-2003 test in the subject of reading literacy, the Norwegian pupils scored under the average of the OECD countries. This result has also declined from the results in 2000 (Department of Education and Research 2007).

In the science literacy section of PISA-2006 the Norwegian pupils have the lowest score of the Nordic countries, where only six of thirty OECD countries scored lower. In the reading literacy section of PISA-2006, Norway has a significantly lower score than the average OECD countries. Again a significantly lower score than on the PISA tests in 2000 and 2003. In the PISA-2006, pertaining to mathematic literacy, Norway for the first time scored significantly lower than the OECD average (Kjærnsli *et al.* 2007:16-24). The results in PISA-2000, PISA-2003 and PISA-2006 have contributed to a debate about the quality of the Norwegian teacher education. One suggestion is to extend the teacher education so that it is a Masters' degree, a highly debated idea.

Finland is often referred to as a county that has succeeded with their education system. It has received educational glory because of their results on various comparative studies of educational accomplishment in the comprehensive school (Simola 2005:456). In the report *International Educational Tests: An Overview 2005* by Ruzzi, it is stated that Finland scores the best in reading literacy, this also includes from 1995 until 2003 (Ruzzi 2006:3). The country also scored at the top level in the subjects of reading literacy, mathematic literacy and science literacy from 1995 to 2003. Further, the schools in Finland have high and consistent standards, at the same time the pupils score below average on impact from social-economic background on students' performance (Ruzzi 2006:4).

In addition it has been concluded that Finland has a comprehensive school that combines high quality performance with a high level of quality in educational outcomes (Simola 2005:456). In PISA-2006, Finland is the best of all the countries in science literacy. In reading literacy, in PISA-2006, only the Korean pupils have a higher score than the Finnish pupils. In mathematic literacy in the PISA-2006, the scores for Finland are high, the best in the Nordic countries (Kjærnsli *et al.* 2007:16-24) and the second best results of the all

participating countries (Center for Educational Assessment 2008). These elements are one of the reasons that Norwegian educational system often is compared with the Finnish education system. Further, the Finnish pupils' high scores on the international tests have made the international society examine closer the Finnish teacher education, concluding that the Finnish teacher education must be of high quality. All of these elements are the foundation for the comparison between Norway and Finland in this thesis.

1.2 Problem Statement

The principle research question for this thesis is: What can Norway learn from the Finnish teacher education about curriculum, recruitment and attitude to globalization?

To answer this, three sub-questions are necessary:

- What are overlying curriculum differences in the teacher education in Finland and Norway?
- What are the recruitment criteria for the teacher education in Finland and Norway?
- How does globalization influence the teacher education in Finland and Norway?

The topic of this research is therefore the teacher education in Norway and Finland and I will focus on what Norway can learn from the teacher education in Finland. I will narrow this theme by focusing on education for teachers working in grades 1 – 10 (compulsory education) in Norway and teachers working in grades 1 – 9 (compulsory education) in Finland. In Norway children start school when they are 6 years old, while in Finland they start when they are 7 years old (Skagen 2006). Therefore, I include one more year in the Norwegian system.

Further, I will focus on the curriculum and recruitment of the two teacher educations and how globalization has affected the two teacher educations. In order to give a holistic description of the two teacher educations it is necessary to present a short historical description of the teacher educations in the two countries and a description of the structure of the two teacher educations. To be able to conduct this research I have read policy documents, articles, books and newspapers.

1.3 Assumptions for the reasearch

In the following the assumptions connected to the research questions will be presented.

The principle research question: What can Norway learn from the Finnish teacher education?

The assumption for the principle research is therefore: Norway can learn from the way Finland designs the curriculum for their teacher education and how they recruit candidates for teacher education. Norway can further learn from the way that Finland has handled globalizations pressure for educational reforms.

Sub-question one: What are overlying curriculum differences in the teacher education in Finland and Norway? The assumption for this question is therefore: Finland has an academic teacher education with a researched based focus with opportunities to specialize. Norway's teacher education has fewer possibilities to specialize, a broader view on knowledge about the content of teacher education, and the education has traditionally not been connected to research institutions.

Sub-question two: What is the recruitment level for the teacher education in Finland and Norway? The assumption for this question is therefore: Finland has recruited the most talented secondary schools graduates, while Norway has tended to recruit relatively weaker candidates.

Sub-question three: How does globalization influence teacher education in Finland and Norway? The assumption for this question is therefore: Globalisation pressures all countries to reform their education systems in order to be more competitive in producing human capital. This pressure is met differently in various countries, due to their different recruitment polices of candidates for teacher education and their diverse curriculum legacies. I assume that Finland and Norway manage the pressure of globalization for educational reforms differently. In this difference I assume there is a lesson to be learned for Norway.

1.4 Operationalisation of the research

In comparing the curriculum of the two teacher education systems I will use policy documents and other types of literature. Further, I will compare the recruitment level for the teacher education in Finland and Norway. This includes comparing the submission criteria

and what type of students that applies for the two countries' teacher educations. Further I will assess how overlying globalization trends have effected and produced educational reforms. That means identifying what type of educational reforms have been made, how they can be placed in an international perspective and what type of teacher role it has produced.

In studying the overlying curriculum differences I will focus on curriculum of the teacher education at the University of Helsinki and the teacher education at the Oslo University College. In the curriculum of these educations the focus will be on the following questions:

- What are mandatory subjects for teacher students at the two teacher education institutions?
- How many ECTS credits does the mandatory subject have? (ECTS is short for European Credit Transfer System. One ECTS is one study point. Study points are used in Norway and Finland, but ECTS are used internationally in order to compare subjects and degrees. Therefore is this the term used in this thesis.)
- Which year in the education the different mandatory subjects are placed?
- Freedom of choice, how many ECTS credits can the students choose and at which year of the teacher education?
- How many ECTS credits of educational subjects at the different teacher education institutions?
- How research is integrated in the two teacher education systems?

Educational subjects, as mentioned in the second last question, are defined in this thesis as the subject of pedagogy, education or educational psychology. At the University of Helsinki the teacher education programs contains pedagogical studies, education or educational subjects. In Norway the teacher education includes the subject pedagogy. Since there are different terms and translations of this type of subject I decided to use the term educational subjects. Therefore, when the term educational subjects is used in this thesis it pertain to the subject pedagogy in the Norwegian teacher education, pedagogical studies in the subject teacher education at the University of Helsinki, and the subjects education and educational psychology in the class teacher education at the University of Helsinki.

In studying the recruitment differences of the two teacher educations the focus is on:

- What are the criteria to enter the two countries teacher education?
- What type of students is recruited to the two teacher education systems?
- What is the status of the two countries teacher educations?

In studying how globalization has effected the two teacher educations differently the focus will be:

- What types of educational reforms have been made in the two countries teacher educations as an effect of globalization?
- Which type of teacher role has the globalization given?

1.5 Research methodology

Different approaches can be taken to understand social theory and research. The approach a researcher chooses is based in a frame of reference for the research. This is a basic fundament for the research and important to make clear for the reader. Further, these approaches give different views on social phenomena, roles in the society and the functions the roles have in society. One example is that various societies have different views on what role a teacher should have; which for example leads to the use of different types of teaching methods. I will present Burrell and Morgan's (1992) theory of the four paradigms for the analysis of social theory, with focus on the teacher's role and education. In the last part of this chapter my frame of reference will be described, illustrating my view of science and knowledge.

Burrell and Morgan (1992) describe that the nature of science can be defined on a scale from a subjective to objective dimension. Further, they claim that assumptions about society can be defined on a scale from regulation to radical change. The scale from sociology of regulation to sociology of radical change can be described to be an order – conflict debate. On the order side of the scale, is nature of social order and equilibrium. This type of theory is concerned with the need for regulation in human affairs, where the main focus is the need

to understand why society is maintained as an entity. On the other side of the scale, the focus is on problems of change, conflict and coercion in social structures. Here the concern is to find reasons for the radical, deep-seated structural conflicts, modes of domination and structural contradiction which is characteristic for the society. The main focus is upon the deprivation of man, both material and psychical (Burrell & Morgan 1992).

For the objective – subjective scale there are four philosophical assumptions; ontological, epistemological, human nature, and methodology. When these concerns are taken into account two extreme dimensions are found. On the one side is the objectivist approach, which claims the view of an external and objective reality which is best investigated by using natural science approach. On the other extreme side of the scale is subjectivist perspective, which advocates that it is individuals that create the social world and that the individual point of view is crucial in social research (Burrell & Morgan 1992).

Figure 1.1 Four paradigms for the analysis of social theory (Burrell & Morgan 1992:22)

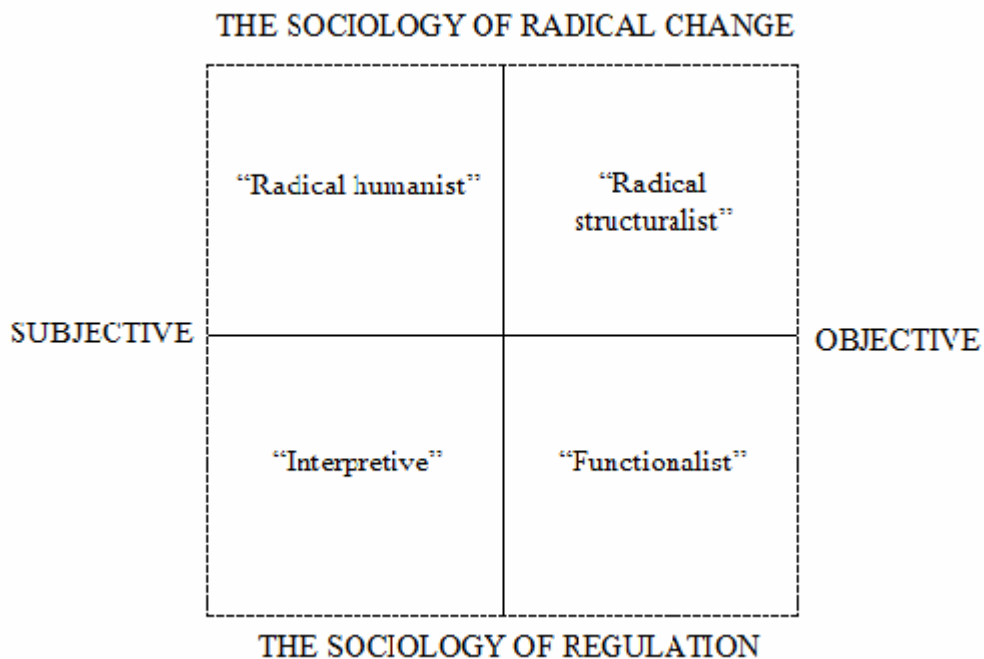


Figure 1.1 illustrates the relationship between the two dimensions and the four paradigms that they create. These paradigms are radical humanist, radical structuralist, interpretive and functionalist. The radical humanist paradigm is characterized by anti-organisational theory. This theory rejects any fixed form of knowledge and social regulation. A radical change is required for the individuals to be freed from the superstructures (Burrell & Morgan 1992).

The teacher role, where the teacher facilitates for the pupils on their way to learning, may be described as a part of the radical humanist paradigm. This type of teacher is not in the centre of the classroom; here the pupils focus on the teaching. Further, in this paradigm, the process of learning is important. Additionally anti-organisation theory can be located in this paradigm and the view on knowledge is that it changes (Tjeldvoll 2006).

The radical structuralist paradigm is based on the assumption that radical change is built on the nature and structure of contemporary society. Here explanations for interrelationships are seen in the context of social formations (Burrell & Morgan 1992). Knowledge is something to be used to criticize and make changes in the classes of society, and for individuals to politically free themselves. Knowledge in this paradigm can be furthered described as systematic (Tjeldvoll 2006). The school system in the communist Soviet Union can be placed in this paradigm.

The interpretative paradigm is concerned with understanding the world as it is. This is achieved by grasping the fundamentals of nature in the social world at the subjective experience level. In this paradigm the social world is defined as social processes created by the individuals' experiences (Burrell & Morgan 1992). In education the focus is on the pupils, to give them the opportunity to interpret knowledge. Emphasizing that knowledge must be interpreted. Rudolf Steiner and his pedagogy are located in this paradigm (Tjeldvoll 2006).

The functionalist paradigm is the main frame in organisational studies, and is characterized by an objective view upon knowledge and a continuing view upon social change (Burrell & Morgan 1992). Therefore knowledge is systematic and stable (Tjeldvoll 2006). This paradigm focuses on the search for rational explanations of social affairs and order (Burrell & Morgan 1992). The traditional teacher role belongs here, where the teachers educate the pupils by giving them knowledge. With this role the teacher spends most of the time lecturing the pupils. The pupils have to follow the teacher; the focus in the classroom is on the teacher. This usually provides an education that focuses on obtaining knowledge and not the process of learning.

The radical humanist paradigm is nearest to my view of science and knowledge. The nature of science is seen as subjective. This implies that I choose an ideographic approach to the research, mainly requiring qualitative data. Qualitative research usually emphasizes

meanings in the collection of data, more than numbers. For the most part it has an inductive approach to the connection between theory and research, here the emphasis is on generating theories. Further, qualitative research can be explained as abandoning the practices of the scientific model. Also qualitative research can be described as having focus on interpretation of the world by its participants. This is the epistemological position of qualitative research. This type of research is based on the belief that social reality is constantly shifting and a product of individuals' creation and that is the ontological position of qualitative research (Bryman 2004).

These are the reasons for the chosen documents, literature and policies in the research, and the explanation for not collecting data using the quantitative method. My research is using the qualitative research method with a focus on interpreting the information that I am able to obtain. The literature that I have used contains documents where people have described the teacher education the way they perceive it.

1.6 Assessing the research approach

Research design is as Bryman (2004) defines it: "a framework for the collection and analysis of data". For the research it was natural to use comparative research design. This type of research design is using more or less identical methods of two contrasting cases. It involves comparing two or more meaningful contrasting cases or situations. These situations or cases can better be understood by being compared. By using this method, comparing the Finnish and Norwegian teacher education systems, it might be possible to understand more about the implications of the Norwegian teacher education. The central point to this research design is to distinguish the characteristics of two or more cases which give the basis for theoretical reflections about contrasting findings. One type of comparative design is cross-national research. This is when a particular issue or phenomenon in two or more countries is examined. The same research instrument is used in both cases, such as secondary analysis of national data or new empirical work. This type of research can be used to seek explanations for similarities and differences in different nations. When data is collected in two or more countries it is a cross-cultural research. This method can be used in many different ways.

One example of this type of research is collecting data in several countries or doing a secondary analysis of data that is comparable. Comparative design can be qualitative or

quantitative; I have used qualitative methods, as a result the quantitative comparative research design will not be discussed in this thesis. When the comparative design is qualitative it is a multiple case study (Bryman 2004:53-55). I have compared the teacher education in Finland and Norway, accordingly the two countries are two case studies and create, as described, the comparison cross-cultural research.

When comparing two countries the comparative research design is a natural choice of research design. I have collected the same type of data in the two countries from documents that describe the two teacher education systems. This is the basis for the reflections that are presented in the discussion chapter of this thesis. For the research I have used content analysis for analyzing the documents, literature and policies. Content analysis will be described and commented on later in this section.

Research method is, as Bryman (2004) defines it: the technique for collecting data (Bryman 2004:27). I have generally used library search for documents, books and articles. In addition, I have used snowballing or chain sampling for the collection of literature. Snowballing is a method for locating information-rich key informants or critical cases. The process can be started by asking well informed placed people who recommend others that can contribute further in the information gathering. These people can again be asked to recommend other people that have knowledge about the subject of interest. Some people or incidents may be mentioned more frequently and rapidly, and thus have a special importance. These are termed key people or key events (Patton 2002:237).

The research was started by contacting the Department of Education in the Ministry of Education and Research in Norway. They recommended several people to contact, books to read, and organizations that could be helpful. I started by reading the books and contacting the people that had written articles in the books. These informants recommended other contacts, books or articles to read. In addition, I reviewed and searched for books and articles in the reference lists. This process resulted in numerous documents and literature to evaluate. I also search in libraries for books, articles and policies that would be of interest and contacted organizations of interest. Snowballing for collecting information gave me the best results in obtaining high quality information.

To ensure that the documents and literature I have gathered are not biased in a way that favoured one of the countries, I had to gather the documents and literature methodically. The

documents and literature describing the Norwegian teacher education is in Norwegian and is therefore easy for me to access. This gave me rich and high quality descriptions of the Norwegian teacher education.

On the other hand, the situation is the opposite for documents describing the Finnish teacher education. Evaluations, policy documents and state reports of the Finnish teacher educations are in Finnish, most of them not translated and published in English. To contradict this I searched for descriptions of evaluations and state reports in English. This did not give me full insight to the Finnish teacher education, but it was the only method available because of the time and resource limitations of a Master's thesis. Therefore, many of the articles I have used to obtain information about the Finnish teacher education are articles published in international journals. In comparison these documents differ from the ones used to obtain information about the Norwegian teacher education. I have tried to compensate by searching for the same information about the two teacher education systems. The method used to gather information will be described later. This is the same strategy used to avoid biases, so as not to gather more positive information about one of the countries.

Before using information from a document a decision had to be made about the inclusion in the research. Assessing the quality of documents can be related to four criteria: authenticity, credibility, representativeness, and meaning (Schott 1990:6). Authenticity relates to the question, is the evidence genuine and of unquestionable origin. If this is not achievable it is not possible to make an informed judgment about the quality of the data. Credibility relates to the question is the evidence free from error and distortion; is the documents biased (Bryman 2004, Scott 1990). I had to ensure that the obtained information about the two teacher education systems was correct. It would damage the research if the information I used was incorrect. Further I had to assess if the authors were biased. For example, could Finnish authors be inaccurate in their belief to explain why high scores of the Finnish pupils in international testing?

Representativeness is about to what degree the evidence is typical of its kind. Meaning relates to the degree that the evidence is clear and comprehensible (Bryman 2004, Scott 1990). The criteria above are used in assessing the documents and literature, and on that basis the decision about which documents or literature to include in the research, for example where investigated made to see if the authors had published other articles in this

field and their places of work. If they had published other articles and worked at a university in the department of education, the document or literature had more credibility. If the documents lacked publishing dates they were not included in the research.

In addition, I examined reference lists of the books and articles in order to decide about the quality of the documents or literature. If the documents or literature were based on reports, evaluations, or other literature that I had not heard of, were not able to check, or the information in the document or literature therefore was not possible to confirm, I was likely to not include it in the research.

I was for the most part able to use the documents and literature that I found, although in some cases there was exclusion. The use of internet sites only included those that were connected to established national organizations. However, the majority of the used internet sites are the Norwegian and Finnish governments, in addition to OECD, universities and colleges in the two countries. I considered that these organizations have truthful information on their website. In addition, I confirmed that the website was the official website, not an impersonator. The last criteria when deciding the use of a document was if it brought new elements to the thesis or supported a main point

The way in which I structured the content of the document and literature is called content analysis. The classical way of defining content analysis is described in Titscher *et al.* (2000). The method is defined as “those methods that concentrate on directly and clearly quantifiable aspects of text content and as a rule on absolute and relative frequencies of words per text or surface unit” (Titscher *et al.* 2000:55). It now also includes those procedures that operate with semantic, syntactic and pragmatic categories. The method can according to Titscher *et al.* (2000) be described as those procedures that are used to analyze text by categories. The first theoretical basis of the method was Harold D. Lasswell’s model of mass communication. He formulated it as: who says what to whom and with what effect. Lasswell was successful in creating the method by underlining the political value of content analysis (Lasswell in Titscher *et al.* 2000:56). The method was a simple behaviorist-oriented stimulus-response model of communication. It was set up as an asymmetrical relationship between sender, stimulus and recipient (Lasswell 1941).

Content analysis can be used and described in many ways. Above the origin of the method is described, and in the following I describe the elements of content analysis used in the

research. As described in Titscher *et al.* 2000 the method uses categories and coding to organize the material. It is possible to analyze the smallest components of a text to occurrence of themes. And it can be done at the semantic or syntactic level. Syntactic level can be signs, sentences or complete texts. Since the syntactic level is not used it will not be discussed further. The semantic level can define units as person, statement and unit of meaning. The vital instrument of content analysis is the system of categories. Every unit found must be coded and connected to one or more categories. Categories are operational definitions of variables and definitions of categories needs to be clear and exact. The categories can be themes or subjects. This is used to find out what a text is about; the focus is the meaning of sentences (Titscher *et al.* 2000). I created six categories. The criteria for the information to be included in a category are those found under operationalisation of the research in chapter 1.4. The following are the categories used:

1. Curriculum of the teacher education in Norway.
2. Recruitment to the teacher education in Norway.
3. Globalizations effect on educational reforms in the teacher education in Norway.
4. Curriculum of the teacher education in Finland.
5. Recruitment to the teacher education in Finland.
6. Globalizations effect on educational reforms in the teacher education in Finland.

Each of these categories has sub-categories, for example mandatory subjects in the curriculum in the teacher education in Norway, criteria for entering the teacher education in Norway, and globalizations effect on teachers role in teacher education in Norway. The same types of categories are used for Finland. By developing these categories I was able to achieve a systematic collection of data.

1.7 Limitations and delimitations of the study

The comparison of the teacher education in Finland and Norway is limited due to the fact that a Master's thesis does not give enough time and space to build a complete comparison. I

have only researched a part of the education. This does not imply that other sections not focused on are unimportant; it is a matter of having to prioritize.

One of the major limitations of this study is the inclusion of curriculum from only one teacher institution in each country. This is, as already described, because of the limitations of a Master's degree. In addition, there are many different ways to become a subject teacher in Finland. I include only a part of that education track at the University of Helsinki. The reason for this is partially a result of the inaccessibility of information that could have been overcome with more time and space in the thesis. Therefore, in this thesis only parts of the subject teacher education program will be investigated.

Additionally, I am unable to investigate what is taught at the teacher institutions, how the institutions function as a learning organization, and the quality of the teaching at the institutions. Further, I am able to include only a portion of the history of the two teacher educations. I describe them briefly, which means that the complete history is not included. The history of a country and its education is an important factor and often explains the current education. This is therefore a major limitation in the study.

There are also limitations in the areas that I have chosen to focus on. I am unable to go into detail about the curriculum in the two teacher educations. Therefore when curriculum is referred to in the two teacher educations, it is referring to the overlying curriculum tendencies. This means that I have investigated only a few elements of the curriculum, as described in chapter 1.4. I am unable to explore for example, the examination system in the two educations or the number of hours spent teaching in the two educations. When inspecting the recruitment to the two countries teacher education systems, I was unable to obtain comparable statistics; therefore I am only comparing descriptions of the recruitment to the two different teacher educations systems.

Pertaining how globalization influences educational reforms, I am only investigating the overlying tendencies in the two countries. Globalization is a major field with many theories, opinions and discussions, and I am therefore unable to include all of this. Further I was unable to include research on the practice for the teacher students, since I was unable to obtain comparable statistics. This could have been achieved by quantitative gathering of information at the two countries teacher institutions. This was not possible with limitations of time and space in a Master's thesis. When I describe the two countries teacher education

systems in this thesis the teacher students' practice will be briefly mentioned. This is to illustrate the content of the two teacher education systems, but the practice will not be commented on.

1.8 Structure of the thesis

The following chapter on Conceptual framework contains central concepts and theories that are necessary to understand and build the foundation for this thesis. Further, chapter three is a description of the Finnish teacher education system, while chapter four is a description of the Norwegian teacher education system. In chapter five the two teacher educations are compared. These findings are discussed in chapter six. The conclusion of the thesis is in chapter seven, in addition to thoughts about further research. The epilogue includes a discussion of methodological limitations of the thesis and reflections around this theme.

2. Conceptual framework

Today the teacher education is viewed in an international perspective. One of the elements that increase this is the international testing of pupils, developing this as an indicator of how well a teacher education is functioning. Therefore, teacher educations are constantly challenged about quality, so that reforms are often implemented with the goal of improving the quality. In addition, it has become more common to acquire knowledge about other countries' educational programs. The purpose is to obtain ideas for how a teacher education can be organized and developed. This can explain how globalization challenges the concept of a high quality teacher education. In this chapter the central information, concepts and theories of the study will be presented. This information, concepts and theories are essential for understanding this thesis. I will first present information about teacher education in general, then globalization theory connected to education and reform theory will be presented. This is fundamental in order to understand the changes that the two teacher educations have been through. At the end of this chapter Norway and Finland will briefly be presented.

2.1 Teacher education

The report *Teacher matters* by the OECD (2005) defines “teacher quality” as the most significant variable influencing pupils’ school accomplishment. Common for school authorities in many countries is that they are seeking to increase the quality of teaching in their schools. Teachers are the most important resource in the schools and central to school improvement. To develop the efficiency and equity of the schools it is vital to ensure that competent people desire to work as teachers. It is also significant that the teacher has exceptional quality (OECD 2005).

Teacher education is organized differently in various countries. In Finland the teacher education is located at university level. To teach in Finland a five years Master’s degree in education is required (Skagen 2006). In Norway the teacher education is a four year program at college level. After three years the students receive a bachelor degree and after the fourth year they obtain a certificate to be a teacher (NOKUT 2006:82 (NOKUT is an acronym

for Nasjonalt organ for kvalitet i utdanningen, in English: The National Organization for Quality in Education)).

2.2 Globalization and reform theory

Many countries state that the reason for educational reforms is the ability to compete internationally in the global economy (Karlsen & Kvalbein 2003:63). This leads to the fact that globalization is an important concept to grasp. Globalization is a widely discussed and a disputed concept. Experts have contradicting opinions about what globalization is and its effects. Globalization can be defined as processes “such that governments and societies across the globe are having to adjust to a world in which there is no longer a clear distinction between international and domestic, external and internal affairs” (Giddens (1990, 1998) in Crossley & Watson 2003:54).

Globalization may change the focus of the nation-state relationship. The focus may be altered from protecting the national identity, to action as economic-growth promoting their national economies. Globalization enhances the focus on economical policies that increase global competitiveness. This will be more important than policies that stabilize the current pattern of the domestic economy (Carnoy 1999:20). This illustrates how changes in one country can and will effect the educational needs in other countries. This can bring about and influence educational reforms.

Globalization tends to influence the type of reforms that governments select for developing education in their country. Further, globalization and world economy may have an impact on educational reforms in different ways. Martin Carnoy describes in *Globalization and educational reform: what planners need to know* published in 1999, three different educational reform strategies. These are: competitiveness-driven reforms, finance-driven reforms and equity-driven reforms. The two last types of reforms are less relevant in this thesis so they will only be briefly presented. The main goal of competitiveness-driven reforms is to improve the economic productivity by enhancing the “quality” of labor. In practice this is about increasing the average level of educational achievement of young workers (Carnoy 1999:38).

In addition, the goal for competitiveness-driven reforms is to develop the learning “quality” at each level. Quality is measured by student attainment and by the education's relevance to a transforming world. The reform can be described as productivity-centred since the goal is to enhance the productivity of labour and the educational organizations. Some of the improvements can be spending money on the educational systems by giving teachers higher salaries (Carnoy 1999). The reform can be divided into four groups:

- Decentralization: municipalities and schools are given more influence on the educational decision-making, with the purpose of increasing control in the local communities concerning curriculum and teachers. This compels the teacher to adjust with local needs.
- Standards: Some countries have had highly decentralized education and by providing a national standard the government gives clear signals of what is expected of the schools and what the parents can expect of the schools.
- Improved management of educational resources: this is to achieve better management in the schools and thereby increase teacher effort and innovation. Additionally, at the same time provide the teachers with effective teaching alternatives.
- Improving teacher recruitment and training: This includes giving teachers higher salaries, increased status for the teacher and other alternatives that so that the teacher functions better in their work (Carnoy 1999:38-40).

In finance-driven reform the goal is to decrease public expenses on education. It has the same goal as the competitiveness-driven reform to improve the productivity of labour, but in addition the finance-driven reform the intention is to improve the quality of education and the effectiveness of use of resources. The main goal for this reform is to reduce public expenses on education. Therefore this type of reform requires choosing strategies that reduce spending (Carnoy 1999:42).

For equity-driven reforms the main goal is to enhance equality of economic opportunity in education. This type of reform is important to equalize the access to high-quality education in a society. The main equity-driven reforms in developing countries can be divided in three (Carnoy 1999:44).

The different types of educational reforms that countries implement depend on the countries history, economy and culture. Sahlberg describes in, *Are you thinking of improving student achievement? – Horse-race for standards or pedagogical conservatism?* published in 2006, that since the 1980s at least four common features of global strategies for educational policies and reforms for enhancing quality of education and student achievement have been dominate. These are standardization of education, increased focus on literacy and numeracy, consequential accountability policies and pedagogical revolutions and imported innovations. In standardization of education the focus of education is shifted to the outcome of education, i.e. student learning and school performance. The thought here is that setting clear and sufficient high standards for school, teacher and student will increase the quality of outcomes. Some of the effect has been centrally prescribed curricula, often with ambitious accomplishment goals (Sahlberg 2006).

In the second reform trend, increased focus on literacy and numeracy, basic student knowledge and skills in reading, writing, mathematics and natural science have been given high priority. These are prime targets and indices of educational reforms. This has resulted in international student assessments such as PISA and International Association of the Evaluation of Educational Achievement (IEA). Literacy and numeracy have become determinants for success or failure of pupils, teachers, schools and entire education systems (Sahlberg 2006).

The third global educational reform trend is consequential accountability policies. Here school performance and accountability is important. Standardized tests and external evaluation determines success or failure of schools and their teachers.

The fourth global educational reform trend is pedagogical revolutions and imported innovations. Here the curriculum development and teachers' professional development are depending on innovations from other countries. Educational reforms often include revolutions in the teachers' beliefs, knowledge and skills (Sahlberg 2006:8).

2.3 Finland

Finland is a high income country in Northern Europe, implying that the country has GNI (Gross National Income) per capita of \$11,116 or more (The World Bank Group 2008). The

country has a democratic government with about 5 million people. In 2001 there were 596 000 pupils in compulsory education in the country (OECD 2003:25). Children start school when they are seven years old and compulsory school is from grade 1 – 9 (Skagen 2006). Simola (2005) states that Finland because of its geographical and geopolitical location has always been a border country between the west and the east. The birth of the Finnish nation state was achieved under the Russian Empire during the nineteenth century and because of this Finland has eastern elements; an authoritarian, obedient and collective mentality in its society and culture. Simola (2005) states that “another historical fact that makes Finland different from its Nordic neighbors is that it went through wars, including one of the bloodiest civil wars in modern European history” (Simola 2005:437). These two aspects can explain the peculiarity of the Finnish drift for social consensus. In 1921 Finland established compulsory school, as one of the last countries to do so in Europe (Simola 2005:458).

Compared to other Nordic countries the industrialization and urbanization process in Finland was quite slow until the Second World War (Simola 2005:458). Finland, the former Soviet Union and other eastern European countries declined Marshall-help (Caplex 2008a). The Marshall plan was an American strategy to help European countries after the Second World War. The plan is named after the American foreign minister George C. Marshall who declared in a speech at 5th of June 1947 that all the European countries would receive help if they would agree on an economical plan for the development of Europe (Caplex 2008a). After the Second World War, the Finnish economy grew rapidly with sensibility to international economic cycles, then in the early 1990’s an extreme economic depression struck the Finnish economy. The unemployment rose to 16% and there was a cutback on all public expenditure. After the depression the economy grew rapidly again (OECD 2003).

2.4 Norway

Norway is a high income country in Northern Europe (The World Bank Group 2008). The country has a democratic government with 4.5 million people (Caplex 2008b). Children start school when they are 6 years old. Compulsory school is from grad 1 – 10 and there are 600 000 in compulsory schools, taught by 51 000 teachers. The compulsory school is run by the 435 municipalities in the country (Lyng & Blichfeldt 2003:10). Norway became an

independent nation in 1905 when it separated from the union with Sweden (Caplex 1990:645). The country had small resources at the end of the Second World War, but received 45 million dollars from the Marshall plan after 1947 (Caplex 2008a). In addition, oil was discovered in 1967 in Norway. This discovery and later discoveries of oil built a solid foundation for economic development in the country. The oil and gas became export merchandise that has given profit and developed the industry. Norway is not a member of the European Union (Caplex 2008b).

2.5 Summary

The concepts that are presented in this chapter are the background for reading the next two chapters that describe the teacher education in Finland and Norway. How does globalization effect the two teacher educations? Globalization and its impact on educational reforms are important in order to define and grasp the impact that reforms and changes have on teacher educations. There are several different types of educational reforms that can be influenced by globalization. These reforms are strategies for managing the increased international competition in education. Finland and Norway have diverse economy and social history, which have shaped their educations differently. Finland has a five year teacher education that provides the students with thorough knowledge based on research. In addition, the education recruits the nation's best secondary school graduates. The Finnish teacher education has not gone through the usual educational reforms and has a traditional teacher role. Norway has a teacher education that is mainly located at college level and the education contains many subjects. The education does not recruit the nation's best secondary school graduates. In Norway educational reforms provides a pupil centred focus where the teacher does not have a traditional role.

3. Teacher education in Finland

In this chapter facts about the Finnish teacher education system will be presented, in addition to a short historical description of teacher education in Finland. The two next sections are about the curriculum and structure of the Finnish teacher education system and recruitment to the education. At the end of the chapter globalizations effect on the Finnish teacher education system will be described.

“In Finnish culture, the profession of teacher has been seen as one of the most important professions of society, and a lot of resources have consequently been invested in teacher education” (Välijärvi, et al. 2002:42). According to Niemi (2006) this is an important foundation for further development of the teacher education (Niemi 2006:49). The Finnish success in education is not a result of any major national educational reform. It is instead a result of the fact that educational reform and development in Finland has been built on constant adjustment of schooling to the changing needs of individuals and society (Sahlberg 2006). The academic Finnish teacher education is built on thirty years of systematic development work with strong cultural, educational and academic roots. Niemi (2006) lists the strong sides of the teacher education in Finland in a summary list; which is based on several evaluations of the education (Niemi 2006):

- The exam has an academic level and most of the class teacher students finished their study.
- Class teachers have a positive perception of the teacher profession and the convenience of teacher’s work tasks.
- One of the most important aspects of the subject teacher’s education is the solid connection between the research and subject didactic.
- The teacher education has high status, only 10 – 15 % of the people that apply for the class teacher education get accepted.
- Talented students apply for the education.
- Young teachers consider the teachers work as developing constantly.

- The students had high-quality subject knowledge and ability to plan teacher lectures (Niemi 2006:42).

In Finland the teacher education is offered by eleven universities, including three art academies and one university that provide teacher education in Swedish. The education is provided by faculties of education, their teacher education units and in cooperation with faculties of the different subjects. Eight of these universities manage teacher training schools for practice for the students (OECD2003:35). For the grades 1 – 9 in Finland the teacher education is divided into two programs, class teacher and subject teacher. The class teachers teach in the grades 1 – 6. They teach every subject at that level and are responsible for guiding the whole personal development of the pupils. The subject teachers teach in the grades 7 – 9 and upper secondary school. They have specialized in one or two subjects and can also teach a second language in the grades 1 – 6 (Niemi 2006, Kallós & Nilsson 1995).

Both of these educational tracks have the same university level, position, status and degree with a Master's examination (Kallós & Nilsson 1995:59). There has not been a national policy standard for the teacher education in Finland. The National-Level Coordination Project of Degree Programme Development in Teacher Training and the Sciences of Education (in Finnish called *Vokke*) has made recommendations for a national-level coordination of degree programme development of the teacher education. The project aimed at harmonizing the curriculum of the teacher education in Finland (University of Helsinki 2006).

3.1 History of the Finnish teacher education

Educational policies in Finland have been built on sustainable leadership guided by commonly accepted values and shared visions (Sahlberg 2006:5). Finnish teachers have a long history in striving for professionalism. Already in 1890 the primary school teachers claimed that their training should be at university level (Simola 2005:460). Further, it is said that before the Second World War, Finland had more primary teachers with a matriculation certificate than any other country in Europe (Halila 1950 in Simola 2005:460). In the 1930s the University College of Education in Jyväskylä was established. This, and the fact that

three teacher-training colleges were established in bigger cities, helped raise the status and prestige of teaching in Finland (Simola 2005:460).

In the late 1950s there was a demand from the teachers union that the teacher training for primary teachers should be at university level. It was not until the decade of 1970 that the education was established at the universities. The responsibility for the teacher training was then removed from the teacher-training colleges and small town “teacher preparations seminars”, to the universities with brand new faculties of education. A Master’s degree for primary school teachers was established in 1979, this led to a substantial upgrade of educational subjects. This again led to the adoption of education as an academic discipline (Simola 2005:461).

Niemi (2006) describes that in the 1980s Finland restructured and decentralized the countries public administration. This led to an increased amount of responsibility for planning and developing for the teachers. In an evaluation made in 1989 the education was considered to be popular, in fact a much-coveted education. The largest problem at that time was the relationship between the faculties where different subjects were taught and the faculty of education. The problem was that educational subjects were not integrated in the subject studies. In 1995 a Bachelor and a Masters degree was established, previously there was a degree that was equivalent to a Master's degree (Niemi 2006).

One of the primary motivations to move the education to the university was to include preliminary research studies in the class teacher education program. Traditionally it had been the only subject teacher education program that had included research studies. When the education was transferred to university level, research and methodology were included at the beginning of the study. The research studies were intended to help the students to mature and develop. When the integration was achieved, the education had a foundation with the belief that the work of the teachers can be described as “continued research”. This means that the teacher is a researcher. Further, this implies that the qualities that the teachers need are the ability to observe and analyse different phenomena, in order to be able to evaluate their own teaching and develop teaching based on research. The Finnish teacher education system can be described as being under the influenced of international trends that consider the teachers roll to be a researcher in his or her work. These trends imply that the teacher professional

development never ends. Further, it involves that the teacher has responsibility for their own work and professional development (Niemi 2006).

The General Syllabus and Degree Reform in Higher Education (1977 - 1980) abolished the Bachelor's degree. This was implemented again in 1994 as a part of the Bologna Process (Simola 2005). The Bologna process is a phase for joint national analysis and evaluation of education (Niemi 2005). It was established by the Bologna Declaration signed 19th of June 1999. "The Bologna process aims inter alia at making divergent higher education systems converge towards a more transparent system by 2010, based on three cycles: Degree/Bachelor - Master – Doctorate" (European Union 2007). Further, only minor structural changes were needed when the Finnish teacher education was adjusted to the Bologna process (Jakku-Sihvonen & Niemi 2006 in Pehkonen *et al.* 2007:51).

One of the changes made according to the Bologna process was a new type of exam for the teacher education in Finland, established in August 8th 2005. This is a Master's exam which became a requirement for becoming a teacher. The Master's exam, 20 – 40 ECTS credits, is a research thesis that also contains free and second subjects. Other minor adjustments were made because of the Bologna process; the class teacher education and the subject teacher education have the same structure despite the fact that they have different main subjects. Both educations have 60 ECTS of educational subjects for teachers. Each student must also develop their own study plan with the purpose of supporting the students individual study course (Niemi 2006 and Pehkonen *et al.* 2007).

3.2 Curriculum and structure of the Finnish teacher education

Teacher education in Finland is a Bachelor degree (180 ECTS) and a Master's degree (120 ECTS) (Niemi 2006:34). The Master's degree is necessary to be a qualified teacher. Further, the rationale behind the program is that teachers have a central role in preparing the new generation for meeting the global world, with rapid changes in technology, economy and security. It is essential that members of the society have the necessary tools to analyze and manage these changes. Therefore, the teacher education has been directly integrated to the aims and purposes of the national goals for Finland. This concerns welfare and economy in the society and it depends on educational outcomes (Pehkonen *et al.* 2007:50).

International comparisons of the Finnish teacher education system illustrates that the Finnish programs are distinguished by their depth and scope (Jussila and Saari 2000; Westbury *et. al.* 2005 in Sahlberg 2006:11).

3.2.1 Teacher education programs at the University of Helsinki

Since the teacher education programs vary between the universities, the teacher education tracks at the University of Helsinki will be used as an example of teacher education in Finland. First the curriculum of the class teacher track at the University of Helsinki will be presented; afterwards there is a description of the curriculum in the subject teacher track at the University of Helsinki.

Curriculum of class teacher education program at the University of Helsinki

The class teacher education track, at the University of Helsinki, is divided into two parts: the Bachelor of Education degree (BEd) and the Master of Education degree (MEd) (University of Helsinki 2003-2004a). The main goal for the class teacher program is to support the students' growth by developing three central abilities: collective working and action culture, different working methods, and students' argumentation skills.

The program contains communication studies and orienting studies of 25 ECTS credits, table 3.1 (University of Helsinki 2003-2004a). During the program the students can choose between education and education psychology as main subjects. The documents that have been retrievable from University of Helsinki do not specify educational psychology, but studies in education are specified as shown in table 3.2. Therefore, the content of the subject educational psychology will not be specified in this thesis. Further, the students have to take a multidisciplinary minor subject module that consists of subjects and cross-curricular issues taught in comprehensive school, table 3.3. In addition, the students can select one or two minor subjects, the subject comprising of at least 60 ECTS credits which enables the class teacher to teach the subject in the upper level of comprehensive school, table 3.4 (University of Helsinki 2003-2004c). In the following, four tables will illustrate the curriculum of the class teacher education at the University of Helsinki.

*Table 3.1 : Communication and orienting studies**

<u>The subject contains</u>	<u>BEd</u>	<u>MEd</u>
- Basic curriculum planning, 6 ECTS credits.	3 ECTS credits.	3 ECTS credits.
- Language and communication skills, 14 ECTS credits.	<ul style="list-style-type: none"> - Mother tongue: 4 ECTS credits speech communication and interaction skills. 4 ECTS credits scientific writing. - Foreign language, 3 ECTS credits. - - Second national language, 3 ECTS credits. 	
- Information and communication technology in teaching, 5 ECTS credits.	3 ECTS credits.	2 ECTS credits.

*(University of Helsinki 2003-2004a)

Table 3.1, illustrates the communication and orienting studies in the class teacher education track at the University of Helsinki. The subject is 25 ECTS credits (University of Helsinki 2003-2004a).

*Table 3.2: Main subject education**

<u>The subject contains</u>	<u>BEd</u>	<u>MEd</u>
Cultural bases of education 15 ECTS credits.	<ul style="list-style-type: none"> - Introduction to educational sciences, 3 ECTS credits. - Change and continuity in education, 7 ECTS credits. - Individual confronting change, 5 ECTS credits. 	
Psychological bases of education, 15 ECTS credits.	<ul style="list-style-type: none"> - Growth, development and learning, 5 ECTS credits. - Knowing your pupil, 5 	

	<p>ECTS credits.</p> <ul style="list-style-type: none"> - Special needs education and pupil welfare, 5 ECTS credits. 	
Pedagogical bases of education, 20 ECTS credits.	<ul style="list-style-type: none"> - Didactics, 7 ECTS credits. - Theory and didactics of early childhood education, 3 ECTS credits. 	<ul style="list-style-type: none"> - Curriculum theory and evaluation, 3 ECTS credits. - Pedagogical knowing and construction of personal practical theory, 7 ECTS credits.
Research studies in education, 70 ECTS credits.	<ul style="list-style-type: none"> - Introduction to educational research, 3 ECTS credit. - Educational research methods, 7 ECTS credits. - Bachelor's thesis and research studies, 10 ECTS credits. 	<ul style="list-style-type: none"> - Research in teaching, 5 ECTS credits. - Advanced qualitative research methods, 5 ECTS credits or advanced quantitative research methods, 5 ECTS credits. - Master's thesis and research studies, 40 ECTS credits.
Teacher practice, 20 ECTS credits.		<ul style="list-style-type: none"> - Minor subject teaching practice, 12 ECTS credits. - Main subject teacher practice, 8 ECTS credits.

*(University of Helsinki 2003-2004a)

Table 3.2, describes the content of the main subject study education track in the class teacher education at University of Helsinki; the subject has 140 ECTS credits (University of Helsinki 2003-2004a).

*Table 3.3: Minor subjects**

<u>The subject contains</u>	<u>BEd</u>	<u>MEd</u>
Mother tongue and literature	8 ECTS credits.	

education, 8 ECTS credits.		
Mathematics education, 7 ECTS credits.	7 ECTS credits.	
Arts and skills education, 13 ECTS credits.	<ul style="list-style-type: none"> - Arts education, 3 ECTS credits. - Crafts education, 4 ECTS credits. - Physical education, 3 ECTS credits. - Music education, 3 ECTS credits. 	
Didactics in humanistic subjects, 6 ECTS credits.	<ul style="list-style-type: none"> - History in education, 3 ECTS credits. - Evangelical-Lutheran religious education, 3 ECTS credits, or secular education, 3 ECTS credits. 	
Didactics in environment and science subjects, 12 ECTS credits.	<ul style="list-style-type: none"> - Geographical education, 3 ECTS credits. - Biology education, 3 ECTS credits. - Physical education, 3 ECTS credits. - Chemistry education, 3 ECTS credits. 	
Optional courses, 14 ECTS credits.	<ul style="list-style-type: none"> - Arts education, 4 ECTS credits. - Crafts education, 4 ECTS credits. - Physical education, 4 ECTS credits. - Music education, 4 ECTS credits. - History education, 3 ECTS credits. - Geographical 	

	education, 3 ECTS credits. - Evangelical-Lutheran religious education, 3 ECTS credits. - Secular ethics education, 3 ECTS credits. - Biology education, 3 ECTS credits. - Environment and science education, 3 ECTS credits.	
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*(University of Helsinki 2003-2004a)

Table 3.3, illustrates the minor subjects in the class teacher education track at the University of Helsinki: Multidisciplinary studies in subjects and cross-curricular issues taught in comprehensive school, 60 ECTS credits (University of Helsinki 2003-2004a)

*Table 3.4: Optional studies**

<u>Subject</u>	<u>BEd</u>	<u>MEd</u>
Optional minor subject studies, 60 ECTS credits.	25 ECTS credits.	35 ECTS credits.
Optional studies, 15 ECTS credits.	15 ECTS credits.	

*(University of Helsinki 2003-2004a)

Table 3.4 describes the optional studies in the class teacher education track at University of Helsinki (University of Helsinki 2003-2004a).

Curriculum of subject teacher education program at the University of Helsinki

The subject teacher track at the University of Helsinki is a cooperation between the faculty of Behavioral Science and several other faculties. The main goal for the program is to help students become experts in planning, implementation, evaluation and development of teaching. During the pedagogical studies the students learn how to integrate knowledge of

the subject, education and different learners, subject didactics and school practises into their own personal practical theory. To become a subject teacher a student must take a degree at their faculties, for example arts and design or theatre. Further, the students have to complete educational studies for subject teacher module, 60 ECTS credits, at the faculty of Behavioral Science, table 3.5. This provides the qualification to teach the subject of their degree. The module of educational subjects can take place during or after their Master's degree or after (University of Helsinki 2003-2004d). Only part of the subject teacher education program is common for all subject teacher students at the University of Helsinki, and therefore the only part of the subject teacher education that was assessable. The assessable part is the educational subjects for subject teacher students.

*Table 3.5 Structure of educational subjects**

<u>Bachelors level 25 ECTS credits</u>	<u>Master's level 35 ECTS credits</u>
Module 1, 15 ECTS credits <ul style="list-style-type: none"> - Psychology of development and learning, 4 ECTS credits. - Special education, 4 ECTS credits. - Subject didactics 1: Subject didactics, 7 ECTS credits. 	Module 3, 17 ECTS credits <ul style="list-style-type: none"> - Social, historical and philosophical basis for education, 5 ECTS credits. - Subject didactics 3: Seminar on curriculum work and evaluation of learning and teaching, 7 ECTS credits. - Applied practice, 5 ECTS credits.
Module 2, 10 ECTS credits + 4 ECTS credits <ul style="list-style-type: none"> - Subject didactics 2: Seminar on teaching methods and planning, 3 ECTS credits. - Basic practice in Teacher Training School, 7 ECTS credits. Master's level studies in Module 2 <ul style="list-style-type: none"> - Subject didactics 4, teacher as a researcher-seminar, part 1: Research and methods, 4 ECTS credits. 	Module 4, 14 ECTS credits <ul style="list-style-type: none"> - Subject didactics 4, teacher as a researcher-seminar, part 2: pedagogical thesis, 6 ECTS credits. - Master's level practice in Teacher Training School, 8 ECTS credits.

*(University of Helsinki 2003-2004d).

Table 3.5, illustrates the structure of educational subjects in the subject teachers education program at the University of Helsinki, which is 60 ECTS credits (University of Helsinki 2003-2004d).

3.3 Recruitment to the Finnish teacher education

Sahlberg (2006) states that only 10 % of about 5000 applicants to the teacher education are admitted at the universities (Sahlberg 2006:10). This is supported by Niemi (2006); she states that 10-15% of the pupils applying for the teacher education in Finland are admitted (Niemi 2006:42). A poll that is referred to in Sahlberg (2006) maintains that 26 % of the general upper secondary graduates rated the teacher professions as the most desirable. These facts imply that the teacher education at the universities in Finland can select from the secondary school graduates that have the nations' top scores on the universities entrance examinations (Sahlberg 2006:10).

To apply for the teacher education in Finland, it is necessary to have an upper secondary school matriculation examination. As described in OECD (2003), the selection procedure for the class teacher education programs are divided in two. The first phase is nationwide, based on the score accomplished at the matriculation examination, the upper secondary school certificate, previous study records, and relevant work experience. The next stage is university specific. This selection phase is based on assignments or activities that are given by the university. This can be an interview in a group or individually, literature and material based assignments, essays, observing teaching and other group situations, and other different types of demonstrations. Selection for becoming a subject teacher is done by the universities according to the student's main subject. Further, the selection phase is the same as for class teacher education program. The Finnish teacher education has not had recruitment problems, with the exception of mathematics and some subjects in natural science (OECD 2003:36).

As already stated, the Finnish teacher education attracts talented students (Niemi 2006, Niemi 2005). Simola (2005) states that the teachers in Finland have higher status than most other advanced liberal countries. The status of the teacher is also high at the lower and higher end of the social spectrum. These groups appear to respect and appreciate the work of teachers, something very rare. This is closely related to the fact that the Finnish teacher education is very popular among Finnish students. According to a survey among graduates

in upper secondary school, teaching is the number one career choice, even surpassing traditional favourite as physician, lawyer, psychologist, engineer or journalist. The Finnish teachers also have the trust of the general public, politician and the economic elite (Simola 2005:459).

Sahlberg (2006) states that the main reason for the high appeal of the teacher education is that the Finnish primary school teacher is required to have a Masters' degree. Primary school teachers do not see their profession as limited to primary school work. It is a fact that young graduates with a Master's degree in primary teaching are highly popular to hire in human resource departments within the Finnish businesses and industries. Another reason for the popularity of the education is that it qualifies for PhD. In the past decade there are an increasing number of school principals and teachers who have a PhD in education in Finland (Sahlberg 2006).

3.4 Globalizations influence on the Finnish teacher education

Traditionally Finland has looked to other countries for finding educational reforms, but this changed after the results of the PISA tests (Väljörvi *et al.* 2007:3). The Finnish teachers have responsibility for planning their teaching. The reason for this is, described in chapter 3.1. In the 1980s Finland restructured and decentralized the countries public administration. Since there is no national policy plan for the teacher education in Finland, the country has not implemented reforms that would provide a national standard for the teacher education. This type of reform is, according to Carnoy (1999), a type of competitiveness-driven reform as described in chapter 2.2. However, the work of the National-Level Coordination Project of Degree Programme Development in Teacher Training and the Sciences of Education, as described in chapter 3, recommendations were made for a national-level coordination of degree programme for the teacher education. The project aimed at harmonizing the curriculum of the teacher education in Finland (University of Helsinki 2006). This implies that there might be developed a competitiveness-driven reform with national standards for the Finnish teacher education.

Despite the fact that Finland has turned to other countries for educational reforms, Sahlberg (2006) maintains that global educational reforms that emerged from the 1980s and

implemented in many parts of the world, have not been used in Finland (Sahlberg 2006:7). The Finnish education system has been unreceptive to this type of influence. According to Sahlberg (2006), none of the following four global education reforms trends have been adopted in Finland: standardization of education, increased focus on literacy and numeracy, consequential accountability policies and pedagogical revolutions, and imported innovations. These reforms are described in chapter 2.2 where Sahlberg (2006) is referred on the subject. Further, Finland has been slow in implementing market-oriented reforms. One important factor is that the Teachers' Trade Union, one of the main negotiating partners in education, has refused to adopt market-oriented models for education (Sahlberg 2006).

The education policies that have been implemented in Finland since the early 1980s, according to Sahlberg (2006), are: broad and deep learning with diversity and creativity, flexibility with loose standards, intelligent accountability with trust-based professionalism and pedagogical conservation in innovative learning environments. In the policies with broad and deep learning, the focus of learning is on providing equal value to all aspects of individuals' growth concerning personality, moral, creativity, knowledge and skills (Sahlberg 2006:8).

Policies in the category "flexibility with loose standards" are based on the idea of building on existing good practice and innovations. This applies for school-based curriculum development, setting of learning targets and networking through steering information and support. The next policy trend is intelligent accountability with trust-based professionalism. This is a process of gradually building a culture of trust in the education system. This system values the teachers' and the headmasters' professionalism to consider what is best for the students and in reporting their learning development (Sahlberg 2006:8).

By doing this, Finland has not followed the global accountability movement in education with a high degree of standardization. In trusting schools and teachers, Finland has been protected from accountability policies that have been commonly exported from dominant education nations, such as Anglo-Saxon education systems. The last reform principle is pedagogical conservation in innovative learning environments. Here contemporary pedagogical ideas and role of teachers in the technology, social learning and caring communities has been integrated with the teachers' tradition and practical wisdom (Sahlberg 2006).

Sahlberg (and Simola (2005)) refers to, in his article from 2006, research by a British team about the prevalence of new pedagogical practice in Finnish schools following the 1994 national curriculum reform. The research team concluded that the Finnish school practices have stayed traditional. They found only a few cases of teachers that had to practice new constructivist pedagogies (Norris *et al.* 1996 in Sahlberg 2006:23). Sahlberg (2006) states that these findings support the fact that in Finland there is a belief that the teacher's practice has remained conservative. It has stayed this way regardless of many innovations, including information and communication technologies that have increasingly penetrated schools and classrooms (Sahlberg 2006). The role of the teacher in Finland can therefore be referred to as traditional. In Simola (2005) the Finnish teacher role is described as mainly involving frontal teaching and teaching of the whole group of pupils (Simola 2005:462) This type of teacher role can be described as belonging in the functionalist paradigm as described by Burrell and Morgan (1992). The paradigms are described in chapter 1.5.

3.5 Summary

The Finnish teacher education is composed of a Bachelor's and Master's degree. The Bachelor's degree is 180 ECTS credits while the Master's degree is 120 ECTS credits. There is a long history of research in the education. Further, the research based part of the education is described as providing profound knowledge to the students. The education for teaching compulsory school in Finland is divided into two tracks: class teacher and subject teacher. There is not a national curriculum for the Finnish teacher education system. In this chapter a presentation is given of the curriculum for class teacher education program and the module of educational subjects for subject teacher students of University of Helsinki. The class teacher education track at the University of Helsinki contains 140 ECTS credits of educational studies a while the module of educational studies for subject teachers is 60 ECTS credits.

The education recruits the nation's best secondary school graduates. To gain admission to the Finnish teacher education it is necessary for the students to pass the nation wide and the university specific admission phase. The teacher education is widely respected in Finland and therefore it has a high status in the country. Further, there have not been common

educational reforms implemented because of globalization, while the teacher role is described as traditional.

4. Teacher education in Norway

In this chapter the Norwegian teacher education system will be described. First the history of the education will briefly be presented. The two next sections are about the curriculum and structure of the education and the recruitment to the education. At the end of the chapter globalizations effect on the education will be described.

When the Norwegian teacher education is referred to in this thesis, it is the four year teacher education for teaching in the Norwegian compulsory school, 1st to 10th grade. This education also qualifies for working with adult education in subjects from the curriculum in the compulsory school (Department of Education and Research 2003:4). Since the focus of this thesis is not on adult education, this area of education will not be discussed further. In order to teach in the upper secondary school a different teacher education program or combination of subject's is required. This type of teacher education is not included or commented on in this thesis.

In Norway the teacher education is mostly at college level, although a few universities have a teacher education program. The teacher education in Norway is four years and qualifies to teach in all subjects in the Norwegian compulsory school (Skagen 2006). The education contains 240 ECTS credits (Department of Education and Research 2003). After three years the student receives a Bachelor's degree and after the fourth year a certificate to be a teacher is obtained (NOKUT 2006:82). The education's main goal is to give the society qualified teachers for all subjects in the school; in this case compulsory school. After completing the education, teachers should be able to fulfill their work, meeting the goals set for each school and the school system (Department of Education and Research 2003:4). The teacher institutions teach and assess the theory, while school facilitates and assesses the practice for the students (Stephens *et al.* 2004).

4.1 History of the Norwegian teacher education

Skagen (2006) reports that the Norwegian teacher education ordinates in the seminar tradition of education and has historically not been associated with research institutions (Skagen 2006:78). Skagen (2006) states further that in the 1900- century the Norwegian

government had detailed control over the curriculum and structure of the Norwegian teacher education. From the start in 1826, the education was for teaching in the Norwegian compulsory school (Skagen 2006). The education was based on seminars that the six districts of Norway were responsible for; this was the commencement of the public teacher education in Norway (Karlsen & Kvalbein 2003). It was class teachers that were educated and the curriculum was the subjects of the compulsory school (Skagen 2006). The main goal for the early teacher education was to give the students a Christian and moral education (Karlsen & Kvalbein 2003).

In Skagen (2006) it is described that from 1938 educational subjects gained more importance in the Norwegian teacher education. After the Second World War all private teacher education institutions were undertaken by the government. This made the teacher institutions a part of the Norwegian Labour Party's strategy for transforming the Norwegian society. This was done by the government having control over the policy documents, curriculum and the time spent on the different subject for the teacher education (Skagen 2006).

In the 1970s the political climate gave the teacher institutions more freedom of choice, with a reform in 1973; educational subjects became the most important subject in the education. There was also less external control of the teacher institutions and the students had more freedom in choosing subjects. This was temporarily changed in the 1990s by the Norwegian Labour Party's cabinet minister Gudmund Hernes. The students were then given fewer subjects to choose from and the teacher education received a new policy plan. In this new policy plan there were compulsory subjects to become a teacher. Against the Minister of Education's preference, the teacher education was at this point extended from three to four years (Skagen 2006).

Under the conservative Minister Kristin Clemet the Norwegian teacher education was changed again. Now the students were again given more freedom of choice, the policy documents for the education were shortened, and the required subject was reduced from three to two years. With a reform in 2003 the subject's Norwegian language, educational subjects, Christianity, religion and non religious philosophy of life, fundamental mathematics, reading and writing training and practice were placed in the first two years of the education. In doing this the teacher students could choose to focus on the lower or upper years of the compulsory school (Skagen 2006). This resulted in a more differentiated teacher

education than before the reform (Karlsen & Kvalbein 2003:51). NOKUT is a national organization that is formed to control and develop the quality of the higher education in Norway. The NOKUT report *Evaluation of the teacher education in Norway 2006* is an evaluation of the Norwegian teacher education. The NOKUT evaluation in 2006 indicates that the teacher education will once again be modified.

4.2 Curriculum and structure of the Norwegian teacher education

The curriculum of the Norwegian teacher education is described in the “Framework for teacher education” by the Department of Education and Research (2003). The education has 240 ECTS credits, 120 of these credits are compulsory and 120 credits contain the subjects the students can choose from. In the framework for the teacher education from 2003 there are five main areas for development of the teachers’ skills. These are: professional, didactic, social, change and develop skills and professional ethics (Department of Education and Research 2003).

Skagen (2006) states that the education is characterized by its breadth, where the students should become knowledgeable about many subjects, but not to a professional depth. Further it is stated that the education is different than other European and international teacher educations; the Norwegian teacher education does not give the opportunity for the students to fully specialize on subjects or grade levels in the compulsory school (Skagen 2006).

The students can aim their education at lower grades 1 – 7 or higher grades 8- 10 of the compulsory school. When aiming at the lower level the students choose more subjects, while it is the opposite for the higher level. Further, the institutions develop plans for the subjects that are not included in the *Framework for teacher education* (Department of Education and Research 2003). The *Evaluation of the teacher education in Norway 2006* by NOKUT states that all teacher institutions have chosen to have the compulsory subjects the first two years of the education. This creates a structure for the education that consists of first two years and then another two years. This implies that the four year education does not represent a totality. The consequence of the two plus two year’s model is that the educational subjects are not incorporated in the subjects that are in the two last years (NOKUT 2006:69).

*Table 4.1 Curriculum for the Norwegian Teacher Education**

<u>Part of the education</u>	<u>Subjects and ECTS credits</u>
Compulsory subjects, the first two years of the program. 120 ECTS credits.	<ul style="list-style-type: none"> - Educational subjects, 30 ECTS credits. - Christianity, religion and non religious philosophy of life, 20 ECTS credits. - Norwegian language, 30 ECTS credits. - Mathematics, 30 ECTS credits. - Fundamental mathematics, reading and writing training, 10 ECTS credits.
Subjects to chose, the last two years of the education. 120 ECTS credits	<ul style="list-style-type: none"> - Subjects from the compulsory school, 60 ECTS credits or 2 x 30 ECTS credits. ** - Subjects from the compulsory school or compulsory school relevant subjects, 60 ECTS credits made up by several components. ***
Practice as part of the education	<ul style="list-style-type: none"> - 20 – 22 weeks.

*(Department of Education and Research 2003:13-14)

** The subjects can be extensions of the compulsory subjects with a minimum of 30 ECTS credits and had to contain subject didactics and practice.

*** The teacher institutions decide if the subjects are compulsory school relevant.

Table 4.1 describes the content and structure of the Norwegian teacher education is. The table illustrates which subjects that are mandatory subjects and how many ECTS credits they are. In addition it describes how many ECTS credits the optional subjects must be, which year the subjects are placed and how many weeks practice is (Department of Education and Research 2003:13-14).

According to NOKUT's evaluation there is a variation in the use of resources and the professional competence in the various educational institutions. The NOKUT report says that official Norwegian documents declare that there should be a direct connection between

the teacher education and research (NOKUT 2006). This is stated in the document *Framework for teacher education* by Department of Education and Research (2003): “the teacher education shall through teaching, research and professional development work give professional and pedagogical knowledge” (Department of Education and Research 2003:4, freely translated by the author of this thesis). In the same document it is stated that research connected to the practice in schools can stimulate the students and their ability to develop (Department of Education and Research 2003:7). Despite this, the NOKUT evaluation proves significant differences in the educational institutions when it comes to types of research and developmental work, and the extent of it (NOKUT 2006:82).

The NOKUT evaluation demonstrates that the teacher education lacks a common perception of research, what it is and the purpose. There should also be a common strategy for the practice of research. The evaluation states that research should be integrated throughout the whole teacher education, giving the students sufficient knowledge of research methods, developing critical reflection and supplying knowledge in pedagogical research. In NOKUT’s evaluation it is described that teachers are often confronted with situations where they must teach subjects that they have not specialized in. In addition, it is stated that in today’s society there is a need for specialized knowledge, therefore, it is necessary that the teachers have specialized education in the subjects that they teach (NOKUT 2006:82).

In order to achieve professional development of the teachers it is necessary to focus on the interaction between theory and practice. According to the NOKUT (2006) evaluation the interaction is weakly articulated in the Norwegian teacher education. Further, the NOKUT evaluation concludes that it is difficult to obtain a total overview of the education and the integration of the different parts of the education. Practice, subject studies and pedagogical theory should be unified, a goal that should be attainable in the education. According to NOKUT’s evaluation this could be attained through the integration of the diverse topics running through the subjects of the teacher education, coordinating plans and connecting theory and practice. The report states that through the evaluation it has become clear that the teacher education institutions have not succeeded at this level (NOKUT 2006).

Overall NOKUT concludes in their evaluation of the Norwegian teacher education that the teacher education has variable quality (NOKUT 2006:4). Further, it is described in Skagen

(2006) that the teacher students lack knowledge and skills concerning classroom leadership and organization (Eikeseth 1991 in Skagen 2006:82).

4.2.1 Curriculum for the teacher education program at the Oslo University College

Since the different subjects that the students can choose from varies for the different colleges, the following example of a teacher education program is used and the specific teacher education program is from the Oslo University College. The main goal for this teacher education program is to stimulate the students' personal development, development in educational subjects, understanding the teachers work, and the schools function in society (Oslo University College 2008). An overview of the content of the teacher education at the Oslo University College is presented here.

Table 4.2 Curriculum for the teacher education at Oslo University College

<u>Level of the subjects</u>	<u>Subject and ECTS credit</u>
1. and 2. year	<ul style="list-style-type: none"> - Educational subjects, 30 ECTS credits.* - Christianity, religion and non religious philosophy of life, 20 ECTS credits.* - Norwegian language, 30 ECTS credits.* - Mathematics, 30 ECTS credits.* - Fundamental mathematics, reading and writing training, 10 ECTS credits
3. year, the students choose one 60 ECTS credits subject or two 30 ECTS credits subjects. **	<ul style="list-style-type: none"> - 60 ECTS credits subjects: English, physical education, music and social studies/nature studies.** - 30 ECTS credits subjects: English 1, Nature studies 1, ICT and learning 2, Norwegian for lower compulsory school, Norwegian for higher compulsory school, Christianity, religion and non religious philosophy of life 1, Arts and crafts 1, Educational subjects 2, Physical education 1, Social studies 1, Food and health 1, Spanish 1, Mathematics for the lower compulsory school, Mathematics for upper compulsory school, German 1, Turkish 1 and music 1.**

<p>4. years, the students chose one 60 ECTS credits subject or two 30 ECTS credits subjects.***</p>	<ul style="list-style-type: none"> - 60 ECTS credits subjects: English, physical education, music and social studies/nature studies.*** - 30 ECTS credits subjects: English 1, English 2, Philosophy with children, ICT and learning 2, Christianity, religion and non religious philosophy of life 2, Arts and crafts 1, Physical education 1, Food and health 1, Mathematics for lower compulsory school 2, Mathematics for upper compulsory school 2, Music 1, Music 2, Nature subjects 1, Nature subjects 2, Norwegian language for lower compulsory school 2, Norwegian for upper compulsory school 2, Educational subjects 2, Social studies 1, Social studies 2, Spanish 1, Adjusted teaching, German 1 and Turkish 1.***
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* Oslo University College 2008

**Oslo University College 2007a

*** Oslo University College 2007b

Table 4.2 describes the curriculum of the teacher education program at Oslo University College. The table specifies the subjects that are mandatory and those optional. Further, the table illustrates how many ECTS credits the subjects have and at which level of the education the subjects are located.

4.3 Recruitment to the Norwegian teacher education

In 2004 it became a requirement that to qualify for the admission into the Norwegian teacher education, the student must have a minimum standard grade in Norwegian language and mathematics subjects. If this had been applied the year before, 31 % of the students would not have been admitted to the education (Skagen 2006). This is supported in NOKUT's evaluation from 2006 where it is stated that 23.7% of the students that were admitted to the teacher education in 2001-2003, would not have been accepted as students after 2004 because of the level of the new requirement criteria (NOKUT 2006:25).

In the NOKUT (2006) evaluation it is reported that the number of students applying to the teacher education in Norway has been considerably reduced since the peak in the middle of

the 2000- century (NOKUT 2006:25). Skagen (2006) states further that from 1970 until today the number of pupils' applying to teacher education is reduced. Traditionally any person applying to the Norwegian teacher education has been admitted. However, to ensure that the students comprehend the ordinary courses in Norwegian language and mathematics, several of the colleges must provide extra beginner courses. In some subjects there has been a high percentage of failure, for example 24 % in mathematics. Further, some students have adapted an attitude of not caring about the professional knowledge (Skagen 2006:80). In addition, the students applying to the teacher education are described as being of low quality, which suggests that the students in the teacher education do not work hard enough (NOKUT 2005 in Skagen 2006:78).

“Investigations made by the Centre for the study of Professions at the Oslo University College illustrate that the teacher education students study an average of 24 hours a week. About half of this time, 12 hours, is used in organized student activities, such as lectures”
Claussen & Breidlid 2008. (Freely translated by the author of this thesis)

The amount of time spent on the education is less than other students groups. The comparison was done and reported in the study referred to in the article *Teacher students study too few hours* by Claussen & Breidlid (2008).

Karl Øyvind Jordell (2003) offers an explanation for the recruitment problems for the Norwegian teacher education. He suggests that the reason for the easy admission to the Norwegian teacher education is a consequence of public policy. For many years female students with high grades applied for the teacher education in Norway. This changed due to the national campaigns directed towards females pushing them to choose untraditional education. The consequence of this is that female students started choosing studies such as medicine and law. On the other hand, male students with high grades did not apply for the teacher education. Therefore, Karl Øyvind Jordell (2003) states that it can be claimed that the low level of students applying for the teacher education has been affected by the fact that students with high grades were desired in other educations (Karl Øyvind Jordell 2003 in Karlsen & Kvalbein 2003:117-118).

4.4 Globalizations influence on the Norwegian teacher education

The rationale for the new *Framework for teacher education* (2003) was not reforms in the compulsory school or that the political identification of the teacher education did not match the needs of the teachers in the schools everyday life. However, the reason for the reform was the extensive rearrangement of higher education in Norway according to the Bologna-process (Karlsen & Kvalbein 2003:75).

“Most countries explain their need for educational reforms by reasoning that the reforms are necessary because of the need to compete skilfully at a national level in a globalized economy. In practice this implies an adjustment and harmonization of the educational systems. The idea is that education of high *quality* is necessary to enable development and maintain high competency; in addition to human resources associated with willingness to change and learning skills. It is therefore important to be in the first rank when referring to knowledge and competency. This is illustrated in the vision of the teacher education (State Declaration nr 16, 2001 – 2002 in Karlsen & Kvalbein 2003:63).” (Freely translated by the author of this thesis)

This quotation and description illustrates how the Norwegian government intends to compete internationally with a strong focus on high quality education.

Carnoy (1999) is referred to in chapter 2.2. He divides educational reforms into three areas: competitiveness-driven reforms, finance-driven reforms and equity-driven reforms. The main goal of competitiveness-driven reforms is to improve the economic productivity by enhancing the “quality” of labor. In practice this is about increasing the average level of educational achievement of young workers (Carnoy 1999). The Norwegian teacher education reform by the Norwegian government can be said to be competitiveness-driven. It can be further described as a type of competitiveness-driven reform that uses standardization as a tool.

Sahlberg, referred to in chapter 2.2, has standardization as a type of educational reform caused by globalization. When setting national standards the government provides clear signals of expectation from the schools. The history of the Norwegian teacher education and several reforms are described in chapter 4.1, which describes a government with detailed control of the teacher educations. Most of the reforms specify the content of the teacher education with compulsory subjects. The Norwegian teacher education has a national

standardization program through the reforms and policy documents. The government's purpose is to dictate the content of the teacher education. With the reform in 2003 the students have slightly more freedom of choice, although there are still mandatory subjects that all the teacher students must complete. The Norwegian government might therefore be described as using national standards as a method for meeting the globalization drive for a teacher education that is capable of competing internationally.

In chapter 2.2 Sahlberg refers to a description of four common educational reforms: standardization of education, increased focus on literacy and numeracy, consequential accountability policies and pedagogical revolutions and imported innovations. Concerning increased focus on literacy and numeracy, basic student knowledge and skills in reading, writing, mathematics and natural science have been given high priority. As described earlier in chapter 2.2, these are prime targets and indices of educational reforms. This has resulted in international student assessments such as PISA and IEA. Literacy and numeracy have then become determinants for success or failure of pupils, teachers, schools and entire education systems (Sahlberg 2006). In the framework for the Norwegian teacher education from 2003 the subject fundamental mathematics, reading and writing training, 10 ECTS credits is mandatory. This can be described as a result of the globalizations common strategies for enhancing the quality of education with a focus on literacy and numeracy.

Skagen (2006) reports that in Norway, reform pedagogy has had a strong influence on the teacher education. This type of reform pedagogy has taken a special anti-authoritarian form (Helsvig 2003 in Skagen 2006: 73). Skagen (2006) states that this has contributed to the weakening of the teacher's role. The teacher is expected to facilitate for the pupils in the process of learning (Skagen 2006:83). This type of role can be described as belonging to the radical humanist paradigm as reported in Burrell and Morgan 1992. This theory is described in chapter 1.5.

Skagen (2006) states that research describes the traditional teacher as one who is supposed to teach, though this no longer dominates the compulsory school (Skagen 2006:73). This might have contributed to the status of the teacher's role in Norway that is dominating at the present time. This change in the teacher's role from traditional to a facilitator, might be described as a fourth educational reform trend including pedagogical revolutions and imported innovations Sahlberg (2006) as described in chapter 2.2.

4.5 Summary

The teacher education in Norway is a four year education traditionally located at colleges in Norway, with historical roots at the seminar tradition of education. The two first years of the education contains compulsory subjects. The education consists of 30 mandatory ECTS credits of educational subjects. In the two last years of the education the students can choose subjects. The optional subjects vary at the different educational institutions and in this chapter the curriculum of the teacher education at the Oslo University College is presented.

Traditionally all students applying for the Norwegian teacher education has been admitted to the education. Further, the students that are admitted are described as been of low quality. The Norwegian government has implemented common educational reforms to increase the capability of competing internationally. In Norway the teacher's role is to facilitate for pupils, not having the traditional teacher role.

5. Teacher education in Finland and Norway compared

In this chapter a comparison of the teacher education systems in the two countries will be presented. First, there is a comparison of the curriculum and structure of the two teacher education systems, then the recruitment. Lastly, the globalizations impact on the two teacher educations will be compared. In order to illustrate differences between the two teacher education systems, it is necessary to repeat from chapter 3 and chapter 4.

The history of the Finnish teacher education reveals a university education with a long and solid integration with research. Further, in comparison Norway, the education has fewer subjects that the students can focus on. The Norwegian teacher education has a tradition of not been integrated with research institutions and a broader view on knowledge in the content of the education.

5.1 Curriculum and structure of the two teacher education insitutions

The Finnish teacher education is described as providing knowledge that gives depth and scope, with an opportunity to specialize during the education. This is achieved by dividing the education into tracks so that the students can focus on upper (subject teachers) or lower (class teacher) grade levels of the compulsory school. To become a subject teacher there are several different programs for the students. At the same time, the Norwegian teacher education is focused on the students having knowledge in many subjects and the ability to teacher in all the grade levels of compulsory school. The education is criticised for lacking professional depth. Further, the focus of the Norwegian education is providing the students knowledge about all subjects in the compulsory school, to enable them to teach every subject.

Figure 5.1 The two countries teacher education systems for teaching in compulsory school

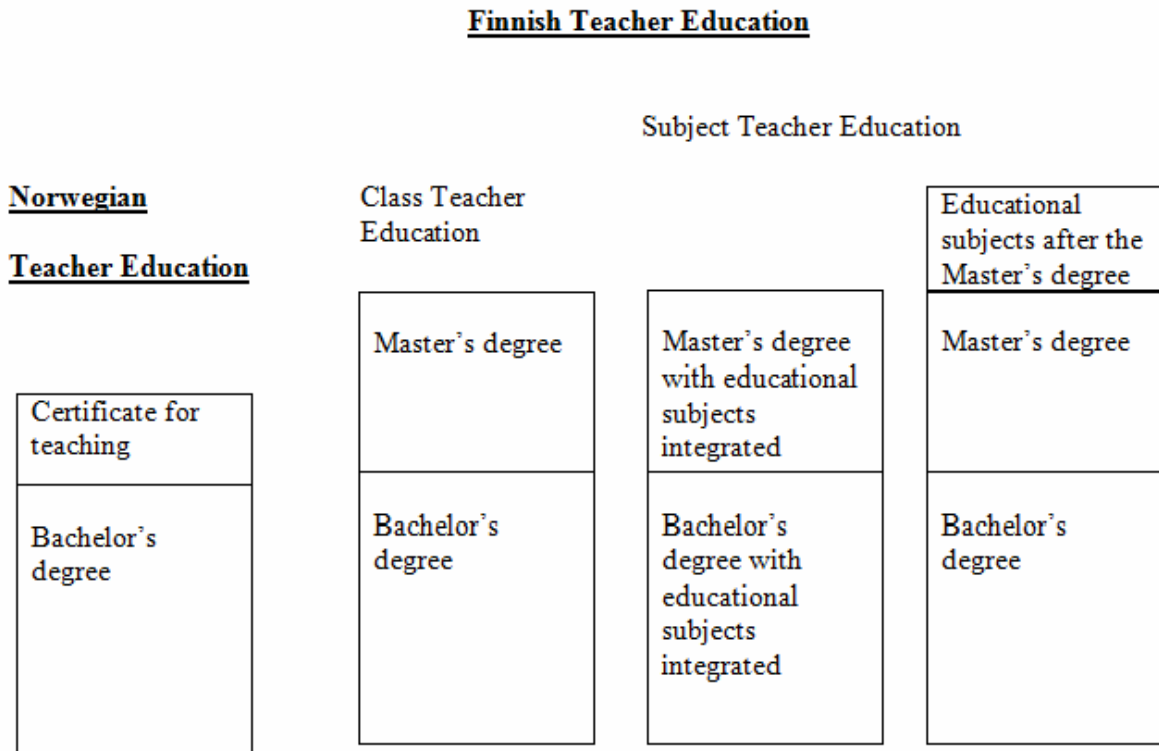


Figure 5.1 illustrates the teacher education systems in both countries. The Finnish system has different paths to become a teacher in the compulsory school; while the Norwegian system has one path.

In Finland the teacher education varies according to the different teacher education institutions. At the University of Helsinki the class teacher education has mandatory 225 ECTS credits. It is compulsory for the students to take communication and orienting studies 25 ECTS credits, and main subjects: education or educational psychology of 140 ECTS, and multidisciplinary studies in subjects taught in comprehensive school 60 ECTS credits. In the subject teacher education at the University of Helsinki, it is mandatory to take the subject teacher module for educational subjects, 60 ECTS credits, at the faculty of Behavioral Science. In Norway the mandatory subjects are decided by the government and are 120 ECTS credits. These are: educational subjects, 30 ECTS credits, Christianity, religion and non religious philosophy of life, 20 ECTS credits, Norwegian language, 30 ECTS credits, mathematics, 30 ECTS credits and fundamental mathematics, reading and writing training, 10 ECTS credits.

In class teacher education program at the University of Helsinki the mandatory subjects are 225 ECTS credits, at both the BEd and MEd level. 140 of these mandatory ECTS credits are at BEd level and 85 ECTS credits are at MEd level. In the subject teacher education track at the University of Helsinki the mandatory subject teacher module has 25 ECTS credits at the BEd level and 35 ECTS credits at the MEd level. In Norway the mandatory subjects are placed in the first two years of the education, which means that the two first years of the education are composed of mandatory subjects.

Table 5.1 Mandatory subjects in the teacher education programs at the University of Helsinki and in the Norwegian teacher education

	Class teacher education at the University of Helsinki		Subject teacher education at the University of Helsinki		Norwegian teacher education	
Mandatory ECTS credits.	225 ECTS credits.		60 ECTS credits.		120 ECTS credits.	
Level in the education of the mandatory ECTS credits.	140 ECTS credits at BEd level.	85 ECTS credits at MEd level.	25 ECTS credits at BEd level.	35 ECTS credits at MEd level.	Located at in the two first years of the education	

Table 5.1 illustrates the ECTS credits of the mandatory subjects and the level the subjects are located at in the two teacher educations at the University of Helsinki and the Norwegian teacher education.

In the class teacher education at the University of Helsinki the students have optional minor subject, 60 ECTS credits. 25 of these ECTS credits are at BEd level and 35 ECTS credits are at MEd level. Further, there are optional studies, 15 ECTS at BEd level. In the multidisciplinary studies the students have optional courses, 14 ECTS credits. These are:

- Arts education 4 ECTS credits, crafts education 4 ECTS credits, physical education 4 ECTS credits, music education 4 ECTS credits, history education 3 ECTS credits, geographical education 3 ECTS credits Evangelical-Lutheran religious education 3

ECTS credits, secular ethics education 3 ECTS credits, biology education 3 ECTS credits and environment and science education 3 ECTS credits.

In the subject teacher education at the University of Helsinki, there is no freedom of choice in the subject teacher module for educational subjects. At the Oslo University College the students can choose subjects in the third and fourth year of the education. In both years the students can choose one 60 ECTS credits subject, or two 30 ECTS credits. The following pertain to the third year:

- 60 ECTS credits subjects: English, physical education, music and social studies/nature studies.
- 30 ECTS credits subjects: English 1, Nature studies 1, ICT and learning 2, Norwegian for lower compulsory school, Norwegian for higher compulsory school, Christianity, religion and non religious philosophy of life 2, Arts and crafts 1, Educational subjects 2, Physical education one, Social studies 1, Food and health 1, Spanish 1, Mathematics for the lower compulsory school, Mathematics for upper compulsory school, German 1, Turkish 1 and music 1.

In the fourth year of the Norwegian teacher education the students can choose from the following subjects:

- 60 ECTS credits subjects: English, physical education, music and social studies/nature studies.
- 30 ECTS credits subjects: English 1, English 2, Philosophy with children, ICT and learning 2, Christianity, religion and non religious philosophy of life 2, Arts and crafts 1, Physical education 1, Food and health 1, Mathematics for lower compulsory school 2, Mathematics for upper compulsory school 2, Music 1, Music 2, Nature subjects 1, Nature subjects 2, Norwegian language for lower compulsory school 2, Norwegian for upper compulsory school 2, Educational subjects 2, Social studies 1, Social studies 2, Spanish 1, Adjusted teaching, German 1 and Turkish 1.

At the class teacher education track at the University of Helsinki there is 140 ECTS credits of educational subjects; the students can choose between the subject's education and educational psychology. In the subject teacher education track at the University of Helsinki,

the students have 60 ECTS credits in educational subjects. In the teacher education in Norway the students have mandatory 30 ECTS credits of educational subjects. At the Oslo University College the students can choose 30 ECTS credits of educational subjects the third and fourth year of the teacher education.

In the teacher education programs in Finland there is a clear connection to research since it is a Master's degree. In the class teacher education track at the University of Helsinki the education include 70 ECTS credits of research studies in education as part of the main subject education. 20 of the ECTS credits are at BEd level and the remaining 50 ECTS credits are at MEd level. In the 50 ECTS credits at MEd level the Master's thesis is included. In the subject teacher education track the research part of the education is at the institute of the degree of the student. In the Norwegian teacher education research subjects are not included. The official policy document for the education state that "the teacher education shall through teaching, research and professional development work give professional and pedagogical knowledge" (Department of Education and Research 2003:4, freely translated by the author of this thesis). In the NOKUT evaluation of the Norwegian teacher education the teacher institutions are criticized for their lack of research.

5.2 Recruitment to the two countries teacher educations

Only 10 % of the pupils that apply for the teacher education in Finland are admitted. As referred to in chapter 3.3, it is a fact that the teacher institutions in Finland can select from the top secondary school graduates (Sahlberg 2006:10). As described in chapter 3.3, the admission and selection process for the teacher education programs in Finland is both nationwide and university specific. The first phase is nationwide, based on the score accomplished at the matriculation examination, the upper secondary school certificate, previous study records, and relevant work experience.

The next stage is university specific. This selection phase is based on assignments or activities given by the university. It can be a group or individual interview, literature and material based assignments, essays, observed teaching and other group situations, and different types of demonstrations. With this type of admission and selection process there are numerous criteria for entering the teacher education in Finland. For many years all students that applied to the Norwegian teacher education programs were admitted. In 2004 it was

decided that it was necessary set a minimum standard of grades in the subjects of Norwegian language and mathematics for those who applied to the teacher education. 23.7 % of those who applied for the teacher education in the years 2001-2003 would not have been admitted with the new submission criteria.

As already stated, the students admitted to the teacher education in Finland are talented. To become a teacher is the first career choice for secondary school graduates in Finland. In Norway the students admitted to the teacher education are described as having low quality. Supporting the pervious statement is the fact that several colleges in Norway must arrange beginner courses in the subjects of Norwegian language and mathematics. It is further stated that the students do not work diligently. This is supported by an investigation made by the Centre for Study of Professions where the students hours used on studying are described. The number of hours used studying are lower than other student groups included in the investigation.

The teacher education in Finland has high status. Based on the low recruitment quality of the teacher education in Norway it might be concluded that the teacher education does not have high status in Norway.

5.3 Globalizations influence on the two countreis teacher educations

Sahlberg (2006) states, as described in chapter 3.4, that global educational reform trends have not been implemented in Finland, despite the fact that Finland has looked to other countries for input on education. The implemented reforms can be described as having broad and deep learning with diversity and creativity, flexibility with loose standards, intelligent accountability with trust-based professionalism and pedagogical conservation in innovative learning environments. In addition the country has a traditional teacher role.

Norway has focused on how to achieve a teacher education that is capable of competing internationally. The government has policy plans that describe the content of the teacher education. The reforms in Norway can be described as an effect of globalization, with competitiveness-driven reforms with national standards, increased focus on literacy and numeracy, and pedagogical revolutions. Further, it is stated in chapter 4.4, that the role of

teachers in Norway has moved away from the traditional teacher role and into a role where the teacher is a facilitator for the pupils.

5.4 Summary

The teacher education in these two countries is different in their focus of knowledge in the education. The Finnish teacher education programs are described as giving deep and high quality knowledge. On the other hand, the Norwegian teacher education is criticized for lacking professional depth by focusing on too many subjects.

The class teacher education track at the University of Helsinki has 225 ECTS credits of mandatory subjects; which are at all grade levels of the education. 60 ECTS credits are mandatory in the subject teacher module in subject teacher track at the University of Helsinki. The subject is students divided between BEd level and MEd level. In the Norwegian teacher education, the mandatory subjects are placed in the first and second year of the education. In the class teacher education track at the University of Helsinki the optional subjects are at all grade levels of the program, while the optional subjects in the Norwegian teacher education are placed in the last two years.

The class teacher education track at the University of Helsinki has over four times (140 ECTS credits) as many mandatory educational subjects as the amount in the teacher education in Norway (30 ECTS credits). Further, the subject teacher education track at the University of Helsinki has 60 ECTS credits of educational subjects. Since the teacher education in Finland is a Master's degree it has research included in the education, therefore research subjects are integrated in the education. The Norwegian teacher education does not have research subjects in the education, often criticized for having a weak connection to research.

In Finland the teacher education has multiple criteria for students to be admitted to the education and recruits the nation's best secondary school graduates. Further, the education has high status in all levels of society. In Norway it is now required to have a minimum level of grades in some subjects to be admitted to the teacher education. The students that are recruited to the education are described as of low quality and not diligent in their studying.

Globalization in Finland has not caused implementations of common educational reforms. The teacher's role in the country can be described as traditional. In Norway competitive-driven reforms are implemented as an effect to compete internationally. Further, increased focus on literacy and numeracy, and pedagogical revolutions are types of reforms that have been implanted in the education. The teacher's role in Norway has moved away from the traditional teacher role, towards the role of a facilitator for the pupils.

6. Discussion

The teacher education systems of the two countries are relatively different, providing an interesting debate about the quality of the teacher educations. This chapter contains a discussion about the two countries: curriculum and structure, the recruitment, and the effect globalization have on the teacher education. These topics are the main focus for this thesis considering why there are differences in the two teacher education systems and what implications they might give. Since only the educational subjects of the subject teacher program at the University of Helsinki are included, this module and program will only be included when it is purposeful to discuss it.

6.1 Curriculum and structure

In this section the focus of the discussion will be the question: What are overlying curriculum differences in the teacher education in Finland and Norway?

In Finland the teacher education is a five years Master's degree. The degree gives an opportunity to specialize on the grade levels of the compulsory school in Finland with the different teacher educations tracks, class teacher and subject teacher. The Norwegian teacher education is four years and focuses on the students having knowledge of many subjects, including all of the subjects in the compulsory school. This gives two very different teacher education systems.

The Finnish teacher education system has a focus on depth and scope, which means they have fewer subjects, which might be an advantage. It is possible to speculate that the Finnish teacher education system, by its organization and prioritizing of subjects, provides a solid base for teaching in their chosen level of compulsory school. This may contribute to giving them more confidence at the beginning of their career. However, the prioritization of the Norwegian teacher education system is so that it provides the students with knowledge of many different subjects. This gives them an oversight of the subjects in the compulsory school. This provides insight to the content of subjects in the compulsory school in Norway, but research shows that the Norwegian teacher education has a challenging task of having

competent graduates who can teach all ten different grade levels, in all of the compulsory schools subjects (Skagen 2006:73).

It is possible to picture that the difference between the Finnish and Norwegian teacher education systems, considering the number and depth of the subjects in the education, is of an essential contrast; specifically the subject teacher program in Finland and the Norwegian teacher education. At the University of Helsinki the subject teacher students have 240 ECTS credits to specialize in one or two subjects. This will provide the students with thorough knowledge in the subjects. In contrast, the Norwegian teacher education contains many subjects, with the purpose of enabling them to teach the ten different subjects of the compulsory school. It is possible to speculate that the Norwegian education model gives the students an idea of what they do not know, rather than give them the feeling of “knowing many things”. Additionally, this might make the students feel insecure of their professional depth when they are going to start their career as teachers.

In the NOKUT evaluation it is stated that Norwegian teachers often teach subjects that they have not been educated in. In today’s society the need for specialized knowledge is increasing. In some fields of science, knowledge is constantly developing and there is an increasing need to have profound specialized knowledge. This may imply that it is important to have deep insight in fields of science, which further leads to the speculation that the idea for teachers to specialize in few subjects might be an advantage. This would give profound knowledge in some fields instead of knowing a little bit about everything. Further, it is possible to imagine that this might ensure enhanced quality of the teachers’ insight in the subjects they teach and therefore improve education for the pupils.

The class teacher program at the University of Helsinki in Finland has 225 mandatory ECTS credits, almost three of the five years of the education. In the program for subject teachers at the University of Helsinki 60 ECTS credits of educational subjects are mandatory, one of the five years of the education. In the teacher education program in Norway, 120 ECTS credits of the education subjects are mandatory, two of four years of the education. Almost four years of the class teacher program at the University of Helsinki are mandatory; this is almost twice the amount of mandatory subjects in the Norwegian teacher program. On the other hand, at the University of Helsinki the students can choose between two main subjects in mandatory ECTS credits in class teacher education. Therefore, the Finnish class teachers

have for the most part the same education. The key variation is which type of main subject the students have.

Further, the subjects that the students in the class teacher track at the University of Helsinki can choose are the amount 60 ECTS credits at both BEd level and MEd level. These subjects are taught in the compulsory school. The students in the Norwegian teacher education can choose 120 ECTS credits; a combination of different subjects. At the Oslo University College, students can choose subjects taught in the compulsory school, with the exception of 30 ECTS credits of educational subjects. Further, these subjects are placed in the last two years of the program.

The subject teacher students at the University of Helsinki have one year of ECTS credits in program that they can choose subjects, one fifth of their full program. In the Norwegian teacher education program the students can choose subjects of the amount of 120 ECTS credits, two years of the education and therefore half of the education. The more subjects that are mandatory for students, the stronger the common reference base of the education. The high percentage of optional subjects in the Norwegian teacher education makes the common reference frame in the education weaker than in the Finnish teacher education. It is possible to speculate that a stronger common base of reference might provide a more solid professional identity. The teacher students in Norway do not have the same opportunity.

When there are a high percentage of mandatory subjects, as in the teacher education at University of Helsinki, it is possible to speculate that the mandatory subjects are intended to be essential in the development of the students, enabling them to teach, and preparing them for their teaching career. On the other hand, when there are many subjects to select from, as in the Norwegian teacher education system, the students are given the opportunity to choose subjects of interest. It is possible to imagine that this might motivate the students to study more. The dilemma then is whether to use the mandatory subjects to prepare the students for teaching, or to have fewer mandatory subjects to motivate the students to study. If the students are highly motivated for an education program it is unnecessary to consider this dilemma.

The mandatory subjects for class teacher track at the University of Helsinki are made up of three different subjects. The main subject is 140 ECTS; the two other subjects are 25 ECTS and 60 ECTS credits. Most of the subjects, 165 ECTS credits, are divided so that the

students have the subjects in all the grade levels of the education. In the Norwegian teacher education program, the mandatory subjects, 120 ECTS credits, are subjects that are 30 or less ECTS credits, placed in the two first years of the program. These are two very different ways of organizing the mandatory subjects. The fact that Finnish class teacher students have fewer and broader mandatory subjects that continue over several years, leads to the speculation that they are provided with an opportunity to develop a firm professional basis through their knowledge gaining over a period of time in one subject. The Norwegian students are not offered this opportunity. It is possible to speculate that an effect of this is that the Norwegian students are less professionally developed at the end of their studies in comparison to the teacher students at the University of Helsinki.

In the class teacher track at the University of Helsinki, most of the mandatory subjects 140 ECTS credits are educational subjects. The remaining of the mandatory subjects, 85 ECTS credits, are taught in the compulsory school with a subject called communication subjects. In the Norwegian teacher education program the 30 ECTS credits of the mandatory subjects are educational subjects. The remaining of the mandatory subjects, 90 ECTS credits, are subjects taught in the Norwegian compulsory school. The two teacher educations systems have approximately the same amount of ECTS credits that are subjects for teaching in compulsory school.

There is a difference in the amount of educational subjects that are mandatory. The Finnish subject teacher students, at the University of Helsinki, have over four times more ECTS credits of educational subjects than the Norwegian teacher students. Further, the subject teacher students at the University of Helsinki, has twice the amount of ECTS credits of educational subjects than the Norwegian teacher students. Additionally, the educational subjects in the teacher education programs at the University of Helsinki are placed at both BEd level and MEd level, while the mandatory educational subjects in the Norwegian teacher education are placed in the two first years of the education.

The difference in the amount of hours and organization of the educational subjects in the two teacher education systems leads to the speculation that the Finnish teacher education provides the students with an opportunity to develop and mature in the educational subjects in comparison to the Norwegian education. Further, it is possible to imagine that this provides the Finnish teachers students with a solid base for teaching which better prepares

them for teaching. This might possibly give them sufficient confidence at the start of their career.

However, the Norwegian teacher students are not given the same opportunity because of the fact that the educational subject in the education program is located in the first or second year of the education, and the fact that it is only 30 ECTS credits. The teacher students at the Oslo University College have the opportunity to choose 30 ECTS credits of educational subjects the third or fourth year of the program. Since educational studies are not mandatory in the third or fourth year of the Norwegian teacher education and the mandatory educational subject is of 30 ECTS credits. It might seem that educational studies are not prioritized in the education program compared to the two Finnish teacher education tracks at the University of Helsinki. It is possible that this is not the right attitude or signal to give the students.

In the Finnish teacher education system, research is integrated in the studies. This is done by having research subjects in the education program, as they have at the University of Helsinki and that the education is a Master's thesis. While in Norway, the teacher education program is criticized for not teaching research subjects and the general lack of research work. It is possible to speculate that research in education can help the students develop; by taking the role of a researcher the students learn to take responsibility for learning and development of critical thinking. These are skills that are helpful as a student and a teacher, possible to imagine that it might lead to responsibility for their own professional development both during and after the education. However, the Norwegian students are not provided with this opportunity because of the lack of integrated research. It is not necessary to have a Master's degree to ensure research in the teacher education. It is possible to have research as a part of students' assignments, in addition to research subjects as part of the education program.

All in all, it seems that the Finnish teacher education system provides the students with a better opportunity develop academically during the education, and that the students therefore are more confident at the end of their studies. This is achieved by having fewer subjects with many ECTS credits, a high level of ECTS credits of educational subjects and integrated research in the education program. The education program seems, in comparison to Norway, to better prepare the students for their teaching career. This is illustrated at the University of Helsinki by having 140 ECTS credits of educational subjects for the class teachers and 240

ECTS credits of specialization in one or two subjects for the subject teachers. This stands in contrast to the Norwegian teacher education.

It is possible to speculate that the structure and content of the Finnish teacher education system might possibly give teachers more confidence and make them desire to proceed in the teaching profession. This may perhaps strengthen the traditional teacher role in Finland and the respect of the teacher education. It is possible to imagine that in Norway the structure and content could create insecure teachers. If the teachers are insecure, the parents and the pupils may have difficulties in giving sufficient respect and trust to the teachers. This again can be transferred to the society leveling general, possibly influence the recruitment to the Norwegian teacher education.

It is possible to speculate that one of the explanations for the differences in the teacher education systems might be the dissimilar curriculum traditions in the two countries. In Finland the curriculum tradition can be described as a type of encyclopaedism theory of curriculum. This is described in Holms and McLean (1998), based on the idea that the content of education should include all human knowledge (Holms and McLean 1998:11). This provides a focus and the content of these subjects. Further, this might be the cause for the strong focus on a teacher education that offers profound knowledge. In Norway the curriculum tradition can be described as based on pragmatism's theory of curriculum. In this theory, the curriculum has child centered aims, as described in Holms and McLean (1998). This places the "needs of the developing child as the criteria for selecting the content of the curriculum" (Holms and McLean 1998:16). The focus in this type of education is therefore the child and its needs. Having a different approach to knowledge and the content of the teacher education might therefore be the explanation to the differences in these two teacher education systems.

6.2 Recruitment

In this section the following question will be discussed: What are the recruitment criteria for the teacher education in Finland and Norway?

It would be too easy to say that the success of the Finnish teacher education is fully caused by the fact that the education is a Master's degree. Other important factors that ensure high

quality teachers in Finland must be considered. It is possible to speculate that one of the most important factors for the Finnish success is the recruitment process to the teacher education and the quality of the students that are admitted to the teacher education.

The major difference between the two countries is captured in the fact that the teacher education in Finland recruits the nation's best secondary school graduates, while some Norwegian colleges must arrange courses to prepare the admitted students. As stated in chapter 2.1 the report *Teacher matters* by the OECD (2005) defines "teacher quality" as the most significant variable influencing pupils' school accomplishment. This underlines the importance of having high quality teachers. One of the factors for obtaining high quality teachers is acquiring students that are motivated and talented; being highly motivated and talented makes students strive for obtaining knowledge. In Välijärvi *et al.* 2007 it is reported that "those accepted [to the Finnish teacher education] are highly motivated and multi-talented" (Välijärvi 2007:49).

Finland has an immense advantage by acquiring the top secondary school graduates that apply to the teacher education, while Norway's teacher students are described as low quality. Skagen (2006) states that the higher the grades the students have when entering an education program, the higher the grades in the education and the lower the failure percentage is. This describes the connection between the criteria for entering an education and the level of grades in the education that has been found in the Norwegian teacher education (Skagen 2006:77). Further, if the education struggles with recruiting students of high quality it underlines the importance of having a standard of minimum grades. Additionally, it emphasizes the importance of acquiring students of high quality applying for the teacher education. It is possible to speculate that since the students that apply to the teacher education are of low quality, it is likely that as teachers they will not have high quality performance.

The criteria for entering the Finnish teacher education are at the national level where the students must have high grades, based on the score at the matriculation examination. In addition, they must pass the university specific criteria through tests or interviews. This stands in contrast to the Norwegian teacher education system, where traditionally those who apply are admitted. Although for some years there has been standard minimum level of some grades to be admitted. In Finland the universities decide the criteria for admission to the

teacher education. Students are selected based on how they perform or from personal interviews or assignments. In this way, the universities can choose the students that they assess as best suitable to become a teacher. The combination of high grades and task performance given by the universities will probably award the Finnish teacher education the students that will become high quality teachers. It is possible to speculate that in Norway the different recruitment criteria to the teacher education may not provide the education with the same type of high quality students as in Finland.

The Norwegian teacher education does not recruit candidates with the highest grades from secondary school. Students that do not have the best grades can of course become worthy teachers if they are motivated, although students that are not motivated will seldom become high quality teachers. The process for recruitment in the Norwegian teacher education system does not provide the possibility to identify students that are not sufficiently motivated to become high quality teachers. Therefore, it is possible to speculate that the process of recruitment to the Norwegian teacher education contributes to the admission of students that should have studied at a different program. Therefore, it might seem that the Norwegian teacher education lacks the possibility to ensure that high quality students, both talented and motivated, are admitted to the education.

The status of the teacher education in Finland and Norway has essential differences. In Finland teachers are recruited to business companies and other industries, while in Norway there are problems recruiting a sufficient amount of students of high quality into the teacher education. It is possible to speculate that the combination of status and the recruitments criteria of the two education systems, contributes in a way that the input of students to the two education systems is of essential difference. In Norway there has been a debate about changing the teacher education into a Master's degree. However, if the student group applying for the education is not changed, it is possible to speculate that a Master's degree in itself and by itself might not be the correct solution to ensure high quality teachers.

The two countries have vital differences in the recruitment process for the teacher education systems. For students applying to the teacher education in Finland it is necessary to be a top student in secondary school and pass the university specific admission procedures. In Norway it has been necessary to set a minimum grade to be admitted to the teacher education and the students applying are described of low quality. The admitting procedures

in Finland allow the universities to identify and select the most talented and motivated students. The situation is very different in Norway. Further, in Finland the teachers are highly respected in the society; this does not describe the situation for the Norwegian teachers.

The teacher education programs in Finland have a high focus on giving profound knowledge and professional development; which provides a strong teacher role and clear perception of the professional teacher. Further, the high respect of the teacher education in Finland might be a result of the fact that the country has struggled economically, more so than Norway. When a country has economical problems, education often becomes an important approach to improve the country's situation. In Norway, after the discovery of oil, the economy has been secure. Since Norway has had a stable national economy it is possible to speculate that this may have contributed to the fact that there has been little concern and attention given to competition and further development in the society, at least until recent years. Therefore, education and teachers might not be regarded as being of high importance in the country.

So what is the impact of the low quality recruitment to the Norwegian teacher education? It is possible to speculate that the low quality recruitment influences the quality of the teachers that are educated in the country. If the input in an education is of low quality, it may be difficult to have high quality performance at the output of the education. When compared to Finland it is hard to understand how the Norwegian teacher education system can compete internationally if the recruitment level does not change.

6.3 Educational reforms and globalization

In this section the following question will be discussed: How does globalization influence the teacher education in Finland and Norway?

Globalization has affected the two countries very differently. The common educational reforms¹, as an effect of globalization, are often implemented to enhance the quality of

¹ Sahlberg (2006) describes four common features of globally strategies for educational policies and reforms for enhancing quality of education and student achievement that have been dominate since 1980. These are standardization of education, increased focus on literacy and numeracy, consequential accountability policies and pedagogical revolutions and imported innovations. This is described in chapter 2.

education. In this case Finland is described as having a high quality teacher education where the common educational reforms are not implemented and the countries pupils score high on international tests. The pupils in Norway have not scored high on international tests and therefore several common educational reforms have been implemented.

Although common educational reforms have been implemented, this has not contributed to successful competition for Norway. This leads to the thought that common educational reforms that are implemented because of international competition of education are not always the correct method to achieve high quality education. This idea is supported by Sahlberg (2006). He suggests that high quality education can be created by alternative approaches. Further, he states that

“education systems that undergo wave after wave of reforms, frequent emphasis often is on implementation and consolidation of externally designed changes. The main result is often frustration and resistance to change rather than desire to improve schools” (Sahlberg 2006:15).

This focus underlines the fact that there is a good reason to be critical of implementing common educational reforms for international completion. One explanation for this might be that what is successful in one country does not necessarily function in another country, due to history, culture and economy.

Finland has a traditional teacher role where the focus is to teach the pupils. In Norway the role of the teacher is described as not traditional, the teacher has a facilitating role for the pupils. It is possible to speculate that these two teacher roles are results of globalizations different impact on the two countries. A traditional teacher role often focuses on the students listening to the teacher and it is usually performed in a classroom that provides an effective working environment. The traditional teacher role is more authoritative, a contrast to the role where the teachers is a facilitator. The last type of teacher role usually provides the pupils with the possibility to choose their own method for learning, in addition there are often group tasks. One explanation for Norway choosing this method might be the curriculum tradition in Norway. However, this method is often associated with more noise in the classroom and less control over the pupils. This is highly debated subject in Norway. However, in some cases it is possible to speculate that the traditional teacher role is preferable to ensure an effective work environment for the pupils.

Globalization has influenced the two countries differently. One possible explanation for this might be that Finland, because of their history with a struggling economy, has focused strongly on developing the country with a focus on education. In the process when a country advances from an unstable economy, the focus might be on internal issues, providing therefore a strong focus on developing education. This might lead to deciding not to implement common educational reforms, further maintaining a traditional, strong teacher role. In recent years Norway has had focus on development with a comparative perspective. Since the country has had a strong economy, it is possible to speculate that it has not been focusing sufficiently on developing education, at least until recently when the international perspective has been introduced. Further, it is viable to consider that because of the development in Norwegian economy in recent years education might not have been given high importance, which might have resulted in a less than solid teacher status.

6.4 Summary

The curriculum of the Finnish teacher education provides students with the opportunity to specialize on specific grade levels and subjects in the compulsory school, through two different tracks in their teacher education system. Further it gives the students an education with profound knowledge that most likely provides them with professional strength and insight. This is achieved by a combination of the specialization of the grade levels in the compulsory school and the fact that the education gives a profound insight to educational subjects and research. This might be described as the opposite to the Norwegian teacher education. The Norwegian education does not give the opportunity to specialize on subject or grade levels of the education. Further, the focus of the Norwegian education is to give the students insight in all the subjects of the compulsory school. It is possible to speculate that this might be more frustrating than productive and contribute to the students' insecurity in their professional role. Compared to Finland the education in Norway contains relatively less educational subjects.

The recruitment criteria for entering the two countries teacher education system provide different types of students. The two levels of the admission phase in Finland ensure that the students admitted are the best of the nation's secondary school graduates and highly

motivated. This is the opposite in Norway. The minimum level for admission in Norway only prevents the weakest students from becoming teachers.

Globalization has given common educational reforms in Norway, contrary to Finland; which has implemented other types of educational reforms. Further, globalization has not influenced the teacher role in Finland in the same way as in Norway. In Finland the teachers have kept a traditional role, while in Norway the teachers are facilitators for the pupils. The difference might be caused by the fact that the two countries have had different economical situations and history.

7. Conclusion

There are numerous differences between the two countries teacher education systems. A successful educational reform implemented in the Finnish teacher education might not enhance the quality of the Norwegian teacher education. However, there are still lessons to be learned from the way Finland has developed a high quality teacher education. In this chapter the conclusions about what Norway can learn from Finland will be described. At the end of this chapter some thoughts about further research will be presented.

The structure of the Finnish teacher education with more than two teacher tracks gives a logical approach for the students to specialize in grade levels and subjects of the compulsory school. This is a proficient method for meeting the societies' needs for special knowledge and something that Norway can learn from. The Finnish teacher education system also gives the students more confidence in the subjects of teaching. Therefore, it might be helpful for the teacher students in Norway to have additional educational subjects as in Finland. This could contribute to the students enhancing their teaching skills. The Norwegian teacher education has been criticized for lack of research; therefore it is possible to learn from the way research has been integrated in the teacher education in Finland. This can be achieved by including research subjects in the education or by making the education a Master's degree, or both.

In addition, it is possible to conclude that Norway can gain knowledge and learn from the recruitment and selection process of teacher students in Finland. Finland has a recruitment and selection process that ensures the nation's best secondary school graduates and most probably highly motivated students. It should be considered that if the Norwegian teacher education does not recruit talented students it is difficult to understand how the education can develop, providing talented and skilful teachers. Therefore, it seems that the Norwegian teacher education would benefit from developing a recruitment and selection process that selects the most talented and motivated students, as they do in Finland.

Additionally, it might be stated that Norway can learn from the way Finland has handled the pressure for educational reforms as a result of globalization. Many countries have implemented reforms, changing practice, while Finland has maintained a traditional teacher role and not implemented common educational reforms.

7.1 Further research

This thesis has pointed out areas that are important for further research. It is essential for Norway to develop the teacher education and policies for the education, based on research. In this section the areas that need development will be discussed and described.

One area of further research would be to examine the differences in motivation of the students in these two countries. This could be accomplished by developing questionnaires for the first year students for usage in both countries. It would be of interest to have information about the reasons for the students' career choice, how they identify themselves as teacher students, and their expectations for the education. Since there is a difference in the teacher role in the two countries, it would be interesting to conduct research on what methods the teachers use in the two countries. This could be achieved by observing teaching in the compulsory school in the two countries. While different teacher roles give different methods of teaching, it would be interesting to evaluate methods that provide the pupils with the best learning environment. This could be conducted by doing research using two classes in the two countries. One class would have the method used in Norway, the other the methods used in Finland, carried out in both countries. This could provide information about whether the different methods used in the two countries influence the outcome of learning, and thereby influencing the results of international tests.

However, the most interesting theme for further research would be a more detailed comparison of the curriculum of the two countries teacher educations. This would provide an enhanced understanding of the differences of the two education systems and the implications of the curriculum. This should include gathering of data from several teaching institutions in the two countries. Information that considered being of interest for this type of research:

- How many credits does each subject have? This should contain information about how many hours of teaching in the subjects, what type of teaching, and the amount of pages in the syllabus. Further, at which level of the education are the subjects?
- Freedom of choice, how many subjects can the students choose and at which level. This should contain information about the amount of hours of teaching in the subjects, what type of teaching and the amount of pages in the syllabus.
- Which type of exam is used and what is the time span of the exam?

- Practice: how is the practice managed, the length, and at which level. This should include information about how many weeks the student are in practice, ECTS credits and who is responsible for guiding and grading the teacher students. It is necessary to have comparable data.
- How is theory and practice integrated? This means how the teacher institutions integrate theory and practice, for example if they use seminars after practice to ensure that theory and practice is integrated.
- The grades in the education. Including information about the grades of the students when entering the education and what are the grades of the students when they complete the education.
- How are the goals for the two teacher educations defined? How are the goals for the subjects in the two educations defined?

In order to be a valid study it is necessary to conduct the research in several teacher institutions in the two countries. If possible, it would be interesting to use three universities in Finland and three colleges in Norway as the focus in the study. This would provide a representative insight to the two countries teacher educations. To complete the research it would be interesting to ask newly educated teachers how they perceive the strong and less strong elements of their education. Here it would be possible to obtain information about what the teachers think lack in their education and how well the education prepared them for teaching. This could provide data about the quality of the curriculum of the two teacher educations. Further, it would lay an informative foundation for the development of the teacher education in Norway.

This study type of research should be accompanied with research about the quality of the students that are admitted to the teacher education in Finland and Norway. Without this type of research it is not possible to make conclusion about the quality of the two educations.

8. Epilogue

In this chapter reflections as a result of this thesis will be presented.

This thesis is based on my reflections on other people's writings and research. The area of educational research described in this thesis, lack empirical research on the subject, it is therefore important to develop this theme. Because of the lack of data it has been a challenging task to do this research. For example, important data that is lacking are: empirical findings on grade levels of the two teacher education systems, turnover statistics, and hours spent on teaching the students, what type of exam the students have, comparable data on how much practice the students have and empirical findings on the students' motivation to enter the education. It would also have been beneficial to have had more literature on how globalizations effect the Norwegian teacher education; such articles have not been retrievable. Further, the thesis lacks the empirical support that would have been desirable to have.

The major shortcoming in this thesis is that only one teacher institution from each country is included. Therefore, I am concluding on limited data. This was the only way this research was possible. One of the reasons for this was that I had problems collecting data from several teacher institutions in both countries because of limited time, depending on others for finding the needed information. Therefore; only information from one teacher institution from each country is used. Further, originally I wanted to compare the teacher education in Norway and Finland. Because of the complex and many roads to become a teacher in Finland the comparison became more difficult than presumed. This led to further limitations in this thesis and therefore this is not a complete comparison of the teacher educations in Finland and Norway.

In addition one of the inadequate sides of this thesis, and one of the limitations of the study, is that it was not possible to retrieve complete information about the class teacher and subject teacher track at the University of Helsinki. In the curriculum of the class teacher track at the University of Helsinki, I was unable to obtain information about the subject educational psychology. Additionally, the complexity of different ways to become a subject teacher in Finland and the University of Helsinki made restrictions of the study. It was not possible to include a study of the curriculum of the subjects that the subject teacher students

specialize in. There are many subjects for specialization and therefore not possible to include in a Master's thesis. Since there are many roads to become a subject teacher, and only able to assess a small part of this education track, the discussion and conclusions in this thesis are therefore only valid for a small part of the subject teacher education in Finland.

There are two important discussions not included in this thesis. The first is the discussion about the PISA test and the importance and relevance of the PISA test results, an important and dominating discussion in the Norwegian media. It has been widely debated about the validity of the PISA tests, does it assess valuable knowledge. The other discussion is the debate about where the teacher education in Norway should be located, at university level or the colleges in Norway. Both of these discussions are important, but I have not had time and space in this thesis to include them.

One area that is essential to focus on in Norway is the recruitment of teacher students and the status of the teacher. In Norway there has been a debate about whether or not to have the same type of recruitment process, in addition to grades by conducting interviews or tasks in the admission process. The purpose of this process is to achieve the same results as Finland where many students of high quality apply. This would ensure students with high grades from secondary school, suitable for the education. However, as I have suggested, it would be helpful for the teacher education in Norway to apply this idea but for the opposite aim. The point is to select good enough graduates, and thereby ensuring that the weakest candidates do not enter the education.

Further, if the status of the teacher is changed for the better in the Norwegian society, it is possible to think that the recruitment for the teacher education would become better. In addition, if the teacher education recruits students with high grades from the secondary school and motivated students, it is easier to ensure that the teacher education produce high quality teachers. It is possible to imagine that if the students recruited to the teacher education are talented, the education will produce high quality teachers. However, it is not easy to alter the status of the teachers and the recruitment to the teacher education. Carnoy (1999), as described in chapter 2.2, a competitiveness-driven educational reform is about improving teacher recruitment and training. This type of reform includes giving higher salaries and other alternatives that makes the teachers function better in their work. This should be considered in Norway.

One element that is of interest in Finland is their lack of implementing common educational reforms, despite the fact that they have looked to other countries for input on education, again another factor that Norway might consider. Above, I have stated that one special type of competitiveness-driven educational reform might be helpful for enhancing the status of the teacher education in Norway. This is contradicting to the point that I have made early, that a successful reform in one country might not function in another country. Having said this, it is necessary to add that it seems that the teacher education in Norway might benefit from collaboration with Finland in developing the Norwegian teacher education.

References

Bryman, Alan 2004: *Social research methods*. Second addition. Oxford University Press inc., New York.

Burell, Gibson & Morgan, Gareth 1992: *Sociological Paradigms and Organizational Analysis. Elements of the Sociology of Corporate Life*. Ashgate Publishing Limited.

Caplex 2008a: *Article, Marshall Plan* [Artikkel, Marshall-planen]. Retrieved from: <http://www.caplex.no/Web/ArticleView.aspx?id=9322414> at the 6th of February 2008.

Caplex 2008b: *Article, Norway* [Artikkel, Norway]. Retrieved from: <http://www.caplex.no/Web/ArticleView.aspx?id=9325043> at the 6th of February 2008.

Caplex 1990: *Important years in the Norwegian history* [Viktige årstall in norsk historie]. J. W. Cappelens Forlag as. 2. edition.

Carnoy, Martin 1999: *Globalization and educational reform: what planners need to know*. United Nations Educational, Scientific and Cultural Organization.

Center for Educational Assessment 2008: *Mathematics Performance*. University of Helsinki. Retrieved from: http://www.pisa2006.helsinki.fi/finland_pisa/results/2006/2006_mathematical_literacy.htm at the 7th of April 2008.

Claussen, Clas Jostein, Bredlid, Anders 2008: Teacher students study to few hours [Lærerstudentene studerer for få timer]. *Aftenposten*, Tuesday 29th of January 2008

Crossley, Michael & Watson, Keith 2003: *Comparative and International Research in Education*. RoutledgeFalmer.

Department of Education and Research 2007 [Kunnskapsdepartementet 2007]: *PISA and TIMMS with big challenges to the Norwegian School*. [PISA og TIMMS med store utfordringer til norsk skole] Retrieved from: http://www.regjeringen.no/nb/dep/kd/dok/tidsskrift_nyhetsbrev/2004/ktuelt-8-04-nyhet-1.html?id=274223 at 10th of May 2007.

Department of Education and Research 2003 [Udannings- og forskningsdepartementet]: *Framework for teacher education* [Rammeplan for Allmennlærerutdanningen]. Department of Education and Research

Eikeseth, Astrid Grude 1991: *Teacher students in theory and practice – rationality or coincidence?* [Lærerstudenter i teori og praksis – rasjonalitet eller tilfeldighet?]. In Strømnes, Pedersen and Grankvist (ed.): *Theory and practice in pedagogy - a symbioses of possibilities?*[Teori og praksis I pedagogikken – er symbiose mulig?]. Trondheim: Tapir. In Skagne, Kaare (red) 2006: *Teacher education in the North*. [Lærerutdannelsen i Norden.] Norwegian Academic Press.

European Union 2007: *The Bologna process: make higher education systems in Europe converge*. Retrieved at: <http://europa.eu/scadplus/leg/en/cha/c11088.htm> at the 15th of February 2008.

Giddens, Anthony 1990: *The Consequences of Modernity*. Cambridge: Polity Press. In Crossley, Michael & Watson, Keith 2003: *Comparative and International Research in Education*. RoutledgeFalmer.

Giddens, Anthony 1998: *The third way: The renewal of Social Democracy*. Cambridge: Polity Press. In Crossley, Michael & Watson, Keith 2003: *Comparative and International Research in Education*. RoutledgeFalmer.

Halila, A 1950: *History of Finnish elementary schooling (1921-1939)*. In Simola, Hannu 2005: The Finnish miracle of PISA: historical and sociological remarks on teacher education. *Comparative Education*, Vol. 41, No 4, November 2005, page 445 – 470.

Helsvig, Kim G. 2003: The pedagogy's limits. The fight about the pedagogy subject at the University of Oslo 1938-1980 [Pedagogikkens grenser. Kampen om pedagogikkfaget ved Universitetet i Oslo 1938-1980]. Oslo: UNIPUB. In Skagen, Kaare (red) 2006: *Teacher education in the North*. [Lærerutdannelsen i Norden.] Norwegian Academic Press

Holmes, Brian & McLean, Martin 1998: *The Curriculum. A Comparative Perspective*. Academic Division of Unwin Hyman Ltd, UK.

International Association for the Evaluation of Educational Achievement 2008a: *Mission statement*. Retrieved at:

[http://www.iea.nl/mission_statement.html?&no_cache=1&sword_list\[\]=TIMSS](http://www.iea.nl/mission_statement.html?&no_cache=1&sword_list[]=TIMSS) at the 7th of February 2008.

International Association for the Evaluation of Educational Achievement 2008b: *Trends in Mathematics and Science Study 2003*. Retrieved at: <http://www.iea.nl/timss2003.html> at the 7th of February 2008.

Jakku-Sihvonen & Niemi 2006: *The Bologna Process and its implementation in teacher education*. In R. Jakku-Sihvonen & Niemi (Eds.) 2004: *Research-based teacher education in Finland – Reflections by Finnish Teacher Educators* (pp 16-29). Turku: Finnish Educational Research Association. In Pehkonen, Erkki, Ahtee, Maija, Lavonen, Jari (Eds.) 2007: *How Fins Learn Mathematics and Science*. Sense Publishers. Rotterdam/Taipei.

Jordell, Karl Øyvind 2003: Chapter seven. Teacher education in stiff numbers against the tabloid background [Kapittel 7. Allmennlærerutdanningen i trauste tall mot tabloid bakgrunn]. In Karlsen, Gustav E, & Kvalein, Inger Anne (red.) 2003: *Norwegian teacher education* [Norsk lærerutdanning]. Universitetsforlaget, Oslo. Pages 117-118.

Kallós, Daniel & Nilsson, Ingrid 1995: *Research on Teacher Education in Finland, Germany and Sweden*. Monographs on Teacher Education and Research, Umeå University.

Karlsen, Gustav E, & Kvalein, Inger Anne (red.) 2003: *Norwegian teacher education* [Norsk lærerutdanning]. Universitetsforlaget, Oslo.

Kjærnsli, Marit, Lie, Svein, Olsen, Rolf Vegard, Roe, Astrid 2007: *Time for heavy lifts* [Tid for tunge løft]. Universitetsforlaget.

Lasswell, Harold D. 1941: *Describing the Content of Communication*. Vol. 9. Washington, DC: Library. In Titscher, Stefan, Meyer, Michael and Vetter, Eva 2000: *Methods of Text and Discourse Analysis*. Sage Publications.

Lyng, Selma Therese & Blichfeldt, Jon Frode 2003: *Attracting, developing and retaining effective teachers – Country background report for Norway*. Work research institute. OECD.

Niemi, Hannele 2006: *The Finnish research based teacher education* [Den finska forskningsorienterade lärarutbildningen]. Pages 33-50. In Skagen, Kaare (red) 2006: *Teacher education in the North*. [Lærerutdannelsen i Norden.] Norwegian Academic Press.

Niemi, Hannele 2005: Future Challenges for Education and Learning outcomes. *Wingspan*, e-volume 1, no 1, summer 2005.

NOKUT 2006: *Evaluation of teacher education in Norway in 2006, Part one: Main report* [Evaluering av allemlærerdanningen i Norge i 2006, Del 1: Hovedrapport]. The National Organization for Quality in Education [Nasjonlt organ for kvalitet i utdanningen].

NOKUT 2005: *Evaluation of the teacher education. Half thru the Project rapport form extern committee* [Evaluering av allmennlærerdanningen]. Midtveisrapport fra ekstern komité]. In Skagen, Kaare (red) 2006: *Teacher education in the North*. [Lærerdanningen i Norden.] Norwegian Academic Press.

Norris, N., Aspland, R., MacDonald, B., Schostak, J. and Zamorski, B. 1996: An independent evaluation of comprehensive curriculum reform in Finland. Helsinki: National board of Education. In Sahlberg, Pasi 2006: *Are you thinking of improving student achievement? – Horse-race for standards or pedagogical conservatism?*. Paper presented at the “Leadership of sustainable innovation: The 3rd International Summit and iNet Conference for Leadership in Education”, 2 – 4 November 2006, Omni Parker House, Boston USA. OECD 2003: Attracting, developing and retaining effective teachers, country background report for Finland. OECD PUBLISHING.

OECD 2005: *Teacher matters: Attracting, Developing and Retaining Effective Teachers*. OECD PUBLISHING.

Oslo University College 2007 -2008a: *Department of teacher education, teacher education 1s and 2. year* [Avdeling of lærerdanningen, Almennlærerdanningen 1. og 2. år]

Oslo University College 2007 -2008b: *Studyplan 3. and 4. year, ALU 2007/2008* [Studiehåndbok 3. og 4. år ALU 2007/2008].

Oslo University College 2007a: *Subject choices for the class A05 – For the third year 2007/2008*. [Fagvalg for kull A05- til tredje studie år 2007/2008]

Oslo University College 2007b: *Subject choices for the class A04 – For the firth year 2007/2008*. [Fagvalg for kull A04- til fjerde studie år 2007/2008]

Oslo University College 2008: *Teacher education* [Allmenlærerutdanningen]. Retrieved at: <http://studiekatalog.hio.no/content/view/full/175> on the 29 of January 2008

Patton, Michael Quinn 2002: *Qualitative Research & Evaluation Methods*. Third addition. Sage Publications.

Pehkonen, Erkki, Ahtee, Maija, Lavonen, Jari (Eds.) 2007: *How Fins Learn Mathematics and Science*. Sense Publishers. Rotterdam/Taipei.

Ruzzi, Betsy Brown 2006: *International Educational Tests: An Overview 2005*. National Center on Education and the Economy.

Sahlberg, Pasi 2006: *Are you thinking of improving student achievement? – Horse-race for standards or pedagogical conservatism?*. Paper presented at the “Leadership of sustainable innovation: The 3rd International Summit and iNet Conference for Leadership in Education”, 2 – 4 November 2006, Omni Parker House, Boston USA.

Schott, John 1990: *A matter of record*. Polity Press.

Simola, Hannu 2005: The Finnish miracle of PISA: historical and sociological remarks on teacher education. *Comparative Education*, Vol. 41, No 4, November 2005, page 445 – 470.

Skagen, Kaare 2006: *Norwegian teacher education in change* [Norsk allmennlærerutdanning I forandring]. Pages 71-87. In Skagen, Kaare (red) 2006: *Teacher education in the North*. [Lærerutdannelsen i Norden.] Norwegian Academic Press.

Skagen, Kaare (red) 2006: *Teacher education in the North*. [Lærerutdannelsen i Norden.] Norwegian Academic Press.

State Declaration nr 16, 2001 – 2002: About new teacher education [Om ny lærerutdanning]. In Karlsen, Gustav E, & Kvalein, Inger Anne (red.) 2003: *Norwegian teacher education* [Norsk lærerutdanning]. Universitetsforlaget, Oslo.

Stephens, Paul, Tønnessen, Finn Egil & Kyriacou, Chris 2004: Teacher training and teacher education in England and Norway: a comparative study of policy goals. *Comparative Education*. Vol. 40, No 1, February 2004, pages 109-130.

Stray, Janicke Haldal 2006: Knowledge, promises and lift [Kunnskap, løfter og løft.] *Morgenbladet*. Published the 25th of August 2006.

The World Bank Group 2007: *Country Classification*. Retrieved from:
<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20420458~menuPK:64133156~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html>
at 13th of November 2007.

The World Bank Group 2008: *Country Groups*. Retrieved from:
<http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20421402~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html> at 6th of February 2008.

Titscher, Stefan, Meyer, Michael and Vetter, Eva 2000: *Methods of Text and Discourse Analysis*. Sage Publications.

Tjeldvoll, Arild 2006: *The Paradigms*. Lecture held at the University of Oslo the 2nd of October 2006.

University of Helsinki 2003-2004 a: *Curriculum for class teacher education 2005-*. Faculty of Behavioural Sciences, Department of Applied Sciences of Education. Retrieved from:
<http://www.helsinki.fi/sokla/english/Curriculum%20for%20class%20teacher%20education%202005.pdf> at 23rd of January 2008.

University of Helsinki 2003-2004 b: *Structure of pedagogical studies for teachers*. Faculty of Behavioural Sciences, Department of Applied Sciences of Education. Retrieved from:
<http://www.helsinki.fi/sokla/english/Structure%20of%20pedagogical%20studies%20for%20teachers.pdf> at 23rd of January 2008.

University of Helsinki 2003-2004 c: *Studies, Class teacher education*. Faculty of Behavioural Sciences, Department of Applied Sciences of Education. Retrieved from:
<http://www.helsinki.fi/sokla/english/classteacher.htm> at 24th of January 2008.

University of Helsinki 2003-2004 d: *Studies, Subject teacher education*. Faculty of Behavioural Sciences, Department of Applied Sciences of Education. Retrieved from:
<http://www.helsinki.fi/sokla/english/subjectteacher.htm> at 24th of January 2008.

University of Helsinki 2006: Vokke-project. Faculty of Behavioural Sciences. Retrieved from: <http://www.helsinki.fi/vokke/english/index.htm> at 20th of February 2008.

Väljärvi, Jouni, Linnakylä, Pirjo, Kupari, Pekka, Reinikainen, Pasi & Arffman, Inga 2002: *The Finnish Success in PISA and some reasons behind it*. Authors and Institute for Educational Research, University of Jyväskylä. Printed in Finland by Kirjapaino Oma Oy Jyväskylä.

Väljärvi, Jouni, Kupari, Pekka, Linnakylä, Pirjo, Reinikainen, Pasi, Sulkunen, Sari, Törnroos, Arffman, Inga 2007: *The Finnish Success in PISA - and some reasons behind it 2. PISA 2003*. Printed in Finland by Kirjapaino Oma Oy Jyväskylä 2007.

Westbury, I., Hansen, S-E., Kansanen, P. and Björkvist, O. 2005: Teacher education for researchbased practice in expanded roles: Finland's experience. *Scandinavian Journal of Educational Research* 49(5), 457-485 in Sahlberg, Pasi 2006: *Are you thinking of improving student achievement? – Horse-race for standards or pedagogical conservatism?*. Paper presented at the “Leadership of sustainable innovation: The 3rd International Summit and iNet Conference for Leadership in Education”, 2 – 4 November 2006, Omni Parker House, Boston USA.