NORDIC TRANSITION CONFERENCE

1st – 2nd November 1999

Oslo, May 2000
Norwegian Ministry of Education, Research and Church Affairs
Preface

Transition Conference: Nordic Approaches

On November 1 - 2, 1999 a conference was held in Oslo under the Norwegian Royal Ministry of Education, Research and Church Affairs in collaboration with the OECD, named:

The Transition from Initial Education to Working Life: Nordic Approaches

The conference was initiated by the OECD and arranged as a follow-up event of the OECD report The Thematic Review of The Transition from School to Working Life.

The objectives of the conference were to:

• Arrive at a clear statement of the key features of Nordic approaches to the transition from initial education to working life
• Produce a joint Royal Ministry of Education, Research and Church Affairs - OECD publication containing the background material for and conclusions of the conference
• Give countries an opportunity to learn from one another’s experiences through face-to-face discussion
• Assist policy development in participating countries

Key themes for the conference were:
1 Building effective pathways from initial education to working life
2 The Nordic approach to building safety nets for those at risk
3 Building a basis for lifelong learning in the transition phase

Representatives from the 14 countries which were actively involved in the OECD Thematic Review of the Transition from School to Working Life participated at the conference.

This report from the conference contains:
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The Transition from Initial Education to Working Life: Nordic Approaches

Oslo, 1 – 2 November 1999

Conference programme

November 1

10.00 - 10.15 Welcome by Mr Jon Lilletun, Minister for Education, Research and Church Affairs

10.15 - 11.00 Key note address by Mr Gudmund Hernes, Former Minister for Education, Research and Church Affairs

11.00 - 11.30 Coffee break

11.30 - 13.00 Theme 1: Building effective pathways from initial education to working life, The Nordic approach
Each of the Nordic countries gives a presentation, max 15 minutes.
Reactions by non-Nordic countries: Austria, Japan, Switzerland

13.00 - 14.00 Lunch

14.00 - 15.00 Reactions to and discussion of Theme 1 in small groups

15.00 - 16.00 Theme 2: The Nordic approach to building safety nets for those at risk
Each of the Nordic countries gives a presentation, max 15 minutes.
Reactions by non-Nordic countries: Australia, Canada, Portugal, UK

16.00 – 16.30 Coffee break

16.30 - 18.00 Reactions to and discussion of Theme 2 by a panel from Australia, Canada, Portugal and UK

19.30 - Dinner
November 2

09.10 - 10.30 Questions arising from day 1; clarification, perspective sharing
   Introduced and facilitated by Richard Sweet, OECD

10.30 - 11.00 Coffee break

11.00 - 12.30 Theme 3: Building a basis for lifelong learning in the transition phase, The Nordic Approach.
   Each of the Nordic countries gives a presentation, max 15 minutes.
   Reactions by non-Nordic countries: Czech Republic, Hungary, United States

12.30 - 13.30 Lunch

13.30 - 14.30 Reactions to and discussion of Theme 3 in small groups

14.30 - 15.00 Coffee break

15.00 - 16.00 Small group discussions to bring together conference key messages and conclusions

16.00 - 16.30 Rapporteur’s summary. Rapporteur; Dr Cathleen Stasz, Rand Corporation, USA

16.30 - 17.00 Final remarks by Mr Ole Briseid, Director General, Norwegian Ministry of Education, Research and Church Affairs

Social event: (Voluntary for those already present)

Sunday, October 31 at 16.20: We want to arrange a short travel to Holmenkollen Ski Museum to experience some of Norway’s famous ski traditions.

Meeting point: Hotel Reception at 16.20, Sunday October 31.

Objectives:
The objectives of the conference will be:
- To arrive at a clear statement of the key features of Nordic approaches to the transition from initial education to working life
- To produce a joint Royal Ministry of Education, Research and Church Affairs - OECD publication containing the background material for and conclusions of the conference
- To give countries an opportunity to learn from one another’s experiences through face-to-face discussion
- To assist policy development in participating countries
Background paper:
This paper draws on the national Background Reports prepared by Denmark, Finland, Norway and Sweden for the OECD’s Thematic Review of the Transition from Initial Education to Working Life, as well as on the Country notes prepared for each of these countries.

Conference report:
After the conference a report will be produced containing the conclusions of the conference.
Gudmund Hernes

The Transition from Initial Education to Working Life

The topic for this conference is “The Transition from Initial Education to Working Life”. The reason why we can organize a conference on this topic is because of the transformation of working life.

For there was a time when little special training was needed. One prepared for work by doing it – by everyday participation rather than by special education. Most of the population took on the tasks of their parents – nay, of their forebears, indeed their ancestors. For social organization remained stable over the generations. Hence what was needed to know, your immediate kin knew.

Or to put it differently: Also in former times knowledge was power. But the knowledge needed was more local and specific. The important thing was to know where the fishing grounds were, where wild animals trekked or where the soil was suitable for cultivation. The important thing to know was which plants or meats were fit for eating, how they could be preserved and how they could be prepared. The important thing to know was how to dress yourself, whether the garb was by crafted furs or woven clothes. The important thing to know was how to build from the materials at hand, whether it was ice, wood or clay.

And most of this knowledge could be transferred directly from parent to child. Your father knew how to make tools and use them to eke a living from the bounty of the land, your mother knew how to use a spindle to make tread or a needle to stitch a dress. As my grandmother once replied when I asked how much flour goes into a porridge: “As much as it takes” – she of course had acquired the feel and eye for the right consistency – for what today’s physicists might call the viscosity of the mixture. In a sense being an adult consisted in the command of the skills needed to enable you to take care of your family and you community – such as repairing shoes, mending clothes, sowing corn or slaughtering animals, baking bread or preparing sausages. You needed to know what it took to make a living, to make a home and to make sense to other members of your community.

The fact that you learned directly from your mentors, also implied that the curriculum, so to speak, was adapted at each stage to your level of attainment. Children were brought along, both in the literal and figurative meaning of the expression, because parents knew from one day to the next what their offspring had been introduced to, what they had mastered and what were the next steps on the road to adulthood. You were trusted to use a rake before you were trusted to use a scythe. You were trained to steer a horse before you were trained to shoe a horse. In a sense, there was a perfect match between the mode of education and the mode of production. Adults were a majority around children – they set the tone and they set the pace, they set the values and they provided necessary knowledge. The world of the young was rich in concrete action though poor in abstract information; it was consistent in values and dense in interaction with adults.

In many places around the world this is still the predominant mode of bringing the young into the adult world – you grow up by growing into it. Indeed, there are still pockets in our modern economies where training on the spot and on the job is the predominant mode of instruction –
preparation occurs through participation. Even when I finished primary education some forty
years ago, several of my classmates left school for work on their farms or became rookie sailors
without any specialized education. This is rare in Western countries nowadays – formal education
plays an ever more important role. Yet, as is often the case: present day society encompasses
living elements dating from many different epochs. Historical residues coexist in a
contemporaneous presence of different pasts.

The fundamental change in modes education came as a consequence of a fundamental change in
modes production. More specifically, when the density of population increased, the division of
labor progressed: It became beneficial to the whole population and profitable to many subgroups
to specialize in one line of work, such as building, baking or brewing.

The advantages lay on the one hand in the skills or even virtuosity developed by repetition: By
performing specialized functions over and over, both the time and efforts needed for the
operations could be reduced though learning by doing. Clumsiness and ineptitude were
eliminated by experience, and the best practice congealed into fixed social forms. Initially
satisfactory but unwieldy or cumbersome procedures were avoided and abandoned when more
functional or practical ones were found. You only have to look at a five year old using a hammer
and compare it to the dexterity of a carpenter to grasp this point. More effective operations were
kept when caught. The skilled laborer so to speak became a special tool for their task, more adept
and adroit. The best forms found solidified into routines. Through the inventiveness of the most
accomplished or the happy accidents by the many, the most adept grasps were hit upon. By imitating
the most deft and nimble, the broader group of practitioners could collectively reach a level of
perfection beyond the grasp of any single individual attempting to carry out all the operations alone.
By confronting again and again the same problems, gradually a group developed experienced hands
and proven practices for handling tools and materials ingeniously, efficiently, economically. The
best practice could become the common practice adopted by a group of professionals. Or put
differently: The perfecting of skills came about as a gradual adaptation to a constant technology,
where the modes of action best suited to it gradually were selected, set and solidified into habits,
traditions and prescriptions for action as tricks of the trade. The tools shaped their users.

More than that, the tools of the trade were themselves developed by a similar process. Step by step
and little by little implements and utensils, devices and machinery were invented and improved.
Technical advances were the outcome of a progressive learning process about the environment:
Over time the means which more effectively enabled people to do their work and exploit the
environment were selected. Tools were differentiated and acquired fixed shapes, adapted to each
particular application, as when a carpenter’s hammer differs from that of a blacksmith. And each
tool came into full play only in the hands of specialists.

When skills and tools became the basis lifetime careers, they also became the impetus for social
organization. On the one hand individuals became craftsmen and artisans by the skills they
commanded and the tools they mastered – by their professional control. On the other hand the
practitioners of a trade could learn from each other and support each other both in relation to their
employers and in relation to political authorities – by their social control. Authorities also came to see that there were benefits both to producers and consumers in giving a community of practitioners a monopoly to exercise certain craft and to uphold its standards. Such were the considerations that resulted in a new social organization: the guilds.

But the guilds were not just organizations to set the terms of trade and set the professional standards. In order to do so they had to provide training and control that the newcomers were up to standards.

The social development of trades and tools – from masonry (the art of bricklaying) to tannery (the art of turning hides into leather), from making barrels which is done by coopers to making brass articles done by braziers – took place as described above through an accumulated series of minor improvements.

Yet individual introduction to the trades could not be left to random recruitment and haphazard practice. The elders who possessed the knack could be emulated through an organized process: preparation by instruction. But then beginners had to be systematically introduced to the tools and the tricks of the trade in long-term apprenticeships. Journeymen and masters had to secure that their successors were brought up to standards as craftsmen by systematic learning and varied experience if the guilds were to retain their monopolies. The profession could tolerate neither dilettantes or dabblers – the inept or untrained, nor charlatans – persons falsely claiming special knowledge or skills and not being what they made out to be. The breadth of skills, international standards and diffusion of innovations were also advanced by Wanderjahre – the journeymen’s travels to foreign countries not just to practice their trade but also to learn new skills from colleagues abroad.

In short: There was no transition from primary education to working life – the transition to working life took place in working life.

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This model of education – learning in apprenticeships – also at first became the model for academic training in Europe. Not only were young people trained in working life for working life in the handicrafts. They were trained in the same way to take part in religious services and more spiritual pursuits, in liturgy. In particular, youngsters had to be trained in singing hymns and performing during masses. In order to do so, they had to learn the language of the rites, latin. The latin name of a liturgical group of youngsters who had gradually been imparted the skills to take their part in sacred rites and music is schola. From it derives not just the term “school”, but also the practices going on within them.

When the first universities were organized some 800 years ago, they also took the guilds as their model. Universities were not a group of buildings, but an association of academics who could confer a right – licentia docendi – the right to teach, conditional on the possession of certified skills. They even used some of the same titles as the guilds, such as masters and bachelors. Universities as guilds also identified the bodies of knowledge that practitioners had to master: The lower division of the seven liberal arts, the trivium – grammar, rhetoric and logic, and the more advanced division, the quadrivium – arithmetic, geometry, astronomy and music.
In short, scholastic and academic training copied the traditional mode developed by the guilds as training for working life by participating in working life and systematic exposure to the richness of the tricks and tools of the trade.

Yet it is an interesting historical fact that scholastic and academic training increasingly became separated for working life, in both temporal and institutional terms. Scholastic training became preparation rather than participation, a phase in life rather than life itself. And scholastic training increasingly came to take place in disconnected institutions – indeed, in the case of universities often as detached institutions.

In Europe in the 16th and 17th centuries the idea took hold that knowing the Bible could not be left to a literate clergy alone who instructed their congregation from the pulpit – supported by paintings of biblical events (“Biblia pauperum”). If people were to understand, they had to be able to read for themselves. Hence the idea of more specialized educational institutions for the general population to acquire the ability to read the scriptures and understand them (politically) correctly, also took hold. But the training was more a training to become good Christians and good citizens rather than a preparation for working life, which continued to take place either by stepping into the shoes of your parents or through the apprenticeships of guilds under the guidance of craftsmen.

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This story can be summarized in a different way. The oldest way of preparing for work is by integration: simply by bringing the young into work and by letting them take on the tasks they can master, which increases with age and skill.

The second mode is separation by levels of skill – vertically between master and apprentice, horizontally between different areas of skill or craft.

The third mode, which has become the most widespread in developed countries in modern times, is the separation of training from performing work and from participating in work. Education is primarily what you get before you get a job, training is primarily what you get outside working life. And the phase in which this takes place has been extended – encompassing more hours of every day, more days of every year and more years of every life. The mode of education is adapted to the mode of production, yet temporally and institutionally disconnected from it.

Why has this happened? I started out by saying that knowledge the young needed to a great extent was local and specific. What has happened is a revolution both in the use of knowledge and in the kinds of knowledge. An ever-increasing part of knowledge is universal and general. The Pythagorean theorem is 2500 years old, and yet is applied by engineers all over the world every day. Yes, there are what we call Roman numerals, but Arabic numerals are now universal. There are local varieties of wine, but there is no ethnic periodic table of chemistry. Boyle’s law is as valid in Bogota as in Bergen, Ohms law is as valid in Ohio as in Okinawa.
This common core of scientifically based knowledge is all the time expanding. There was a time when some philosophers thought that all discoveries – at least all great intellectual discoveries – had already been made. But don’t you worry. In this century fundamental discoveries have been made in physics (e.g. the theory of relativity), in biology (the DNA-string), in mathematics (e.g. the Turing machine), in medicine (e.g. antibiotics).

Not only is the common core of scientifically based knowledge all the time expanding – it is all the time put to new and radical uses transforming our lives. Such applications range from fertilizers to refrigerators, from TNT to DDT, from electric light bulbs to electronic computers, from polyester to polypeptides, from Xerox’s photocopier to Sony’s Walkman, from interferon to Internet. Shoes used to be made of leather and later of rubber. The running shoes you now use are high tech – they could not have been constructed without extended research in physics, physiology and chemistry.

Hence science has become the most potent power for social transformation. And science is one of the most fantastic thing humans have learned to do together – crossing boundaries and spanning centuries. Leibniz invented the binary number system based solely on 1’s and zeroes staring from the religious idea that God is everything (1) and the rest nothing (0). It took some centuries before the mathematical work of this German philosopher found its use in modern digital computers.

Not only is knowledge transforming products – it is transforming professions.

A typographer used to be a craftsman who could master a composing frame, type casting, fonts etc. Then came offset – and later photo-type. Now being a typographer is to be fluent on a Macintosh computer or its relatives.

Until last week I thought the craft of baker and confectioner would be relatively untouched by the revolution in information technology. Then I met a young woman artisan who told that she printed patterns and letters on rice paper – which is edible – by use of a PC. Then she pasted the printed rice paper over the icing of her marzipan layer cake! And of course she calculated nutritional values of various meals by means of her PC. Her profession also, is being transformed by advances in and applications of science.

It is this revolution in the role of knowledge in transforming products and professions which impinges on the apprentice tradition for vocational training.

Other forces have pushed in the same direction. First, the desire to train the young to become capable citizens, which not only requires literacy, but also some fluency in science and numeracy.

Secondly, training in schools is not just about becoming capable citizens, but also expanding the individual’s scope as a human – “to perceive and to participate, to experience, to empathize and to excel”. This implies that they have to become familiar with broad the heritage of man, both in its universal and timeless accomplishments such as the Great Wall of China, the Pyramids of Egypt or the Cathedrals of France, or the more local expressions be it in national literature or local lore.
Thirdly pupils have to internalize knowledge which can last them a lifetime and provides the keys to new knowledge throughout their whole working careers.

Fourthly, education should open the whole world of work to all individuals. If you are to be able to choose a profession different from that of your parents, then you need general skills that can be educated and expanded in many different directions.

Fifthly, the education must instill in pupils and students the fun that comes from playing intellectual games – e.g. the wild things that for example physicists or mathematicians do. (imagine that light has weight, and that there exists a triangle with three 90 degree corners!)

In some countries these considerations taken together has led to doing all of the training of youngsters in schools and letting them enter the life of work afterwards. As knowledge has become more general and global, so primary education can become more common and its contents more shared by all pupils.

Altogether the arguments for a general, core curriculum for all students are strong. Yet here are also strong arguments against the academization of all schooling – and the medieval model of the student sitting at the desk sponging up the words of wisdom from the teacher.

First there is the problem of motivation. I for one love the particular kind of game that mathematics is – math is not about solving problems but about hunting for rules. Once you find the right rule, the problem is easily solved (e.g.: How do you find a square that is half the size of another? Here is a possible rule: Divide the square into two equal rectangles. Then divide each of them into two equal smaller squares. Then clip off half of each of the four resulting squares along their diagonal – i.e. by cutting corners, so to speak. And lo: The resulting square is half of the original since we have removed half of each of its four equal parts.) On the other hand, I never learned grammar and get lost at transitive verbs or conjunctions. In such cases, when the motivation for general knowledge is missing, pupils and students can be inspired or egged on by the need they have for general knowledge when solving practical problems. I found it was useful to learn English in spite of my poor grammar since it enabled me to follow “Top Twenty” on Radio Luxembourg and to read Westerns. The need for general knowledge can be derived from the need for the practical skills you desire to master. In order to be able to calculate the angle of roofing beams a carpenter needs to know the Pythagorean theorem.

The other is the problem of relevance. Fun and games – such as mathematics or grammar – can be great. But it will add to your willingness to learn all rules and principles if you can see what they can be used for. To put it as a slogan: Nothing is so practical as a good theory. A good theory has a lot of concrete applications to show for itself. And an important way of finding out what is relevant is to discover what is needed in order to function outside of the school – in practical work. Last week I heard of a student trained for baking that came back for more math. He had to be able to calculate the different measures of flour, yeast, butter, milk and molasses that went into the dough for Saturdays when demand was different from the other weekdays – the proportions remained the same, yet the quantities were different. And he had come across a great receipt for
Albanian rye bread which made four loaves – and in his bakery they wanted 48 without having to make 16 separate doughs.

The third is the problem of detection. It is often absorbing to hear about the great things our ancestors have discovered – such as the contagion theory of diseases. But if you are to be trained as a nurse, you can find out about the bacteria on your own hands by cultivating them in a Petri dish. In other words, you can find out for yourself – and learn to find out for yourself. Indeed, you can be trained in doing research and experience the joy of discovery yourself. Indeed, a good theoretical education requires a lot of practice.

It is interesting to note that this way of thinking increasingly impacts also on academic training. You cannot become a good doctor simply by reading anatomy, physiology and pathology. You have to see for yourself and you have to touch patients. Indeed, modern medical training has been criticized for not providing enough hands-on skills and that old techniques for diagnosis by palpation is lost when a fetish is made of laboratory medicine. In other words: To become a good general practitioner requires a lot of actual practice – as does becoming a specialist. “Øvelse gjør mester” – “Practice makes perfect” – as the saying goes. And this holds for almost every other field as well, from becoming a pianist by practizing endless numbers of “etydès” – exercise pieces – to becoming a watchmaker from taking watches apart and putting them together right.

Indeed, we can use new technologies to imitate life. This is old hat in medicine, where dissection is first carried out on specimens and animals before students are let loose on humans, and where surgeons train on guinea pigs before they practice on patients. Now simulators can emulate real life and virtual reality can mimic the real world, whether it is for flying or for welding – or even surgery. But the main point remains the same: That learning is best done by doing, not just in working life, but in schools and universities as well.

There is a moral to this story, which can be made explicit. When we talk of transition from school to work life, we cannot just look upon this as just a flow of candidates from one state or institutional sphere to another. We also have to ask which parts of working life can be transferred to schools, not just in terms of curricula, but also in terms of working methods, practices and personnel. And we have to ask how we can prepare pupils for work life before they leave primary education, by extensive out of school placements, by summer jobs etc. The point of this is partly to acquaint the pupils with what is relevant and what is necessary. But it is also to familiarize them with a culture that is different from their own at school, namely a culture that is dominated by adults and the culture of adults. In other words, education must use work as what it can be: a transforming experience. Since we have constructed a social world with greater separation of the world of education and the world of work institutionally and temporally, we should think of new ways of letting work transform education.

Basically I am arguing for a new balance between work and education to create a world which is richer for the young, because at least parts of the greater variability found in working life can be imported into the educational system and because of the culture in working life is less age-graded than the educational system. The difficulties in accomplishing this are of course great. But that is all the more reason to start soon and act decisively.
For on the one hand new knowledge is transforming working life – products, procedures and professions. The implications of this for the next century is that we can train no one for jobs that we can expect will remain untouched by new knowledge. Or put differently: We can train no-one for any specific job. The content of all jobs will change, the social composition of jobs will change. Jobs will be transformed, jobs will disappear and new types of jobs will be introduced. Ten years ago the job of a Web Designer did not exist even in anyone’s imagination let alone in reality – it was not yet designed, so to speak. In the United States, over the last 10-15 years 40 million jobs have disappeared. But 70 million new ones have been created.

The implication of this is that no one can educate themselves for job security simply because jobs are in jeopardy. They are no longer fixtures or permanent positions, they are ephemeral and they are fluid creations. The activities jobs consist of will continuously be modified or substituted for others, as when typographers work on the PC screen rather than with linotypes. This in turn means that no one in the future can expect job security. Neither can the contents of jobs be guaranteed. Nor can the future validity of your initial training be assured, since jobs change. The slots you can move into will change as will the qualifications they require.

What one must aim for is not so much job security as career security – i.e. an assurance that can be employed in a fluid labor market where old jobs all the time change or disappear or new ones are constructed.

Knowledge is what will give you power on the future labor market. But that knowledge will not just be the initial qualifications for present positions. It will be the type of knowledge that enables you to take on jobs not yet created and to master the old ones as they are remade by new technology. Hence vocational training must provide the types of knowledge that is not easily made irrelevant when the concrete contents of jobs change.

Fortunately we know what kinds of knowledge this is – it is general knowledge that can be used in many different directions or settings. A general capacity to write a clear exposition is applicable whether you write a short description for road construction – or a patient’s journal. A general grounding in say English will serve you well even when the topics of discussion change. It serves you not only when travelling – it has in effect become the lingua franca of the Internet. A general background in manipulating symbols such as provided by mathematics will serve you well whether you want to learn the tricks of calculating stress and strain on construction beams – or you want to master Java programming. You must be able to calculate whether you want to serve as a nurse or as a pilot. A general skill to interact with others in a work setting – to lead and to follow, to instruct and to take orders will not be outdated in the future.

Hence an important part of vocational training will be the skills that school you for re-schooling, the tools that prepare you for re-tooling. Those who enter vocational training this year are to stay in the labor force for the next fifty years – until they are ’64, as the old Beatles’ song goes. What students learn must be valid for many different tasks until 2050. They must be equipped for futures that are open – and about which the only certain thing is uncertainty. In the future education will not be a phase in life – it will become a form of life. Indeed, living and learning will be two words for the same process.
The general capacities needed must at the same time be embedded in practical skills that enable them not just to produce what we consume today, but also to develop new products. Particularly in a knowledge economy – where human and social capital is more important than physical and financial capital – we must train the young to make their own jobs. In the future all individuals, all industries, all countries more and more have to live by their wits – by their trained imagination and capacity for invention, their sense and skills to make the world over – not just in terms of products and procedures, but also to make the world more humane and more exiting for all.

So my main message is simply this. In the transition from initial education to working life students must be trained for a working life in flux. We will never again get a stable division of labor and permanent, life-time positions. We will have permanent transformation of labor and fluid positions. What will remain constant is general knowledge and is multifarious applications. Being a worker will become identical to being a learner.

Hence in designing educational systems, we cannot just think of transition to work – we must think hard about the how to face the continuous transformation of work. To students we must say: Your future is a transition to transformation. Hence your education must be preparation for this transformation. We will do our best to give you the knowledge and skills to master it – to live, to lead and make interesting lives and exiting worlds.

Transition from Initial Education to Working Life:
Highlights from the Nordic Conference

Cathleen Stasz
January 1999

Introduction

On November 1-2, 1999, representatives from fourteen countries who participated in the OECD “Thematic Review of the Transition from Initial Education to Working Life”, met in Oslo, Norway. The purpose of the conference was twofold. First, the conference served to compare and highlight the Nordic approaches to supporting the transition from initial education to working life, as these approaches have received somewhat less attention than others. A second purpose was to consider how or whether the Nordic approaches might provide lessons or models for other countries. This paper attempts to summarize the conference, and draws primarily on the discussions held there, but also on the conference Background Paper.1

There was a considerable amount of lively discussion over the two days of the conference, and this paper will not attempt to capture them all. Rather, the intent is to summarize some key aspects of the Nordic approaches along the three themes discussed, which are:

1. Building effective pathways from initial education to working life
2. Building safety nets for those at risk
3. Building a basis for lifelong learning in the transition phase

Second, the paper raises some issues or questions that in some sense try to sort out the question of whether there is a general “Nordic approach” and what its features might be, and also to consider the applicability of Nordic approach to other country contexts. This paper aims at capturing the essence of the conference proceedings and to contribute to the ongoing dialogue that the conference intended to spark.

To begin, it is important to state what is perhaps obvious — the participants in the conference and the OECD Transitions study met with some common purpose. As Mr. Gudmund Hernes so eloquently expressed in his opening address, the post-industrial economy presents new challenges for education and training in our respective countries as we move into the twenty-first century. To various extents, all the countries involved recognize profound changes in the nature of work due to globalization, technology advances, new management practices, and other factors. As we plan for the future, we may not know what the jobs of the future will be. So we all begin with some basic questions:

• What should young people know and be able to do as they leave school and transition to working life and full participation as citizens?
• How should schooling be organized to support that transition for all, especially those most at risk of falling by the wayside?

1 The author was also a member of the OECD study team to Finland. Group leaders from two of the discussion groups provided notes of their discussion, which were also used as a resource in writing this paper.
What kind of system will accommodate the need for lifelong learning for adults as well as stimulate the desire for lifelong learning among young people?

The conference focused attention on how the Nordic countries, in particular, have grappled with these questions, which are parallel to the three themes that served to organize the conference proceedings.

**Theme 1: Effective Pathways and Systems**

First, the conference addressed the question of building effective pathways. During the 1990s, all the Nordic countries participating in the Transition Study — Norway, Sweden, Finland and Denmark — have been redesigning their vocational education offerings, especially at the upper secondary and tertiary levels. Many of the country reforms aim to better integrate academic/general and vocational education or to blur the distinctions between school and work. Thus, they seem to follow Mr. Hernes’ recommendation for education to “use work as a transforming experience”.

Although the specific programmatic reforms differ in detail from country to country, they can be characterized by the following general features. The remainder of this section provides examples and further discussion for each.

- Broadening of core curricula in educational programs to include wider set of skills and work-related competencies
- Emphasis on work-based learning
- Emphasis on project-based work and more applied or “practical” learning activities
- Redesign of teacher education to incorporate different pedagogies
- Creation of certifications and multiple exit points
- Expansion of tertiary education to include advanced vocational education
- Increase in opportunities for students to advance from upper secondary to tertiary level

The Nordic countries develop national curricula and the trend has been to broaden the curricula in two respects. The first change was the emphasis from a very specialized, job specific course of study to broader industry-related curricula, at least in the initial years of post-compulsory schooling. The main effect has been to streamline the vocational offerings by grouping specializations into broader industry-related clusters. In Norway, for example, the engineering and mechanical trades incorporates 27 different occupational categories, some of which are further specialized. Finland has 30 occupational categories in seven sectors.

A second feature is the inclusion of a wider set of skills and work-related competencies, such as problem-solving, communications, working in teams and general technology-related skills (information and communications technology or ICT). The curricula also seek to enhance development of “non-cognitive” skills (e.g., moral values and responsibility) or to develop habits of mind that will encourage individuals to learn over their lifetimes. The Norwegian system is

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2 Several countries taking part in the Transition Study have developed new skill taxonomies that incorporate a broader conception of skills. For example, Australia refers to “key competencies,” England and Scotland to “core skills”, and the U.S. to “SCANS” competencies (for Secretary’s Commission on Achieving Necessary Skills, which developed the framework).
perhaps the most expansive, as it describes a framework that aims to help students develop six different aspects of human nature: the spiritual, creative, working, liberally educated, social and environmentally aware.

The curricula and programs in the Nordic countries also increasingly encourage or demand work-based learning opportunities, integrated with school learning, to help students develop work-related competencies that might be more difficult to teach or learn in classroom settings. Prior to recent reforms in Finland, vocational training was primarily school-based. Now work-based learning is compulsory, and upper secondary vocational programs are longer to accommodate a six-month work experience. Work-based learning is also an important feature of their Youth Workshops and expanded apprenticeship system. Both Norway and Finland require a one-week work experience for compulsory school students. Swedish students have opportunities for work-based learning experiences in upper secondary school, but it has been difficult to provide for all interested students.

The curricular reforms also emphasize project-based work and more applied practical learning activities for students. Project work is compulsory in Norway and Denmark and is supported, although not mandated, in Sweden and Finland. In Norway, all students are expected to take part in at least one interdisciplinary project per year. In Denmark, the Production Schools are open to all students under 25 who do not have formal qualifications. All learning in these schools is project based, with integrated theory and application. Students produce real goods and services.

Proposed changes in curriculum and teaching are more likely to be implemented if teachers have appropriate education and training. Thus, the reforms in the Nordic countries include provisions to redesign teacher preparation and development to incorporate different pedagogies and to acquire necessary ICT-related skills. Teacher training needs to include new methods, because not all students respond well to more traditional pedagogy. Teachers may also need to change their attitudes about the new curriculum and about the necessity to adjust schooling to better meet the demands of the new economy. Changing teachers’ behaviors and attitudes can be extremely difficult and is also a slow process. Some of the Nordic countries are proposing more innovative methods for exposing teachers to the world of work, for example by having non-vocational teachers visit or work in enterprises.3 (Vocational teachers are already expected to be keeping abreast of the relevant changes in their fields and usually have good connections to the workplace.) Representatives from Norway reported that changing the roles of the teacher and the student is now the major focus for their national policy.

Another reform of the Nordic pathways is expansion of certifications and exit points, so as to avoid “dead ends.” One way this has been accomplished is through modularization of the curriculum, which provides young people and adults with varied opportunities to create individual pathways, proceed at their own rate, or return to education and training throughout their working life. In Finland, modules in both education and training programs have replaced traditional subjects, and competency-based qualifications to assess learning are being phased in.

3 New models of teacher training are of interest in many countries of course. For a recent review of programs in the U.S., for example, see Allen Phelps et al., Teacher Learning in the Workplace and Community, MDS-1265, Berkeley, CA: National Center for Research in Vocational Education, University of California.
Reforms in Norway and Denmark make it possible for individuals to receive partial qualifications, although it is not yet clear how these qualifications may affect current operation of the labor market. Several other countries at the conference expressed interest in the idea of partial qualifications, how employers were reacting to them, and how their introduction into the labor market would work out.

The Nordic reforms attempt to provide more student choice, flexibility, or individualization within the educational programs (both regular programs and special programs for “at-risk” individuals), although the degree of choice varies. In Sweden, the amount of choice is somewhat limited, with about 10 percent of the national programs at the upper secondary level left to students’ individual choice. In Finland, upper secondary students may choose up to 40 percent of their credits and may also choose to complete their programs at another school, although in reality few students take advantage of this option. Individualization is accomplished through the variety of programs available to meet different needs and availability of counseling and guidance services (discussed further below in connection with the social safety net).

Vocational education in Nordic countries is also expanding at the tertiary level. A 1992 reform in Finland, for example, established the Ammattikorkeakoulu (AMK) institutions or polytechnics. Selected vocational colleges were provisionally upgraded to tertiary level institutions, with accreditation mechanisms to guarantee the expected high quality of programs and qualifications. In 1995 the legislation was amended, allowing for the transition from “temporary” to up to 30 “permanent” polytechnics. The aim is for AMKs to absorb the expanding enrollments in the tertiary education sector.

As tertiary education expands, more opportunities for students to advance from upper secondary to tertiary education are created. In other countries with similar expansion, the challenge might be to reform upper secondary education to ensure that graduating students would be prepared to take advantage of and succeed in new opportunities for higher education. In the Nordic countries, however, the demand for spaces in tertiary education institutions already outstrips the supply of qualified applicants. It is significant, therefore, that the Nordic countries choose to reform upper secondary education at all, and may be seen as testimony to the value they place on high quality education for all. The Nordic reforms have emphasized combining general and vocational education to increase the general education content of vocational programs and creating programs that result in dual qualifications. The Finnish reforms aim for all upper secondary vocational programs to provide entrance qualifications for tertiary study (university or polytechnic) by 2001. Time spent on general education in vocational programs in Sweden increased from one quarter to one-third. According to the Background Paper, these experiences have created some difficulties for “weak” students who are having problems with the increased general education content. However, the curriculum and pedagogical reforms that are also being carried out, in particular the use of project work or more practical learning approaches, should help these students, as similar curricular reforms in other countries show some sign of success.4

4 Efforts to integrate academic and vocational education and to increase the academic quality of vocational courses have been underway in the U.S. for at least a decade. Some recent evaluations suggest that these reforms are most effective for students with academic difficulties who are at-risk of dropping out of school.
The Nordic countries also provide various subsidies or supports for students. In Sweden, for example, students receive varying amounts depending on the programs, but the government intends to make them more uniform. All university students get the same amount of support, regardless of wealth. All vocational students in Denmark receive a salary from their employers, and the state supports students in Production Schools. At the tertiary level, students who live away from home receive more funds than those living with their parents do.

There are also some important distinctions between the Nordic countries that are worth mention. The countries differ with respect to the degree of centralization of the systems and the resulting locus of authority in developing and implementing reforms. The Norwegian and Danish systems are more centralized, with authority resting primarily at the national level. In Sweden and Finland, the latest reforms are being implemented in a more decentralized fashion. In Sweden, for example, many decisions can be made at the school level. In Finland, consortia of social partners in municipalities form a decision-making body for the local area. Even with this measure of decentralization, however, the core elements of the education systems — curriculum, programs, pathways, standards and certification — are developed at the national level. This makes the governance of the Nordic systems similar to the Germanic countries, but quite unlike most of the English-speaking countries in the study which tend to be much more decentralized.

In comparison to the other OECD countries, the Nordic countries have relatively higher rates of educational attainment among their populace. Most individuals continue their education after compulsory schooling. Transition patterns are more fluid than in the past, as more individuals, especially young people, choose to study and work concurrently or to intersperse education with periods of travel and studies abroad. As in other OECD countries, youth transition appears to include a period of “churning” in the labor market, where young people move from job to job, take temporary employment, or have spells of unemployment between jobs, until they settle into longer-term, more permanent employment. In the Nordic countries this may be partly due to policies which provide many opportunities for further learning and which permit both youth and adults to take advantage of them. But it is also partly due to shortages in the availability of positions at the tertiary level: demand for a place seems to outstrip supply. In Finland, for example, young people may take temporary work or travel as they re-apply for a position in the AMK or university. One question that might need to be addressed is how the expansion of learning opportunities for adults in these countries will affect the already tight supply in the tertiary sector.

Several themes or characteristics of the Nordic approaches also surfaced in the pathways discussed by the participants from Austria, Switzerland, and Japan, and also certainly apply to developments in the U.K., the U.S., and other countries. The apprenticeship systems in both Austria and Switzerland are experiencing shortages, a situation which partly necessitates some other reforms in the system (e.g., bringing work-based experiences to school, creating certifications at different exit points, increasing access to higher education). The Japanese system

\footnote{See discussion and further details in the Background Paper: Nordic Transition Conference 1st-2nd November 1999.}

\footnote{The Background Paper reported that in Finland, for example, 18 percent of upper secondary graduates in 1998 matriculated to university and 12 percent to an AMK institution. However, 79 percent of that cohort applied for a tertiary position.}
is different from the Nordic approaches in a few important respects. Most vocational training happens in firms which students join right after high school. Thus, upper secondary teachers have a very strong guidance and counseling role. All the discussants agreed that the changes in work discussed earlier are a basic motivator for many of their education and training reforms.

**Theme 2: Weaving the Safety Net**

The presentations from the Nordic countries on their approaches to creating a safety net for “at risk” individuals outlined different specific policies but also several common themes.

**Entitlement and obligation.** In the Nordic countries, every person is entitled to education and training in the transition phase and the state is obligated to provide it. Obligation is not just a word spoken by politicians, but a commitment backed up by real subsidies and supports. Norway, for example, has a statutory guarantee wherein all 16-19 year-olds have a legal right to upper secondary education.

**Creation of many special programs.** Multiple special programs have been created for both education and job training to fit the unique needs of at risk youth or adults who have not been successful in the labor market. In Denmark, for example, 16-20 year-olds who left upper secondary without a qualification have three program options: Open Youth Education Program (FUU), Vocational Basic Training Program (EGU) and Production Schools (open for anyone under 25 years). This feature suggests a recognition among the Nordic countries that a program must fit each individual’s capabilities, needs and situation. In the words of the representative from Denmark, they needed to develop “large closets for differently fitting suits.”

**Counseling and guidance services.** Counseling and guidance services are provided to help tailor an educational or training program to each individual’s needs. As discussed in the Background Paper, school counselors develop programs for individuals with special needs, and teachers play a key role by referring students to counselors or psychological services. In Swedish schools, the headmaster has this responsibility. Finland has developed separate guidance systems in schools and employment offices. Policymakers in Finland view guidance as a “slippery” term that refers to many different contents, providers and purposes and thus requires different types of strategies.

**Activation policies.** To obtain various kinds of services, the young person or adult usually has some active part or involvement in the program. Finland, for example, requires unemployed youth ages 18-25 to participate in active measures in order to receive labor market benefits. Activation is also required in Denmark for all unemployed individuals, and unemployment benefits can be received for a maximum of only five years.

**Follow up policies.** All the Nordic countries have processes to actively identify and follow up those individuals at risk, thereby creating a safety net with a very fine mesh. Denmark’s follow-up policies require municipalities to follow up anyone under age 20 who does not have a qualification. Municipalities also have responsibility for follow up in Sweden. In Norway the county municipalities have the responsibility for the follow up service. In Finland, follow up is carried out through national employment offices.
Overall, the Nordic countries appear to have an exceptionally strong set of policies and practices for assisting at-risk individuals. In Norway and Sweden especially the trend is to focus services on completing education, especially at the upper secondary level, rather than to move individuals directly to the labor market. Since higher levels of education are associated with better outcomes for individuals over the long term, these policies also make good sense for the economy.

The sheer variety of programs available as well as the multitude of institutions with authority for developing and implementing the programs does create some coherence problems. For example, institutions that offer programs are often associated with certain authorities or agencies. Thus, referrals from one authority (e.g., state, municipality, educational institution, and employment office) may not cover all the possible opportunities for the individual at risk. If a system is overly complicated, then it may be difficult for parents and students to comprehend the possible options and therefore make the best choices. Finally, more complex systems with an excessive degree of individualization can also lead to higher costs.

The discussion of the safety net topic by representatives from Portugal, Australia, Canada and the United Kingdom seemed in somewhat stark contrast to the Nordic approaches. All these countries have at-risk populations, comprised of youth who fail to finish compulsory school or who complete secondary school without qualifications and adults with incomplete education or low qualifications. The policies for dealing with at-risk individuals in the U.K., Canada, and Portugal (and also in the U.S.) tend to push more responsibility for dealing with at-risk individuals to the school level. The school has become the focal point for providing support, ideally in collaboration with other social service agencies. Similarly, support services are often provided by community-based organizations, which are usually non-profit and sometimes church-affiliated. These organizations obtain government funding and also seek operating funds from the private sector, various foundations or individual donors. In some communities, these non-governmental entities, either coordinated or not with the schools, are the primary service providers for economically disadvantaged or poorly educated individuals or anyone in need of special services. These countries also reported higher numbers of individuals in need than did the Nordic countries, and also more severe types of problems, such as teen pregnancy, drug use, or domestic violence.7

Another difference in the countries represented in this panel is the tendency to place greater responsibility on the individual. There is less talk of “entitlements” except where an individual can demand special services by law, e.g., if a person has a specific disability. The educational systems are open to all, but it is the individual’s responsibility to take advantage of what is available. This responsibility carries over to job training or employment services for dropouts or for graduates who are having difficulties finding a job.8 In addition, while the Nordic approaches

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7 Of course it may be that the types of problems are similar, and the perception of greater severity is related to the higher proportion of individuals in the non-Nordic countries who present with these problems. Although specific data was not provided in the Background Paper, the U.K. discussant estimated that as many as 150,000 13-19 year-olds were outside the regular system and in need of services. This compares with perhaps only several thousand identified as at-risk in Sweden.

8 In the U.S., post high-school job training, welfare or employment programs for dropouts or graduates are often referred to as the “second chance” system. The implication is that program participants somehow missed the first opportunity provided to them.
focus first on enhancing a person’s educational attainment, other countries’ policies tend to emphasize work first.

Another point of discussion concerned immigrant populations. Although the Nordic countries all have immigrant populations which have more difficulties in the labor market than native citizens, there was little discussion in the Background Report about specific issues concerning immigrants or how they are being dealt with.

It would require more intense study to understand and comment on the underlying social, economic, and political factors that help shape the different approaches and to determine which factors seem to most influence the Nordic approaches to maintaining the safety net for those in transition. During the discussion, however, several ideas were raised that form a starting point for speculating about the country differences that may impact the generalizibility of the Nordic approaches to other countries. Three points were raised.

1. The Nordic countries have a long tradition of fostering social capital through a strong welfare system. These countries seem to develop national policies that are committed to “raising all the boats.” If policies are intended to provide equal chances for all, then the state is obligated to provide extra support for those who fall behind.

2. The Nordic countries also have a long history of social partnerships between the state, trade unions, employers and municipalities. The role of municipalities is somewhat unique, as they may have the authority to act for the national government. An example is in Finland, where local government bodies collaborate with employers and educational institutions to carry out educational reforms.

3. The Nordic countries also have more homogeneous populations than some of the other countries, which suggests that their general policies are likely to adequately serve most individuals.

In contrast to these aspects of the Nordic approaches, several of the countries participating in the discussion have very different policies or traditions: the trends in the U.K, Canada, and Australia (and the U.S.) are to place more and more responsibility on the individuals in need of services, to shorten the time that services or support are provided, to emphasize employment over education, and to increase privatization of services. It may be that these basic differences in dealing with “at-risk” individuals will limit the lessons that can be learned or adapted from the Nordic models.
Theme 3: Promoting Lifelong Learning

From the discussion of life-long learning and policies to promote it, one can also identify some broad similarities among the Nordic approaches. First is the general concept: that it is necessary to learn throughout the life span and best to begin developing early in life a capacity for “learning how to learn.” A second important aspect of the approaches to lifelong learning is the previously discussed policy that states are obligated to provide education for all. Thus, the Nordic approaches to lifelong learning are an investment in “intellectual capital.”

The Nordic perspective also embraces the idea that the best way to promote lifelong learning is to create a structure to support it. The structure is intended to provide a defined, yet flexible way to increase the likelihood that young people will stay in school and reach as high an educational level as possible. This creates the foundation for lifelong learning. It is also a preventative measure, as higher levels of education are associated with better social and economic outcomes over the long term. The structure should also support the adult learner who may not have completed upper secondary school or who may need retraining. Thus, the lifelong learning system can make up for educational deficiencies in the adult population.

Counseling and guidance play an important role in strategies to promote lifelong learning. Denmark plans greater coordination of separate guidance functions among education providers, labor, and municipalities. Finland has developed electronic networks to provide comprehensive information on education and training opportunities, and is especially concerned with retraining of older, working adults ages 45-60.

Certification of formal and non-formal learning is an important feature of the lifelong learning systems. This is accomplished through different mechanisms, including modularization of curriculum, coursework or programs leading to certification, recognition of on-the-job learning and competency-based testing. Employers certainly play an important role in the mix, as they need to take some responsibility for initial training or upgrading of incumbent workers’ skills and must also be prepared to recognize the certifications once attained. The Nordic countries have strong social partnerships (Norway, Denmark) or are developing stronger relationships with employers (Finland, Sweden) to support lifelong learning initiatives.

The formalization of lifelong learning through structured programs and especially certification raises somewhat of a paradox. On the one hand, lifelong learning seems most likely if it stems from intrinsic motivation and desire to learn. On the other hand, the approaches emphasize certification of informal learning that amounts to a type of extrinsic reward or social validation of learning. Thus, it is possible that gaining these certifications may appeal most to those who already do well in school or who feel the need for external validation. The individuals most in “need” of lifelong learning may have been unsuccessful in school and therefore have little interest in classrooms or structured learning programs.

The definition of lifelong learning also remains a bit fuzzy. The Nordic countries described such a broad array of programs and opportunities to engage in lifelong learning that it raises the question: What is not lifelong learning? The Finns, for example, adopt a lifespan definition, to
include childhood to old age, and learning in all work, school and family environments. This is not necessarily a criticism of the Nordic country attempts to develop the concept of lifelong learning and to create policies and programs to support it. The idea of lifelong learning is prominent in other countries deliberations about transition issues, and the Nordic countries have made an important first step in defining what is meant by lifelong learning and how it might be encouraged and supported.

The discussants for this topic (representatives from the Czech Republic, Hungary and the United States) generally agreed that the issue of lifelong learning is discussed in their respective countries and deserves policymakers’ attention. The Czech Republic is still developing its system of pathways from education to work and has yet to develop very explicit policies for lifelong learning or adult education. At present, their system is not very flexible, as it is difficult for students to change pathways and opportunities for higher education are limited. The policies in Hungary aim primarily to include more vocational education in their system, which is highly academic and general. In both countries, the social partnerships are not as developed as in the Nordic nations: school and work are somewhat disconnected.

The discussants also raised some other interesting perspectives on lifelong learning. One issue concerned the role of the media in learning and how it can affect the “ethos” of learning. How do countries communicate their education reforms to the public and how do they use media to inform, educate, or gain support for new education policies?

A second issue concerned the impact of the World Wide Web and the Internet on lifelong learning. An example is in the United States, which has a more market-oriented higher education system. The rapid rate of technological change is encouraging many adults to learn on their own, and the Internet has helped create a market environment for adult education that is not institution-based. Formal learning opportunities are being offered, as individuals can take courses and earn certifications on-line. The American population is aging and living longer, and a large proportion have the resources to use the Internet for a variety of learning experiences or for finding information. The situation was described as “competence without credentials.” The use of the Internet for lifelong learning will only expand. The challenge for policymakers, then, is to help ensure quality control of the information and learning programs available through this new media.

**Looking to the Future**

The conference helped draw a picture of the Nordic country systems to support the transition from initial education to working life. Overall, well-organized pathways that combine workplace experiences with education, tightly woven safety nets for those at risk, and strategies for promoting lifelong learning can characterize their systems. Reforming an education and training systems is, of course, a process of steady work, and the Nordic countries have also had their share of problems. The Nordic countries and others at the conference share most similarity with respect to approaches to building pathways. This is not a surprise, since the transition reforms are partly in response to global economic conditions that affect all. Some differences between the approaches are also evident, as discussed in the description of social safety nets. Overall, many conferees expressed much admiration of the Nordic approaches and their apparent ability to reach consensus among the social partners.
What might be unique or different about the Nordic approach? This question is of course debatable, and would certainly require more thoughtful consideration than a two-day conference affords. On the other hand, perhaps defining a “Nordic approach” less important than attempting to understand what aspects of the Nordic approaches might work in other places and how they might be implemented.

To address the question of applicability requires a different kind of discussion. Rather than describing or comparing and contrasting the systems and pathways, one also needs to understand the institutions and institutional relationships that support the different country systems, their underlying incentive systems and the points at which policymakers have leverage to create change. Programs that function well in one system may fail in another if the surrounding context does not provide the right implementation environment.

Consider the following example. When Bill Clinton was governor of Arkansas, he led governors’ education task force that explored the possibility of creating a youth apprenticeship system in the U.S. Their design was modeled largely on the German dual system. When he became President, Clinton pursued the idea in earnest, and eventually signed the School-to-Work Opportunities Act of 1994. This legislation, although arguably an advance for vocational education in the United States, fell far short of creating a dual system for several reasons. Chief among these was that essential features of the dual system are not present in the American context and were not likely to be created at the scale required. These include an educational system that ensures that young people entering apprenticeships have sound basic knowledge and skills from which to build, a highly regulated youth labor market, national standards that safeguard the quality of the training provided in firms, an industrial relations system where labor unions and firms cooperate and where a Works Council oversees the quality of training and protects trainees’ interests, long-term financial relationships between business and industry, and an ample supply of trained trainers to oversee the quality of on the job training.

The group sessions held during the course of the conference provided a forum for discussing the kinds of conditions that affect policy design and implementation, and many conferees commented on how valuable they were. The next conversation should continue to look below the surface characteristics. While this conference has usefully focused on illuminating the features of the Nordic pathways and systems, the next and often more difficult question is: How do you make them work?

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10 For further discussion see David Finegold, Making Apprenticeships Work, IP-114, RAND, Santa Monica, CA, March 1993.
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**The Nordic Transition Conference**  
**Oslo, 1 – 2 November 1999**

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Background Paper
Nordic Transition Conference 1st – 2nd November 1999

Key similarities and differences between transition frameworks and outcomes in the Nordic countries participating in the Thematic Review of the Transition from Initial Education to Working Life

(Denmark, Finland, Norway and Sweden)

Although this Background Paper draws on the Background Reports and Country Notes of the Nordic countries participating in the Thematic Review of the Transition from Initial Education to Working Life, as well as on data, documents and research reports provided by the Nordic Ministries and the OECD, the views expressed in this Background Paper are those of the author and not necessarily those of the Ministries of the Nordic Countries or the OECD.

Prepared for the Norwegian Ministry of Education, Research and Church Affairs
Chapter 1: Building a basis for lifelong learning in the transition phase

1.1 Attempts to lay a basis for lifelong learning in the transition phase

The concept of lifelong learning has emphatically been placed on the political agenda in the Nordic countries in recent years, particularly following the “European year of lifelong learning” in 1996. In keeping with the principle of lifelong learning, the Nordic countries have implemented or are planning to implement comprehensive revisions or reforms in their initial education and training systems, in which education is seen as an entity, encompassing all ages and all types of learning environments, including occupational and social knowledge and skills acquired outside the formal educational system. A major challenge has been and is to increase the correspondence of education with working life requirements. The aim of proposed and implemented measures has been to create more integrated, better co-ordinated, flexible and unified initial education and training systems that not only prepare young people for entry into employment or tertiary study, but that also provide them with a broad knowledge base and foundation for lifelong learning.

In the Nordic countries education and vocational training are seen as an important means to achieve goals in other policy areas such as economic policy, regional policy and employment policy. There is a broad political consensus that the qualifications, skills and competence of the people are essential prerequisites for economic development, wealth creation and the further development of the welfare society, and to avoid unemployment. In order to provide possibilities for lifelong learning in the Nordic countries, it is considered important that a broad spectrum of initial and continuing education and training and other study possibilities should be accessible to adults. Thus, an important priority for Nordic policy makers is also to provide adults with a chance to go back to complete an incomplete initial education. Therefore, measures that encourage a better and more suitable supply of education for adults are emphasised.

There are similarities and differences in the approaches chosen by policy makers in the individual countries. However, Nordic policy makers seem to share a common objective: to increase the level of education in the entire population and to attempt to design changes that meet the changing demands of business and industry and that provide a broad preparation for working life and lifelong learning. Education is thus not to be regarded as a “one-off activity”, but as a resource for personal and social enrichment and growth in the lives of people of all ages i.e. an investment in human capital.
1.1.1 Reforms in the 1990s of the Nordic education systems and policy directions, which may be considered to be attempts to lay a basis for lifelong learning

This section of the background paper does not attempt to provide a complete picture of the educational systems of the Nordic countries participating in the Thematic Reviews, as these systems are thoroughly described in the Background Reports and Country Notes of the individual country. This section will focus on reforms implemented in the 1990s that are considered to have impact on motivation for lifelong learning and that are intended to improve the relationship between education and working life.

**Denmark**

The Danish approach to innovation and change in the 1990s is coherent with a trait inherent in Danish educational policies through history, namely the emphasis on personal choice and consensus. Danes are more likely to add new programmes to the already existing ones, than to replace one system with an entirely new one.

Compulsory education (the Folkeskole) was reformed in 1994 when it was given a new Act that is intended to provide children with a better preparation for their adult life by inter alia improving the teaching in basic subjects like Danish language, mathematics and foreign languages as well as encouraging use of new information technology. Since 1995, initiatives to “bridge” the transition between compulsory and upper secondary education have been carried out (so-called bridge-building courses). In 1998/99 new initiatives are being targeted at the optional 10th form, which is no longer to be considered as a termination of the Folkeskole but as an introduction to the “Youth Education System”, as upper secondary education is called in Denmark.

Today youth education is divided into three branches: vocational education and training; upper secondary general education; and individual programmes. Characteristic of policy changes in the upper secondary system in the 1990s has been the diversification of the system, aimed at making transition from one stream to another easier.

In 1991 the two vocational training systems (apprenticeship and farmer schools/ EFG) were merged into one, and a new system of social and health education was implemented, placing these programmes within the vocational education and training branch of upper secondary system.

In 1992, tertiary education was reformed when the traditional continental one-degree system was replaced with the BA, MA, Ph.D. system, making tertiary education more transparent internationally, thus facilitating recognition of foreign education.

A new basic vocational training program (EGU) was established in 1993 (as part of the individual programme branch) intended for young people who need access to regular programmes or are aiming at simple functions in the labour market and who otherwise might have been at risk of dropping out of education and training. The programme’s duration is between 1 1/2 and 3 years, of which 20-40 weeks must be completed at school, the rest being provided by an enterprise. In 1994 “Open Youth Education” or (FUU) was introduced as a new individual programme
option, in which young people who do not find any of the ordinary programmes attractive, can make up their own programme based on existing courses mostly within socio-cultural, aesthetic/creative and pedagogical fields.

In 1995 the vocational gymnasia were separated from the rest of the vocational education system as two independent three-year programmes, the higher commercial examination programme (HHX) and the higher technical examination programme (HTX), in line with the general education gymnasia. The programmes, which prior to 1995 had been two year-programmes, became part of the academic stream, thus providing eligibility for tertiary study.

In 1996 a new law “the Youth Education Effort” was introduced entitling and obliging all youth under 25 years of age to accept an activation offer within a maximum of three months after becoming unemployed. The activity can be either occupational or educational, but preferably the latter. Many vocational schools are involved. Also activation obligations apply to those aged 25 or more, although not as comprehensive as those provided for young people under 25.

New initiatives are currently being carried out (1998-99) aimed at increasing the quality and transparency of youth education, paving the direction of Danish policy-making into the next century. An important measure is the planned “Development Programme for Youth Education in the Future” which shall support efforts to bring about coherence and broadness in the whole youth education system. Special attention will be focused on contents, structure, study methods and forms of evaluation and the improvement of transition patterns. Another initiative is “Reform –2000 of the Danish VET-system”, which includes the reduction of the vocational education and training programmes from 90 to 7, a more transparent educational structure, modularised programmes, increased provisions, possibilities and conditions for both strong and weak students, including possibilities for individualised pathways and the option of receiving partial qualifications for those who are at risk of dropping out. Also the Danish government intends to revise the Act of Basic Vocational Training.

A new reform of the teacher-training programme with effect from August 1998 takes its point of departure in the idea that Folkeskole must have a better subject-specific preparation. Also central knowledge and proficiency areas, stricter examination requirements and a strengthened external examiner function are being established.

Finland
In Finland focus for the next century will be on promotion of employment by means of education, the development of co-operation between education and working life and the implementation of a strategy of lifelong learning. As of 1 January 1999, a comprehensive legislative reform in the field of education came into effect which decentralises decision-making to the educational providers and emphasises management by objectives, contents, regulation of core issues and students’ rights and responsibilities.

In the 1990s modularised framework curricula have been developed in upper secondary education (both general and vocational), including possibilities for more individualised study programmes and possibilities of combining general and vocational courses.
A vocational reform is being phased in from 1998 to the year 2001, by which year all vocational programmes will last three years. All programmes will provide entrance qualifications for tertiary studies and include at least six months mandatory on-the-job training. Consequently, all study programmes will be reformed (1998-2001) and linked to vocational qualifications, including a competence-based examination intended to comply better with working life requirements. These changes will be done in close co-operation with the social partners.

In 1992 new legislation came into force expanding the apprenticeship system to young people as an alternative to school-based vocational education. Prior to 1992, apprenticeship training had mainly been an option for adults. The intention is to provide 20 per cent of the yearly intake of basic vocational training in the form of apprenticeship for young people by year 2000.

In the autumn of 1997 a reform was introduced in Finland allowing the long-term unemployed with at least ten years of work experience to continue to receive unemployment benefits even while in training.

In Finland compulsory school and upper secondary school is open to adults and vocational education and training is provided for adults who are or have been actively working. It comprises self-motivated training, labour market training, in-service training and apprenticeship training. Both separate adult education centres, upper secondary schools and vocational institutions offer upper secondary and higher level education for adults. Adults are provided with an opportunity to sit competence-based examinations, independent of how the vocational skills have been acquired.

In 1992 a post secondary vocational education reform was launched in experimental form with the establishment of AMK institutions (polytechnics at tertiary level which currently provide eligibility for university studies for those who have attended 2, 2 \(\frac{1}{2}\) year programmes in vocational upper secondary education). As of the autumn of 1996 a permanent network of AMK institutions was set up and as of the year 2001 the difference in the eligibility for further education between those in general and those in vocational programmes will be abolished when all upper secondary vocational education is based on three-year programmes. The reforms of the 1990s also include development of continuing education for adults, improvement of career and recruitment services and new financing mechanisms for improving access to education and training.

Norway
The general process of change in modern society revealed the need for a policy document defining aims, principles and basic values that all education should be based on. A Core Curriculum which applies to primary, lower secondary, upper secondary and adult education was therefore implemented in 1993. The Core Curriculum is an incentive for lifelong learning in the sense that its objectives emphasise broad competencies, where ethical values and attitudes, theoretical and practical knowledge and the promotion of creativity, initiative, entrepreneurship, cooperativeness and social skills are all part of a whole.

The implementation of the Core Curriculum was the first measure adopted in a series of comprehensive reforms all implemented in the 1990s comprising Norwegian primary and lower
secondary education (Reform 97), upper secondary education (Reform 94) and tertiary education (Network Norway and teachers’ education). In addition to the Core Curriculum, new study programmes have been introduced for all courses and subjects in primary, lower secondary and upper secondary education. The core skills and competencies of the Core Curriculum are to be learned and taught in relation to other skills and knowledge and are therefore integrated in the study programmes. This is an attempt to make young people better prepared for lifelong learning and working life in that it allows the learning of the core skills to be set in context. In addition, the study programmes are modularised and focus on the challenges of the information society, new technologies and the scientific environment and on strengthening the provision of foreign language learning. As a consequence of the recent reforms in primary, lower secondary and upper secondary education, new national framework curricula for teacher education have been reformed in 1998/99. A new programme for the education of vocational teachers is scheduled to be launched between the years 2000 and 2006.

Reform 97 introduced compulsory education for six year-olds and extended compulsory education to ten years. Reform 94, the reform of upper secondary education, introduced a statutory right to three years of upper secondary education to all young people aged 16-19 having completed compulsory education or equivalent tuition. The two systems of general and vocational education were merged. A new model for vocational training was introduced (2+ model), in which the two first years are taken at upper secondary school after which the students sign an apprenticeship contract with an enterprise and spend two years in an enterprise (one year full-time instruction and one year productive work). General education core subjects were introduced up to a certain level in all vocational programmes. The number of foundation courses was reduced from more than a 100 to 13, each representing an area of study. Three of the areas of study qualify students either for college or university studies and ten of the areas of study lead to the trade or journeyman’s certificate or vocational qualifications from vocational areas of study taken at school.


In tertiary education, Network Norway, a nation-wide network, has been established to coordinate the system of tertiary education and to link the various institutions of higher education together. The network benefits the various academic environments by enabling them to cooperate with regard to division of labour and it makes transfers between programmes and institutions easier for students who wish to do so.

Norway is also in the process of implementing a reform called the Competence Reform that embraces all adults in and outside the labour market. The reform will be implemented as a process in which employers, employees and the government are active contributors. Maybe the reform’s main motivation for lifelong learning, is the establishment of a system for validation of competencies acquired outside the formal education system with a view to recognising adults’
non-formal learning. It will be possible to sit examinations as an external candidate. The section 20 measure\(^\text{11}\), which allows adults who have five years of relevant experience and who wish to document their qualifications to register for a trade or journeyman’s examination, will be prolonged.

A total of NOK 1.2 billion is proposed allocated to measures concerning adult education in year 2000. In January 2000, the Parliament adopted the Competence Reform which will enable employees to take study leave. The Competence Reform will also enable adults to complete basic education and training (primary, lower secondary and upper secondary education), and facilitate certification of non-formal learning both in relation to the work place and the education system. The reform is part of a tripartite effort to raise competencies of all individuals, both inside and outside the labour force, in line with the recommendations of the OECD (1996). In early 1999 during the wage negotiations, the government promised to spend NOK 400 million in the coming two to three years with the aim of developing the market for continuing education and training. In the 2000 Budget, NOK 50 million are allocated to this purpose, while 90 million are earmarked for educational funding better adapted to the needs of adults. In November 1999 the Parliament adopted a bill providing the right to study leave. The right will probably be implemented in 2001. A bill concerning the right to primary, lower secondary and upper secondary education will be submitted to the Parliament during the Spring of 2000.

**Sweden**

A feature that characterises Swedish policy direction in the 1990s is that educational decision-making policies have been decentralised providing the educational institutions at all levels with substantially increased autonomy. Today, Sweden has the most decentralised school system of the Nordic countries participating in the review, leaving most decisions to be made at school level rather than at central or regional level. The shift from centralised to decentralised decision-making has also occurred in labour market and employment policies.

The 1990s has also been a decade of comprehensive educational reforms in Sweden.

In autumn 1994, the compulsory school received a new curriculum (Lpo 94) stating overall objectives and guidelines for compulsory education. In addition, there is a nationally determined syllabus for each individual subject with goals that both the school is to strive to attain and that the pupil is supposed to attain. Local authorities have to develop school plans and quality reports based on the objectives specified in the curriculum and syllabuses. Also a new knowledge related grade system has been developed. As of first January 1998 the pre-school class (six year-olds), formerly part of the pre-school system, was integrated as part of the state compulsory education system.

Upper secondary education has also been reformed. The structural changes of the Swedish upper secondary school have been based upon an amalgamation of a large number of different study lines into 16 national programmes. Today, the system comprises the 16 national programmes (two general education programmes and 14 vocational programmes), individual programmes and specially designed programmes (the latter shall reflect local and individual needs).

\(^{11}\) In the new comprehensive Education and Training Act this is regulated in Section 3.5.
1991 extended all upper secondary programmes to three years, with this applying to all commencing students as of the 1994-95 school year. The objective of the reform of upper secondary education, which was adopted by Parliament in 1991 was "to raise the general educational level and prepare everyone for lifelong learning, where recurrent education is becoming more common"\(^\text{12}\). The scope and contents of the vocational programmes were broadened, in part to strengthen the pathway from vocational education to tertiary study that had existed under the previous system. The reform was implemented in stages starting in 1992/93, the first cohort within the new system completing their education in 1997. A new individual programme was also introduced in the 1991 upper secondary reform, providing weaker students who find the 16 national programmes too theoretical with a new option.

In 1997 a new type of apprenticeship system was introduced in the form of pilot projects. In the new apprenticeship system 50 per cent of the time is to be spent in the work place rather than the required 15 per cent (APU) of the total over three years in the standard vocational programmes. The new apprenticeship system is thought to avoid the problems which existed in the system that was abolished in the 1970s and also to address the problems of quality in APU, in which schools in many cases have not met the required 15 per cent of work-based training.

Starting from the 1998-99 school year, students must have at least a passing grade in Swedish, English and mathematics to gain access to any of the 16 national programmes or the specially designed programme.

In 1996 pilot programmes at post upper secondary level were introduced (so called qualified vocational education or KY courses "kvalificerad yrkesutbildning"), in which one-third of the time is active work, (not traditional traineeship) where workplace learning and problem solving is executed in an overall educational context. The QVE programme is especially intended for fields in which there is shortage of labour.

In Sweden compulsory education has been open for adults for more than 30 years and as of 1997 a five-year programme was initiated for the renewal and development of adult education, the so-called “Adult education initiative” or “the Competence Lift”. The principal target-group are unemployed adults without three years of upper secondary education, but the intention is also to renew contents and working methods in all adult education and to disseminate the results and make them available for all. Special attention will also be paid to validation of competencies acquired outside the formal education system. The National Agency for Education is given the responsibility of drawing up a plan for the follow-up of the municipalities, which are in charge of implementation. The intention is to provide 100,000 places for SEK 3,000 million a year, funds that are allocated to the municipalities by the Swedish government over the five-year period. In addition, the Agency will be in charge of follow-up, evaluation, research, development and inspection work.

\(^{12}\) Government bill *Develop with knowledge* (bill 1990/91:85)
1.2 Initiatives to put in place forms of teaching and learning that are intended to encourage lifelong learning

Denmark

According to the Act on the Danish Folkeskole (compulsory education) "the content of the teaching shall be selected and organised so that it gives the pupils the possibility of absorption, a general view and a feeling of coherence. The teaching shall enable the pupils to acquire the forms of cognition and working methods of the individual subjects. The pupils shall - in an interaction with this - have the opportunity to practise and develop the acquired knowledge and skills through the instruction in interdisciplinary topics and issues."

The guidelines for the curricula require the choice of teaching and working methods, teaching materials and the selection of subject-matter in the individual subjects to be varied, so that it corresponds to the needs and prerequisites of the individual pupil. Thus, the teachers are expected to help promote each individual pupil's personal and social development according to his or her capability. Working methods, which are modified towards the pupil's attainment of greater self-reliance and maturity, are sought through close co-operation and ongoing dialogue between teachers, parents and pupils. The Folkeskole requires project work to be integrated into the two last years, and pupils' final examination assessment includes a project component. The guidelines also require that new information technology must be integrated into the teaching of all subjects (obligatory and optional) at all form levels. Also requirements on the information technology equipment of the schools are included in the guidelines. The pupils' benefit from the teaching is being evaluated on a continuous basis. This evaluation forms the basis of the guidance of the individual pupil with a view to the further planning of the teaching. To make sure teachers are well equipped to teach in the Folkeskole, the teacher education system emphasises interdisciplinary working methods and project work methods and evaluation forms and ICT.

"The Folkeskole in the Year 2000", a recent joint initiative taken by The National Association of Local Authorities, the Danish Union of Teachers and the Ministry of Education, targets the following areas: Quality and development - expectations and results; Challenges for the individual pupil; Knowledge and proficiency; Teaching aids and school buildings; A good start - the common basis; Parents and school; Management - challenge and responsibility; Target-oriented use of resources.

In the three-year Gymnasia and two-year HF programme\textsuperscript{13} the instruction is provided in the form of class instruction in the individual subjects. Project working is mandatory in certain subjects and is usually carried out in groups. There are also excursions, periods of practical experience, interdisciplinary project days, assemblies and study groups. The three- year HHX and HTX programmes have a more project-based pedagogy than the Gymnasium and HF programme. Teaching methods that emphasise the development of students' independence and their ability to argue, generalise and make abstractions are required. For all programmes the instruction must

\textsuperscript{13} The general education stream consists of the 3-year Gymnasium, Higher technical examination (HTX) and Higher Commercial Examination (HHX), which all can be entered after 9\textsuperscript{th} form and successful completion of advanced school-leaving examinations and the 2-year Higher Preparatory examination (HF), which can only be entered after 10\textsuperscript{th} form and successful completion of advanced school-leaving examinations.
constitute a whole and therefore interdisciplinary approaches are encouraged so that the subjects
give mutual support to each other.

The sandwich-type programmes in vocational education and training consist of theoretical
education at a vocational college (1/3 of the total time) which alternates with practical training in
an enterprise (2/3 of the total time). The theoretical education at the college must be organised in
due consideration of the students’ wishes, and the teaching must be differentiated in consideration
of the students’ prerequisites and interests. A "Q-strategy for the vocational college sector" was
initiated in 1995. The objective is quality development through self-evaluation and assessment of
results.

A recent project - the "Quality that can be seen" project - focuses on assessment of indicators
connected to prerequisites such as well-qualified teachers (subject-wise as well as
pedagogically), development orientation, the physical framework, qualified and motivated
students/pupils and support functions in order to attain the following targets:
1) The system must ensure an offer of education and training for all
2) There must be coherence in the education system
3) The resources must be used efficiently
4) High quality teaching
5) The population must have a high level of educational attainment with good vocationally
oriented and personal qualifications
6) The education system must contribute to the development of society and to economic growth,
and it must be sufficiently flexible to meet the needs of the labour market
7) Motivation for continued education and training

The Danish Government has decided that systematic evaluations are to be carried out at national
level for all levels of education. One or more evaluation institutes in the fields of primary and
secondary education will be established in accordance with the experiences gained from the
Centre for Quality Assurance and Evaluation of Higher Education (established in 1992, given
permanent status in 1999), which is responsible for monitoring higher education and serves the
needs of institutions that engage in self-evaluation projects.

In short-cycle higher education teaching focuses on application rather than on pure theory. In
medium cycle programmes teaching emphasises interaction between theory and practice and is
organised in a combination of different forms of learning, including for instance case studies,
lectures and exercises, problem-oriented project work and practical training. Long cycle Danish
university education emphasises student initiative. In between lectures students study in small
groups where they are expected to contribute actively. Part of their studies consists of
independent project and research work. The degree studies offered by the universities in Aalborg
and Roskilde begin with a one- or two-year basic course which qualifies students for a number of
further courses of study characterised by an interdisciplinary, problem-oriented approach.
Finland

The Finnish approach to lifelong learning is to move away from an educational system that has an institution-centred approach to one that encompasses different learning environments and forms of study. An aim is to broaden the focus of teaching methods to include independent study and project work in addition to classroom studies. Thus, flexible forms of training will be increased, and at all levels of the education system multi-faceted basic skills in information technology, information management and communication are required. The general objective is to organise teaching and non-teaching activities to give pupils the opportunity to develop their personalities and prepare them for an active role in society and working life. It is also emphasised that pupils shall attain the skills needed for choice of careers and further studies and that they are encouraged to continue developing themselves throughout their lives. Also environmental issues and international co-operation and peace are promoted in Finnish schools.

The new comprehensive legislation of 1999 places a new responsibility on pupils, namely pupils’ self-evaluation, whereby the pupils evaluate themselves and receive feedback about the evaluation made. In addition to evaluating the learning, the pupil’s work and behaviour is to be evaluated. Attention is to be paid to responsibility, initiative and to co-operative ability, as well as to the pupil’s consideration for others and for the surroundings, and respect for work and for obeying the rules.

Finland has separate curricula for upper secondary general and vocational education, but they both have their own national core curricula made by the National Board of Education. Entrepreneurship is part of the regular curriculum in all vocational institutions. In the study programmes the possibility of forming personal study programmes is increased and so is the possibility of choosing courses from different educational institutions.

Project work is one of the methods used in vocational education and training. The method of organising instruction is not regulated. Teachers can themselves choose the methods they apply in order to achieve the objectives set forth in the curriculum.

As for teaching arrangements, co-operation is required between upper secondary schools, vocational institutions and other educational institutions, so that a young person may utilise the region’s entire educational provision to the largest possible extent.

In the implementation of the strategy for lifelong learning, the development of teachers’ competence is emphasised. The content of both basic and supplementary teachers’ training is being developed in order to provide teachers with necessary skills in ICT and use of media for open and flexible learning. Also the strategy includes the development of new information products and services, including a global and open information network for education, training and research. The new national strategy for education, training and research in the information society will cover the years 2000-2004 and is based on the results from a recent project which evaluated the impacts of ICT on instruction and learning.

Norway
National Curriculum
The overall objectives for primary, lower secondary, upper secondary and adult education are stated in the Core Curriculum. The objectives the student is supposed to work towards are described in the frame of six different “types of human beings”; i.e. the spiritual human being, the creative human being, the working human being, the liberally educated human being, the social human being and the environmentally aware human being. Together these constitute an ordered whole “The integrated human being”. By studying the “contents” of the objectives in the framework of the six human beings, a presentation is given of a broad concept of knowledge which is thought to make children, young people and adults better prepared to face the challenges they will encounter later in life both personally, in society and in working life. Also the objectives are intended to aid schools and enterprises in organising a learning environment which will assist the students in their efforts to reach the objectives.

In addition to the Core Curriculum, the national curriculum of primary and lower secondary education (L97) includes principles and guidelines for education in primary and lower secondary schools and study programmes for specific subjects. The curriculum of upper secondary education consists of the Core Curriculum and the study programmes for each subject and course in upper secondary education, including apprenticeship training in an enterprise. The content of the study programmes is established through the specification of objectives and learning targets based on knowledge of which type of competence the future society needs and of the educational methods that most effectively will develop the required competence. Therefore all study programmes require the use of information and communication technology (ICT) and all schools have been under an obligation to provide the equipment needed over a five-year period since 1994. The Ministry has also developed a “Plan of Action for ICT in the Norwegian Education Sector” (1996-99) and has supported projects in schools that emphasise the use of ICT in learning.

As a response to the needs of the information society, the Parliament has decided on two new foundation courses to be established, one emphasising sales and service related subjects and one emphasising media and communication skills15.

Also the Competence Reform (reform on continuing education) presupposes the establishment of development programmes and funding schemes that encourage greater use of information and communications technology in teaching and the development of new flexible, user-adapted courses, adult teaching methods and media-based teaching.

Project work
To help develop the competencies that are envisaged in the Core Curriculum, (such as problem finding and solving, co-operation, creativity, scientific and analytical thinking, self-directed and team-based learning) project work is included in all study programmes as a compulsory teaching method. (Other teaching methods are to be developed in co-operation between teacher and student). Project work will allow the core skills of the Core Curriculum to be learnt in context

15 The new foundation courses will represent two new areas of study, with sales and service as a vocational pathway, and media and communication leading to either vocational qualifications or to access to higher education.
with other skills and knowledge. All students are required to take part in at least one interdisciplinary project work every year. The approach to the problem of the particular project must be related to the study programme for the subjects involved. As an aid for teachers, a guide for project work has also been developed. Reform 94 research states that project work is by a majority of students and teachers considered to be an important tool for developing competencies important in lifelong learning.

Assessment
A new regulation on exams, craft and journeyman’s certificates and documentation establishes how assessment of broad competencies within the meaning of the curriculum is to be done. In addition a guide book for schools and teachers, containing guidelines on individual and school-based assessment, as well as instructions for internal and external exams, has been produced.

Support materials and competence development for teachers
To help teachers adopt to the new role and the new teaching methods which result from the new educational content, methodological guides and other educational resources have been developed to assist teachers. The purpose is to give advice on how the objectives in the Core Curriculum and study programmes can be realised, including how classroom practice can meet the needs of an entire age cohort. This is achieved through providing examples and sharing experience.

In order to enhance the competence of teachers and enable them to teach according to the new curricula, the Ministry has worked out a plan for competence development and further training of teaching personnel in the primary and lower secondary schools. An important aspect of quality in upper secondary education is the training of teachers and instructors as well as business leaders and the members of examination boards and appeals boards. A plan of action for competence development and in-service training for these target groups has therefore been produced. Problem-based, self-directed and team-based methods are also included in the new framework curricula of teacher education.

Support materials for pupils and apprentices
Not only do teachers have to deal with the adaptation to new roles and a different educational content. Also for many pupils, going into the reforms means taking on a totally different role, which they need help and advice to master. For this reason two guidebooks were written, one for pupils and one for apprentices. "The Guide" is designed to help pupils and apprentices assume their responsibilities during the process of learning and to create a solid base for active participation, according to the principles and intentions of the Core Curriculum. "The Guide" helps pupils and apprentices understand the school or the enterprise as an organisation and their own duties and rights in this context. It also gives them advice on how to play an active part in the learning process as well as to seek information and knowledge through working with projects in and outside the classroom. “The Guide” is meant as a tool of planning and a support in the dialogue between teachers/instructors and pupils/apprentices and between pupils/apprentices in the choice of learning materials, teaching methods and forms of assessment.

Another important part of the support material for the reforms has been the production of new textbooks. The Ministry directed about NOK 60 million (US$10 million) via The National Centre
for Educational Resources (NLS) to publishers and publishing houses for this purpose. NLS is also responsible for providing information and other services to users in the education system. A School Network operated by NLS is a national meeting place for schools on the Internet. From 1997 to 1998 the number of users rose by 60 per cent.

**Evaluation of Reform 94**

The final reports from the evaluation of Reform 94 are now published, covering the five-year-follow-up period of the reform. (A similar evaluation is being carried out for Reform 97 of primary and lower secondary education).

A Reform 94 research project called “From Goal Document to Class-room Activity”16 which evaluated Reform 94 by its contents, shows that a majority of the teachers (two thirds) and students (three fourths) support the objectives of the reform and believe the new curricula contribute to more profitable learning. Teachers state they are satisfied with the reform’s contribution to professional renewal. Teachers view student dialogues as an important opportunity for students to express their opinions about the learning environment, but only one fifth of the students state that they are active participants in the learning process. White Paper no. 28 (1998/99) which was presented to the Parliament this spring envisages a national strategy for school improvement and assessment with particular attention being paid to improvement of learning and teaching environments and methods.

**Sweden**

**National curriculum**

All school activity must be carried out in accordance with fundamental democratic values. The goals and guidelines of both the curriculum for the compulsory school (Lpo 94) and the upper secondary school (Lpf 94) states that the school shall cater for pupils so that they develop their ability to work as well independently as in co-operation with others. Upper secondary school is based on a system with courses and academic points. Syllabi are developed for these courses. The syllabi give the students a large degree of influence over the content and organisation of the education, and influence on the school situation otherwise. About 10 per cent of the national programmes are left to students’ individual choice.

**Project work**

Project work is not mandatory in the Swedish compulsory and upper secondary school or in teacher training. The Swedish decentralised system, where schools are steered by goals and objectives, focuses on the results (not on the methods or ways that are used in order to attain the goals). There are no specific official recommendations concerning project work, but the goals and guidelines in the curriculum and syllabi emphasise broad competencies such as problem solving, creativity and co-operation.

**ICT**

In spring 1998 a report “Tools for learning- A National Programme for ICT in schools” was submitted to Parliament. The Parliament supported the initiative and the Swedish government is investing SEK 1.5 billion on the implementation of “the National Action Plan for ICT in

schools”. All municipalities have accepted the opportunity to participate in the programme which is being implemented from 1999-2001 under the authority of the Delegation for ICT in schools. The action plan covers pre-school, compulsory school, special school, sami school and upper secondary school.

All teachers who participate in competence development in Sweden will have a multimedia computer at their disposal. The intention is to make teachers confident with the use of ICT as a pedagogical tool in their teaching. The teachers will be offered the opportunity to keep the computer after finishing the competence development courses.

1.3 Transition patterns and participation rates

Participation rates and transition patterns and outcomes in Nordic Pre-schools and Compulsory Education

The foundation for lifelong learning is established in pre-school and compulsory education in the Nordic countries. A large number of pupils participate in pre-school activities which are seen to form the basis for continued schooling. Pre-school and compulsory education are also considered to be an important basis for promoting children’s development in a lifelong learning perspective. A basic principle governing Nordic compulsory education policies is that all children and young people shall have equal access to education, irrespective of gender, geographical residence and social and financial circumstances (the principle of an equal and all inclusive state school system - “enhetsskolen”). Education is seen as an important means, both at the macro and at the individual level, of promoting investment in human capital. Thus, the education shall be adapted to the requirements and needs of the individual pupils.

Compulsory education in the Nordic countries should not only be a preparation for working life or further study, but also an incentive for motivation for lifelong learning. This is evident in the general objectives of compulsory education in the individual countries:

- “acquire knowledge, skills and working methods which assist individual pupils in their development and to prepare pupils for life in a democratic society”. (The Danish Folkeskole)

- “promote pupils' personal development into balanced, healthy, responsible, autonomous, creative, co-operative and peace-loving individuals and members of society. Teach morals and good behaviour as well as the knowledge and skills necessary for life”. (The Finnish Peruskoulu)

- “provide pupils with knowledge and skills and, in co-operation with the home, promote their harmonious development into responsible people and members of society”. (The Swedish Grundskola)

- “support the pupils’ personal development and help them to reach knowledge and understanding of Christian and humanistic values, our national heritage, international issues, basic democratic principles. The training should make pupils capable of scientific
thinking and problem solving. This all together will make pupils integrated human beings, ready to face the challenges society has to offer” (Core Curriculum which applies to Norwegian primary, lower secondary, upper secondary and adult education).

In Sweden, Denmark and Finland compulsory education lasts for nine years (with an optional 10th year in Denmark and Finland), starting at the age of seven (although open for six year-olds if parents wish so in Sweden). This was also the case for Norway until 1997 when compulsory education for six year-olds was introduced and the length of compulsory education was extended to ten years (Reform 97)\textsuperscript{17}. In Finland, 75 per cent of the age group participate in separate pre-school education (for instance in day care centres). At the moment it is not compulsory for the municipalities to provide pre-school education, but as of 1 August 2001 it should be offered to the whole age group. About 98 per cent of six year-olds attend the optional pre-school class in Denmark. In Sweden as of 1st January 1998 a pre-school class was introduced for six year-olds, and although it is optional to attend, nearly 100 per cent of the children do so. Pre-school class is now integrated with primary school and child care and the compulsory school’s curriculum also applies to the pre-school classes and after-school care centres (as of the 1998/99 school-year).

Educational participation rates and transition patterns in Nordic upper secondary education and tertiary studies

Table 1 below shows that in 1996, educational participation rates were 3-7 per cent higher in the Nordic countries among 15-19 year-olds (the ages generally corresponding to upper secondary education), than the OECD average of 77 per cent. The rates dip below the OECD average in Sweden (by about 10-15 per cent) and in Finland (by about 7 per cent) the years immediately following upper secondary education (19-20 year-olds). Even though Norway and Denmark also experienced a dip in the rates of 19-20 year-olds in 1996, the rates still remained 1-5 per cent above OECD average. The overall dip in participation rates in the four countries at ages 19-20 can be ascribed to a number of factors:

- Sweden, Finland and Norway practice conscription for young men (optional for women) and most young men complete their military service or community service at ages 19-20 before entering the labour market or entering tertiary studies. (In Denmark only 1/3 of 18- year-old men are drafted)
- deferred tertiary study as the result of foreign travel or studies abroad (this applies to all four countries)
- deferred tertiary study caused by too few places compared to the level of demand, especially within popular fields of study (especially in Sweden and Finland)
- selection mechanisms that favour those with work experience (possibility of accumulation points) upon entry to tertiary study (Sweden).

From the ages 20-21 onwards, young people in all four countries participate in education at a greater rate than the OECD norm up to their late 20s.

\textsuperscript{17} This concerns children born in 1991 and later.
Table 1 Educational participation rates, ages 15-24, 1996

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</tbody>
</table>

Source: OECD

**Transition from compulsory education to secondary education and work and participation and completion rates in upper secondary education**

The first opportunity to move from education to working life in the Nordic countries - i.e. the first transition phase - is at the completion of compulsory education, although few do so. Upper secondary participation rates have been growing in all four countries in the 1990s, with Sweden ranking highest of the four countries in 1996. In Sweden, only 4 per cent were not in upper secondary education one year after the ending age of compulsory schooling. The high school participation rates in Sweden are inter alia explained by the fact that a large number of jobs have been lost during the 90s, due to the economic recession. Employment rates fell until 1997, and
this has had great impact on youth. For Swedish youth under the age of 19 who leave education, there is almost no prospect of employment today. Thus, the deteriorating employment situation has been an incentive for youths to stay in education and more and more take education today.

In 1996 participation rates among 16 year-olds were 93 per cent in Finland, Norway and Denmark. In Finland the participation rates were 92 per cent among 17 year-olds, which means that 8 per cent were not in education one year after the ending of compulsory education. An optional 10th year is offered in Finland to those school leavers who do not manage to get a place in upper secondary education (4 per cent in 1996). Of the 7 per cent who did not enter upper secondary education after completing 9th form in 1996, 5 per cent had entered within a year. Thus 94 per cent entered the same or following year after completing 9th form.

In Denmark and Norway there is a dip in school participation rates by about 10 per cent for youth aged 17. Whilst the total participation rate remains high at 93 per cent at age 17 in Norway, the dip in school rates in Denmark corresponds to the dip in total participation rate, which is down to 82 per cent at age 17 (which also corresponds to the OECD average at that age). This means that 18 per cent of young Danes were not in education one year after the ending age of compulsory education (16), thus making participation rates at age 17, 10-14 per cent lower in Denmark than in the other Nordic countries. This may be explained by the following factors:

1. Some have found a job after finishing 9th or 10th form and some are unemployed (very few)
2. Some have chosen to spend a year abroad as exchange students or to travel
3. Some drop out (particularly at vocational colleges, some drop out after the introductory course, because they do not succeed in finding a training place in an enterprise).

Drop-out rates in Denmark have, however declined considerably in the 90s compared to the 70s and 80s due to the policy of diversification of choices at upper secondary level. Especially, the flexibility in the new individual programmes has reduced the number of drop-outs at this age. Today about 5 per cent leave education completely after finishing compulsory education in Denmark and in 1995 the proportion of a cohort completing an upper secondary education was 83 per cent.

Another factor delaying the transition process in Denmark is the abundance of choices of programmes at upper secondary level, which makes it possible for young people who start one

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18 According to the Swedish Background Report nearly 50 per cent of young people between 16-19 were in the labour force in 1990, but this percentage had fallen to 26 per cent by 1996. During the same period the percentage of young people in the 16-24 age group in the labour force had fallen from 82 per cent to 63 per cent.
19 Source: Finnish Background Report.
20 The dip in school rates at age 17 in Norway is explained by the fact that the figures do not include students in specially designed courses (særløp) where training and education is supplied by an enterprise after the foundation course, students who attend folk high schools or private schools that are not covered by the Act on Upper Secondary Education.
21 No one is denied the right to study for a journeyman’s exam as the college is obliged to provide a simulated training place for those who fail to find an apprenticeship place.
22 Source: Danish Background Report.
programme to change programmes during their upper secondary education\textsuperscript{23}. In 1992-93, 12 per cent of students continued to an HHX or HTX course and another nine per cent continued to a vocational education and training course\textsuperscript{24} after completing a general upper secondary education (Gymnasium or HF). Usually, the transition period is delayed by about a year before they start the new course.

The Danish new policy initiatives, which include the reduction of vocational programmes from 90 to 7, are inter alia carried out in response to the delayed transition patterns of Danish youth as a result of the possibility for “double dipping” between programmes. The proposed measures have much in common with the measures implemented in Norway in the 1994 Reform of upper secondary education and training. Prior to Reform 94 the Norwegian system of vocational upper secondary education was very similar to the Danish one, with an abundance of very specialised courses. These courses acted as bottlenecks, where students could not proceed to the next level, and instead moved horizontally in the system to take another course, or else dropped out of the system. This type of “double dipping” has been reduced after the implementation of Reform 94 and drop-out rates have fallen. There is however, as in Denmark a problem with mismatch in supply and demand of apprenticeship places. Reform 94 research shows that those who attend an alternative advanced course II, because they have failed in finding an apprenticeship place, have lower completion rates and higher drop-out rates than those who have 2 years of training and productive work in an enterprise. Therefore efforts are currently targeted at meeting challenges of using differentiated teaching methods and at finding flexible solutions which involve work-place training.

Since the 1994 reform in Norway, flows between compulsory and upper secondary education have increased. In 1996 only 7 per cent were not in education one year after the ending age of compulsory education. This is 11 per cent above the OECD average. The incident of “double dipping” in vocational programmes has been reduced as a result of the 1994 reform. As of today, the statutory right to three years of upper secondary education has to be exercised within four years. As the normal progression of vocational programmes is four years after Reform 94, students attending these programmes have not been able to change their minds during their course of study in fear of losing their statutory right. Students who attend the general education pathways, on the other hand, have been able to change courses once without losing their right. In White Paper no. 32 (1998/99) it is proposed that the statutory right should be extended by one year. This would make it possible for those who attend vocational programmes to change their minds once and still be guaranteed a full qualification as long as the right is exercised within five years.

The total participation rate in Norway was 83 per cent for 18 year-olds in 1996, i.e. the same level as Finland and about 15 per cent above the OECD average. The average age of leaving education in Norway is 19, while it is 18.8 in Finland\textsuperscript{25}. A majority of young men in Finland and Norway

\textsuperscript{23} According to OECD (1998) Education at a Glance: OECD indicators one in five of all young people go on from their first upper secondary programme to graduate from a second.


\textsuperscript{25} Compared to 19.4 in Denmark and 18.7 in Sweden. Source: OECD database.
finish their military or community service at age 19-20 and many, both men and women travel before applying for a job or tertiary studies.

Even though in theory all educational channels are open to both young people and adults at upper secondary level, there is a mismatch problem between supply and demand in certain fields of study. Especially in Sweden, Finland and Norway there are geographical disparities as many upper secondary schools, especially in the more rural areas, have a limited number of study places in more popular fields. In Norway this has particularly affected adults who often discontinue their studies as the advanced course of their choice is not offered in their county\(^{26}\).

In both Denmark and Norway there has also been a mismatch problem in the supply and demand of apprenticeship places, particularly in certain industries, and efforts are now being made to counterbalance this, both through anticipation and guidance measures in co-operation between education and labour market authorities and the social partners. Anticipation and forecasting of education and labour market needs is a high priority also in Sweden and Finland, as many of the young people and adults who do not obtain a place in the field of study of their choice are recorded in the statistics among those who have discontinued their studies.

### Transition from secondary education to tertiary education or work and participation rates in tertiary education

#### Denmark

The tendency of young Danes to change courses during upper secondary education delays entry into tertiary education. In 1996, 31 per cent of 20 year-olds were still enrolled in upper secondary education at age 20. Tertiary participation rate at the same age was only 10 per cent, that is 9-16 per cent below the other three countries and 16 per cent below OECD average\(^{27}\). While at the tertiary level time limits are placed upon the amount of time for which student grants can be received, this is not the case at secondary level.

Because of delays in commencing tertiary study, the first age at which tertiary participation was at its maximum in 1996, was 23 (the actual participation rate was 25 per cent)\(^{28}\). Young Danes also appear to take a longer time to finish tertiary education than the OECD average. In part as a response to delayed transition patterns in tertiary education, the three-year Bachelor’s degree, followed by the two-year Master’s degree was introduced in 1992 to replace the traditional Candidate degree. So far, it seems as if neither students nor Danish employers accept the Bachelor’s degree as the final degree for entering the labour market. Therefore most students continue into a Master’s programme instead of entering the labour market. At age 26-29 as many as 12.1 per cent of young Danes were still enrolled in tertiary education, whilst the OECD average was 6.8 per cent. The total duration of the transition period in Denmark was 8.3 years in 1996 (only exceeded by Norway among OECD countries), an increase of 3.3 years since 1989.

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\(^{26}\) Many of the counties have not fulfilled the 75 per cent quota reserved for intake of adults in upper secondary education.

\(^{27}\) Source: Country Note on Denmark.

\(^{28}\) Source: OECD database.
The average age of leaving upper secondary education was 19.4 in 1996, while the average age of entering the labour force was 24.3 years\(^{29}\).

The lengthy transition period for Danish youth from education to work must also be seen in the context of the education and training systems that have been designed for adults, as the boundaries between youth and adult education is unclear often with overlapping age requirements. The adult education school, or VUC, is open to all Danes who are 18 or older who wish to complete the Folkeskole or take the examinable courses of the HF programme in upper secondary education. The labour market training centre, or AMU, is open to those who are 20 or older and offer modular vocational courses (often short-term) to prepare people to enter the unskilled and semi-skilled occupations in the economy. However, in recent years AMUs have also offered programmes in the technical and commercial colleges and vice versa. Young people in their 20s might therefore be found both in the Gymnasia or the VUC and in the technical and commercial colleges or the AMU.

**Finland**

In Finland, transition from upper secondary education to tertiary education has as in Sweden been a delayed one due to a shortage of tertiary places. 98 per cent of upper secondary leavers apply at least once and three in four apply within the first year of completing upper secondary education\(^{30}\). The average delay has been two years. This “backwater effect” (due to capacity problems within certain fields of study) has also been evident in Norway, Sweden and Denmark and many upper secondary graduates wait until the following year to reapply for their preferred study place.

The first age at which tertiary participation was at its maximum in Finland in 1996 was at 22\(^{31}\), while the actual participation rate at that age was 33 per cent (the highest participation rate at this age of the four countries and 11 per cent above OECD average). One reason for the delayed entry to tertiary studies is that only about a third of the young people who complete the matriculation examination each year are admitted to the universities as there is a mismatch in supply and demand in certain fields. Especially, students from vocational programmes have had limited access to tertiary study, but with the expansion of all vocational programmes to 3-year-programmes (after the year 2000) providing eligibility for tertiary study, together with the expansion of the non-university AMK institutions, one can expect a higher participation rate of school-leavers from vocational schools.

The Finnish government has set a target to provide 66 per cent of the age group with places in tertiary education. Whether the expansion of the non-university sector is enough to meet this target might be questioned. The Finnish transition pattern from education to work is as follows: young people who have chosen the vocational route of upper secondary education enter the labour market at the age of 18-20, while those who have chosen general upper secondary school education, enter the labour market at the age of 22-26, depending on the years spent in tertiary study\(^{32}\).

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\(^{29}\) Source: OECD database.

\(^{30}\) Source: Finnish Background Report.

\(^{31}\) Source: OECD database.

\(^{32}\) Source: Finnish Background Report.
Norway
As in Denmark, there is in Norway a relatively high proportion of young people who are still taking part in education in their mid 20s. Tertiary participation by 18-21 year-olds doubled between the mid-1980s and the mid-1990s. The first age at which tertiary participation was at its maximum in 1996 was at 21 (the actual participation rate at that age was 29 per cent). In 1996, 27 per cent of 24 year-old Norwegians were participating in education compared to an OECD average of 17 per cent. This is inter alia caused by tertiary education progression rules, which allow periods of study to be lengthy. Since 1995 however, some result-oriented allocations have been introduced in the state funding of the higher education institutions to provide a stimulus for the institutions to encourage more of their students to complete their studies within the prescribed time limits. In 1996 the average age of at which half of the cohort had left education was 19, while the average age at which half of the cohort had entered work was 24.6, and the total duration of the transition period was 8.6 years, the highest of the four countries.

Sweden
A unique feature for Swedish transition patterns is the temporary peak in the proportion neither in education nor in the labour market at the ages of 19-20 (1 in 6 are found in neither). However, the proportion of young people under 19 who are not in education and not in the labour market is very small (below 2 per cent). At the beginning of the decade 50 per cent of the cohort were settled in work at the age of 19: today this level is not achieved until about the age of about 24. The total duration of the transition period has increased from 2.7 years in 1990 to 7.6 years in 1996, and the part of the transition period that is spent in post compulsory education has increased from 2.4 years in 1990 to 3.6 years in 1996.

These trends are explained both by the extension of all upper secondary programmes to 3 years, and by an increase in tertiary study participation (during the 90s participation rates have been doubling among 19-22 year-olds in Sweden, but levels drop again among 21 year-olds). In addition, in a global and knowledge-based society young people’s attitudes are changing and young Swedes are not an exception, so many engage in travelling and other pastimes before entering the labour market or tertiary study and many choose to do so at age 19/20. Among young men military or community service is usually attended at age 19/20.

1.4 Participation in part-time, weekend and holiday jobs
Youth in all four countries learn the demands of the labour market at an early age, as a large number of young people combine studies with part-time jobs in evenings, weekends and holidays. Many do so to finance their studies (especially at tertiary level), but young people have also come to realise that working may in fact facilitate entry into the labour market after graduation. Young people who can demonstrate that they have acquired necessary work-related skills during their student years are often preferred by employers when hiring, especially if the part-time job they had also was related to their field of study. Young people appreciate this and therefore one can see an increasing tendency among young people to work part-time while studying in all four

33 Source: OECD database.
Denmark has the highest proportion of students in part-time jobs. Among 15-19 year-olds, 59 per cent have part-time jobs while studying. Among students over the age of 19, the proportion has grown during the 1990s and today about 80 per cent combine their studies with a job\(^{35}\).

In 1995 about one in four students in Finland combined work and studies. 14 per cent of upper secondary students worked part-time during the year, while a quarter of tertiary students (predominantly men) worked part-time during the year. A total of 42 per cent of tertiary students had some kind of job in 1995. Among post secondary students in AMK institutions, a little less than a fifth had a job, whereas the figure for students at vocational institutions was a little less than one tenth\(^{36}\).

Table 2 below shows the percentage of students combining part-time work and studies in Norway in 1998\(^{37}\).

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
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<tbody>
<tr>
<td>Single, aged 25 and under</td>
<td>58</td>
<td>47</td>
</tr>
<tr>
<td>Single, aged 25 – 29</td>
<td>70</td>
<td>58</td>
</tr>
<tr>
<td>Single parents</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Couples without children</td>
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<td>63</td>
</tr>
<tr>
<td>Couples with children</td>
<td>44</td>
<td>63</td>
</tr>
</tbody>
</table>


Since there are only four university towns in Norway and most state colleges are situated in urban areas, many students have to move away from home to attend. Most students need to supplement student incomes, particularly if they attend tertiary education in the university towns, where housing costs are relatively high\(^{38}\).

A Swedish upper secondary school leaver survey of 1997 showed that 12 per cent of students had worked before or after school, 22 per cent had worked during weekends, and 40 per cent had worked during school holidays. In total, 57 per cent had combined their upper secondary education with employment. At tertiary level, students are involved in part-time jobs at about twice the rate as upper secondary students\(^{39}\).

\(^{35}\) Source: Country Note on Denmark.
\(^{36}\) Source: Draft Country Note on Finland.
\(^{38}\) Student housing is available for 14.5 per cent of the student population and most students have to rent housing on the private market at high costs.
\(^{39}\) Source: Draft Country Note on Sweden which points out that Labour Force data tend to underestimate the extent by which students combine part-time jobs with studies.
One could argue that working during studies lengthens graduation time for students and thus also the transition period, particularly when generous student grants are combined with earnings from part-time jobs, allowing student incomes to be close to a skilled worker’s income level. This might be suggested to be the case in Denmark and Sweden, where student income policies are particularly generous. (All young Danes over the age of 18, regardless of their parents’ means, are entitled to a basic financial assistance grant. For those under the age of 20 the grant component is larger and the loan component smaller. The level of grants and loans for those who are over the age of 20 is independent of parental income. Attendance requirements are linked to the youth programmes, while tertiary students are linked to study achievement. In Sweden, the income support measures for those under 19 are not subject to a parental income test, while the grant for those aged 20 or above is linked to a study rate of at least 75 per cent of the curriculum requirements.

This might work as an incentive towards delaying tertiary study. However, the benefits of part-time work seem to exceed the costs, particularly taking into account the personal benefits of having work experience upon applying for a job. Also part-time working students contribute to the national economy (many at least at tertiary level have semi-skilled jobs), and once transition to work is done, it is more likely that young people with work experience settle more quickly in the labour market. This is confirmed by a Swedish study, which concluded that it is more likely that students who have had part-time jobs while studying are employed one year after completing upper secondary education, than those who had not worked at all.

1.5 Impact of globalisation and internationalisation on the transition phase

Overseas study and travel
Internationalisation and globalisation have great impact in all four countries in the transition phase. An increasing number of young people spend time abroad sometime during their transition phase, either to travel or to study. Upper secondary teachers regard young people who have spent a year as an exchange student as an asset to their own teaching. Also provisions are being developed that facilitate the transition process for these young people when they come back to the mother country. In Norway, for example, exchange students don’t have to retake courses if tuition is equivalent in the course they completed during their stay abroad.

All four countries participate fully in the EU programmes Leonardo da Vinci and Socrates, and internationalisation also has a high priority at the four countries’ higher education institutions. The majority of higher education institutions have entered into exchange agreements for staff and students with institutions in other countries, i.e. particularly in the EU\(^{40}\) Member States, the USA and the other Nordic countries. An increasing number of students in the four countries also follow some or all of their courses abroad.

A trend in all four countries is that particularly many 19 year-olds choose to spend time abroad either for studies or travel before entering tertiary studies. In Sweden, Norway and Finland this is

\(^{40}\) Denmark, Finland and Sweden are EU members, while Norway fully participates in EU programmes through the EEA Agreement.
encouraged. In Denmark however, concerns are that the transition phase is too long and it would be better if young people spend time abroad during their studies, whether this be at upper secondary or tertiary level. As pointed out in the Country Note on Denmark, this might delay the transition period, particularly in tertiary education, as young people most likely will return with new impulses and new career plans that might make them interrupt the course of study they originally started. This would both add to the duration of transition and the overall costs of tertiary education.

Also globalisation and internationalisation have impact on contents in the four countries’ curricula. In all countries internationalisation is included in the curricula’s learning targets. Also different measures and plans are implemented both at national, municipal and school level to promote ethics, tolerance, multiculturalism and to combat xenophobia and racism. In instruction international issues are emphasised, particularly in language teaching, history and social sciences, but also in vocational courses and apprenticeship training students and apprentices are supposed to learn about the international development of the particular trade they are studying. Some schools also specialise in establishing contacts across national boundaries, and the teaching will most often include at least one study visit to another European country.

1.6 Educational attainment of the adult population

Table 3 below shows that all four countries have upper secondary completion rates among adults that are well above the OECD average of 60 per cent. Particularly, completion rates are higher than OECD average in the age groups 25-34, 35-44 and 45-55. Norway ranks highest both at upper secondary and university level of the four countries taking the whole adult population (25-64 year of age) into account and also well above the OECD average, particularly at upper secondary level. Denmark also has university level completion rates in all age groups above the OECD average, while Finland and Sweden have completion rates below the OECD average in the age group 25-35. In Finland university level completion rates stay on the OECD average, or 1-2 per cent below the OECD average in the other age groups. In Sweden however, a distinctive feature is that a smaller proportion of 25-34 year-olds than of 45-54 year-olds has a university-level qualification. This means that the generation that left upper secondary education in the 1980s are less likely to obtain a tertiary qualification than young people of the same age in Denmark, Finland and Norway. This is a very rare feature even compared to other OECD countries. Even though enrolments in higher education have grown in Sweden in recent years the gap has not yet been filled when it comes to completion rates between these two age groups. The tendency is that the proportion of those gaining a tertiary qualification has been falling, especially in the non-university sector. This feature is partly explained by the fact that there was, from the mid 1970s to the late 1980s, a favourable labour market in Sweden and it was easy to obtain a job without tertiary qualifications. This did however change with the recession at the beginning of the 1990s, when a great number of jobs were lost in Sweden.
Table 3 Educational attainment of the adult population, 1996

<table>
<thead>
<tr>
<th>Age</th>
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<th>Finland</th>
<th>Norway</th>
<th>Sweden</th>
<th>OECD Average</th>
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<tr>
<td>Per cent with at least upper secondary education</td>
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<td>25-34</td>
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<td>25-64</td>
<td>67</td>
<td>82</td>
<td>74</td>
<td></td>
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<tr>
<td>Per cent with at least university level education</td>
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<td>25-34</td>
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<td>12</td>
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</table>


1.7 Is there a Nordic model of transition from initial education to working life?

Common to all countries is that very few enter working life after compulsory education. Another common trait is that transition patterns are becoming more blurred. It is therefore becoming more and more difficult to present any absolute transitional phases. In all countries it is increasingly common to start work while studying and to intersperse education with periods of travel and studies abroad. The transition process towards settling in permanent employment is characterised by periods where the young person is alternating between odd jobs, studies, overseas travel, periods of unemployment, job-seeking and temporary employment.

In the Nordic countries the clearest direct transition points to working life occur upon graduation from vocational education at school or after obtaining a trade or journeyman’s certificate and after completing higher education, whereas the upper secondary school general areas of study are chiefly a passage to tertiary study. There is a tendency for many of those who complete upper secondary education not to continue their studies immediately, but to temporarily move out of the education system. For boys, this is influenced by compulsory military service or community service. For both boys and girls it is influenced by periods of temporary jobs and travel.

This is probably a trend that will continue taking into account the policy changes that are currently being carried out in the Nordic initial education and training systems to improve the opportunities for the adult population to go back and finish an incomplete education not only at primary and secondary level, but also at tertiary level. From a young person’s point of view this will benefit young people in that they have an incentive to delay transition, as there are ample chances to complete the education later. From a policy maker’s point of view this might increase overall costs of the transition process.
In all countries there is also a tendency that it takes a long time for young people to settle into permanent jobs. Many young people have temporary, often short-term jobs until late into their 20s. It seems likely that young people in the future will change jobs more often than older age groups, and that the stability of having a permanent position is not regarded to be the asset it is found to be among older age groups.
Chapter 2: Is there a Nordic approach to building safety nets for those at risk?

2.1 Explicit or implied rights to education and training in the transition phase and efforts to prevent school failure and reduce number of early leavers

In the Nordic countries as in other OECD countries, the traditional type of early school leavers have been young people who have received low grades at school and are often part of social milieus which are less likely to support education. This includes students with reading or writing disabilities, or problems with mathematics, those whose family situation is difficult, and those who find school to be too theoretical and boring. A new category of early school leavers has, however, been developed, namely those who do not want to pursue upper secondary education. Characteristic of this group is that they manage on their own and are able to find temporary employment. The futures of both these groups of early school leavers will depend on the existence of a youth friendly labour market and thus on the further development of the possibilities located in the intersection of work and employment. This also challenges the upper secondary school to develop learning environments that go beyond ordinary classroom teaching and that instead focus on factors that motivate learning for life, such as student participation, communication, responsibility, self realisation, and feelings of personal well being and mastery.

In Denmark the municipalities are required by law to operate municipal youth schools that both supplement and serve as an alternative to the regular compulsory school programme. The Municipal Youth School caters for 14 to 18 year-old youth. Pupils can meet the obligation of compulsory education fully by attending a youth school after seven years in the regular Folkeskole. Youth schools are characterised by alternative ways of structuring the day-to-day work at school through both full-time and part-time education offered in afternoons and evenings. According to the Country Note on Denmark around 60 per cent of 14-18 year-old Danes attend youth school activities each year. Those who do not fit in or are at risk of dropping out of the regular Folkeskole may also attend continuation schools. This type of school offers religious, political or special education programmes or specialities that are not offered by the public schools.

In Denmark an option in upper secondary education is open to all students, through the individual programmes which are under municipal administration. In addition, the apprenticeship programme (sandwich programme) offered at the commercial and technical colleges is open to all. Admission to the Gymnasium, HF programme, HTX and HHX programmes however, depends on the scores one achieves in one’s school-leaving examinations and the recommendations of the faculty of the Folkeskole. But there is free intake for both young people

41 Continuation schools are privately governed boarding schools mainly for youth who are in difficulty with their families.
and adults who fulfil the entrance requirements.

In Norway the statutory right to upper secondary education for 16-19 year-olds includes the right for students to be admitted to one of three foundation courses chosen by themselves. Students with special needs do, with the support of expert opinion, have the right to a special, adapted education and are entitled to be admitted to their first-choice foundation course. They are also entitled to exercise the statutory right within five years as opposed to the normal four years of other students. In White Paper no. 32 (1998/99) it is proposed that the statutory right should be extended by one year (six) for this group of students. As a consequence of the statutory right, the 19 county municipalities have an obligation to provide upper secondary education for all students between the ages of 16 and 19. The county municipality must also provide an additional number of places for other groups, among those adults, equal to 375 per cent of the number of students between 16-19 (i.e. three year cohorts).

In Sweden it is the obligation of the local authority to provide education in national, specially designed or individual programmes at upper secondary school for all young people resident within the local authority area and who have completed nine-year compulsory school or equivalent tuition. The obligation applies until and including the first six months of the calendar year the young person becomes 20 years old (may be extended to age 24). Schools and local authorities are required to attempt to provide all students with access to a programme of their first choice. The individual programme provides an option for students who are not qualified to be admitted to the national programmes or specially designed programmes. Students with special needs, e.g. pupils from compulsory special schools, shall be given an opportunity within an individual programme. The programme also provides introductory courses for immigrants and it also caters for those who want to combine work or apprenticeship training with studies (either in subjects the student lacks from compulsory school or in vocational or general subjects at upper secondary level). The programme thus provides an opportunity for those who want to transfer to the national programmes at a later stage.

In Finland, all those who have completed the comprehensive school are eligible to study in upper secondary schools or vocational schools or in the apprenticeship programme (open for youth as of 1997). It is up to the student to decide the pace of their studies within the limits of the course supply and the maximum time allowed to complete the studies. Municipalities provide education in upper secondary schools and mostly federations of municipalities provide education in vocational institutions.

The Nordic countries provide tuition for both young and adult immigrants and also the opportunity to choose the respective country’s language as a second language. However, among young people at risk, young migrants are particularly vulnerable. Where measures have been implemented to reintegrate migrant youth who drop-out, the likeliness of success and reintegration into school or the labour market is about 50 per cent lower for this group than for native youth42. Migrant youth also tend to be unemployed for a longer time than natives do and they therefore also use longer time to settle in the labour market.

42 Source: Country Note on Sweden
2.2 Policies and programmes to follow up and address the needs of young people who leave upper secondary education without having obtained a qualification

In Sweden among those who left compulsory education in 1993 22 per cent of men and 24 per cent of women had not obtained a qualification by 1996. The individual programmes are an option for students who have slipped outside the upper secondary school’s national programmes or the specially designed programmes without having obtained a qualification (see also section 2.1). Even though the main intention of the individual programme is to provide a route back into a national programme, it is possible for a young person to complete three years of upper secondary education within such a programme. According to the Swedish Country Note the number of students in the individual programme in the second year is only around 10% of the number who commence it. This might be an indication of the success of the individual programme in providing pedagogical approaches that address the needs of young people who find schooling too theoretical and too little connected to life outside of the school.

Today about 20 per cent leave upper secondary education in Denmark without having obtained an upper secondary qualification. The aim of the Danish government is to increase the qualification rate to 95 per cent by the year 2000. There are, however, many possibilities for students aged 16-25 who have slipped outside the regular upper secondary education and vocational education programmes without having obtained a qualification. These include the Open Youth Education Programme (FUU), the Vocational Basic Training Programme (EGU) and the Production Schools.

- The Open Youth Education Programme (FUU) was introduced in 1995 as an alternative for youth aged 16-25 who do not use or complete the other secondary education programmes. The FUU programme must offer challenges both for "strong" and "weak" young people, and may constitute both an alternative to and an opening for the existing programmes. An individual course plan of 2-3 years’ duration is developed in co-operation between the young person and the school. The course is intended to give the young participants many-sided and personal qualifications and strengthen their competence and interest in either continuing in the education system or in the labour market. The course has a very broad aim and must consist of at least three to four different parts of known or new courses and course sequences, e.g. courses at the free boarding schools, production schools, the municipal youth school, vocational colleges or vocational adult education centres, HF -single-subject courses etc. Also exchange and study visits abroad as well as municipal projects and activities may form part of the course.

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43 In 1996 upper secondary completion rates among women were 78 per cent and among men 76 per cent among those who left compulsory school in 1993. Source: Background Report on Sweden.
• **Vocational Basic Training Programme (EGU)** was introduced in 1993 and is aimed at less academically minded young people, who would otherwise be at risk of not completing a vocationally qualifying course of education. The course lasts for two years, and consists mainly of practical training, while 20 to 40 weeks are set aside for theoretical education at school. The school part of the course must take place at recognised educational institutions such as technical colleges or AMU centres. It is the individual municipality which is responsible for organising the vocational basic training courses in co-operation with the local educational authorities. The courses allow for flexible organisation according to the individual young person’s interest and abilities and the programme is designed at the municipal level jointly by the young person and a counsellor. The EGU programme is directed towards simple unskilled labour market occupations and is thus not covered by apprenticeship which provides skilled qualifications recognised by the social partners. 2/3rds of the municipalities offer this option and of the 1,000 young people who attend the programme two thirds continue in education or have managed to get a job after completing the course.  

• **The Production Schools** are open, flexible institutions that build on the philosophies characterising liberal adult education. The schools are open for youth under the age of 25 who do not have formal qualifications, whether or not they are unemployed. Some enter directly from the Folkeskole, but most after having tried other youth education programmes. The schools are open 48 weeks of the year and about 12,000 students attend a year (average of four months each). All learning is project based and subject matter is always supposed to contribute to the running of the school or the local community in which the school is located. Theory and practice are integrated in the learning process, as learning is by doing. The students produce real goods and services in understanding with the local businesses. Social and cultural activities are mixed with general education and the whole community participates in the school’s activities. The production schools are privately owned and run by a board. On the school board both municipalities, employers and trade unions and members of the community are members.

A recent study referred to in the Country Note on Denmark shows that 60 per cent of students continue on to further education or to a job, 10 per cent continue on to other projects such as labour market programmes, 15 per cent move on to other types of activities such as military service, travel abroad or child rearing and 15 per cent remain unemployed.

There are examples of the pedagogy found in production schools also in the other three countries. However, many mainstream educational institutions might succeed in re-motivating those at risk, if similar pedagogical approaches to learning had become more commonplace. Even though the curricula in all four countries include objectives that encourage broad competencies such as responsibility, student participation, learning by doing, problem solving etc., and teaching

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44 Source: Country Note on Denmark.
45 Originating with N.F.S. Grundtvig and characterised by flexible learning.
methods are not specified (except for project work in Norway), thus allowing for more flexible allocation of time within the school year, it seems that most mainstream schools do not encourage such measures or are unaware of the freedom that is found in the concept of management by objectives.\textsuperscript{46} This might be caused by old traditions, but also other rules and regulations that apply to mainstream institutions might discourage such measures to be tried out, as well as pressure from parents and other interest groups that have a say in the learning process. However, measures to counterbalance the relics of old traditions in mainstream pedagogical approach are being implemented in all four countries, as is described in section 1.2.

**Follow-up Services in Nordic countries**
In Denmark, the municipalities are legally obliged to follow up all young people under the age of 20 (and in some areas this is voluntarily extended to those under the age of 25) who drop out of education without obtaining a qualification. Schools are also legally obliged to notify the municipality and guidance service of such drop-outs. If, on being contacted, the young person is found not to be in education, unemployed or in part-time or temporary jobs they are called in for a personal interview at the guidance service, where they receive a personal adviser or mentor. In cooperation with the adviser a personal action plan is drawn up that involves work, education and training. The plan will be reviewed at least twice. The aim is to reinsert them into mainstream education, so that they can obtain a recognised qualification.

Since 1994 the county municipalities in Norway have been under a legal obligation to establish a Follow-up Service for young people who have a statutory right to education, but who are not in training or employed, including those whose education is discontinued. The object of the follow-up is to provide the young people in question with opportunities, which will lead to formal competence. The follow-up shall take place in close co-operation with the various municipal, county-municipal and government institutions that today have part responsibility for this group. Each young person who accepts an offer of assistance is assigned a personal counsellor and is required to develop a personal action plan, which is regularly reviewed. Of the 7 per cent that were in the target group of the Follow-up Service in the 1996/97 school year, about 4 per cent accepted an offer of education or work during the course of the school year. 1.5 per cent were still being followed up by the counties. Less than 0.5 per cent rejected help from the Follow-up Service and about 0.3 per cent were impossible to trace. The target group of the Follow-up Service has been stable, 7 per cent also in the 1998/99 school year. Of these 0.4 per cent refused an offer and 0.5 were impossible to trace. Reform 94 research registered that 20 per cent of those registered in the Follow-up Service did not want to pursue upper secondary education and had managed well on their own.\textsuperscript{47} In addition, as part of the implementation of the Competence Reform a system is being elaborated whereby non-formal qualifications can be considered for admission to higher education.

Swedish municipalities have since the early 80s had follow-up responsibility for all young people

\textsuperscript{46} This is also documented through the research based evaluation to Reform 94 in Norway. Students report they have yet to experience the increased attention to student participation emphasised in the study programme objectives, even though teachers state they are emphasising student participation to a larger degree than before the reform.

up to the age of 19, who have not continued from compulsory school to upper secondary school, who have dropped out of upper secondary school prior to obtaining a qualification or who are without a job. The object of the follow-up is quick re-insertion into the education system. The local authority can continue to assume responsibility according to law 1997:1268 which oblige local authorities to follow up young people up to the aged 20 to 24 who are outside the educational system. In the 1990s, approximately 6-7 per cent have been in the target group of the Follow-up Services.

In both Norway, Sweden and Denmark the young people who accept an offer from the Follow-up Service are offered different education and training measures such as trainee places in firms, subsidised employment, different education and training opportunities or combinations of these. In Norway the most successful approach to re-motivating and reinserting drop-outs seems to be the combination of a trainee place within an enterprise, which offers subsided employment and on the job training, with some school attendance.

In Finland, a similar Follow-up Service at municipal level does not exist. However income support for young people is, as in other Nordic countries, dependent upon them taking part in active education and training measures. Schools have counselling services which are used by students who are planning to drop-out. Currently, drop-outs and all other groups that need counselling and guidance can also use the services at the Labour Offices. It is voluntary for the drop-outs to come to the Labour Offices. According to figures from Statistics Finland from 1996, 9.3 per cent dropped out of upper secondary vocational education, 8.8 per cent dropped out of post secondary vocational education, and 8.7 per cent dropped out of higher level vocational education and 8.9 per cent dropped out of polytechnics (AMKs)\(^{48}\).

The Labour Offices have personnel for counselling and guidance of young people who leave school or drop-out of upper secondary education (or need counselling for other reasons). However, according to the new legislation applicable from 1 January 99, also educational providers have responsibility to follow up both students who drop out and graduated students. The educational providers often work together with the employment office locally.

As an initiative to try to curve youth unemployment during the recession, an action plan for a National Youth Programme was set up (1993), by a youth committee in which Secretary Generals of the three Ministries (Labour, Education, Social Affairs and Health) were members. The action plan includes measures to ensure provision of continuing education for comprehensive school and upper secondary school leavers, to ensure traineeships for students to promote their professional development, to ensure vocational school leavers their first full-time jobs and to improve employability of unemployed youth.

The reforms (see chapter 1) that are currently being implemented in the structure and content of the Finnish educational system are also intended to improve the situation for the least educated young people who face the risk of being excluded. In compulsory education the yearly drop-out rate is less that 1 per cent of the age group. Especially, the reform of the apprenticeship system is thought to supply young people at risk with better chances of succeeding in the labour market and

\(^{48}\) Source: Ministry of Education Finland.
also motivate them to aim for a recognised qualification. (Within basic vocational training young unemployed people under the age of 20 are provided apprenticeship training within the Objective 3 programme, with partial funding from the EU Social Fund. Further vocational training for unemployed young people mainly under the age of 25 is also provided, financed through the Social Fund for apprenticeship training.) Out of the 6,100 new students who started apprenticeship in 1997, 10 per cent were young people. The extension of the capacity in vocational programmes is hoped to provide more places for students who otherwise might have dropped out because they were not admitted to the field of study of their choice. The on-the-job training reform is intended to increase student motivation in vocational programmes by the integration of working life skills and entrepreneurship.

2.3 The Nordic labour markets in the 1990s - impact on youth and young adults

Both Sweden and Finland have experienced economic recession in the early 90s and as a consequence sharp fall in employment levels. Both countries have also experienced rising unemployment levels until 1994, after which they started dropping. This stands in marked contrast to Norway where economy has been growing and unemployment rates dropping and to Denmark where the economic situation has also been good overall, with fluctuations of 1-2 per cent in both employment rates and unemployment rates during the 1990s.

However, both Sweden and Finland have had remarkable economic recovery, particularly the last five years. In Finland and Sweden the number of jobs lost had a great impact on employment levels, particularly among youth. Recession peaked in Sweden in 1993, with an unemployment to population ratio of 8.3 per cent among 15-19 year-olds and of 15.5 per cent among 20-14 year-olds, an overall rise of more than 6 per cent compared to 1990.

Among the four Nordic countries this was only exceeded by Finland in 1993, when the unemployment to population ratio was 11.5 per cent among 15-19 year-olds and 19.2 per cent among 20-24 year-olds, and the overall number of registered unemployed persons in 1994 was five times higher than in 1990. In both Sweden and Finland the unemployment to population ratio was considerably higher among 20-24 year-olds than among 15-19 year-olds. In just three years it rose by about 12 per cent in Sweden and more than 14 per cent in Finland.

Unemployment to population ratios in Finland declined considerably after 1993, (particularly in the youngest age group), but the ratios were in 1997 still at the highest level compared to the other countries taking part in the Thematic Review. From 1997-1998 however, there was a decline of about 5 per cent in the 15-19 age group, resulting in Finnish levels dipping 1.1 per cent below the Danish unemployment to population ratio for that age group, which was at 5.6 per cent in 1998. In the age group 20-24 however, a similar decline in ratio between 1997 and 1998 did not occur, but the overall decline at that age was about 6 per cent, since unemployment rates peaked in 1993. The total unemployment level registered in Finland dropped 1 per cent below the

49 Source: Ministry of Education Finland.
total of Denmark - which was 6.6 per cent - in 1998. An impressive reduction in a five-year period, but rates were still about 2.5 per cent above the lows of 1990 (2.4 per cent).

In Sweden there has been a decline in the unemployment to population ratio among 15-19 year-olds of about 2 per cent in the recovery period since 1993. In 1997, both Norway and Finland had higher ratios among 15-19 year-olds than Sweden, but Swedish ratios were the highest of the Nordic countries in the older age group (13.3 per cent, although only 0.1 per cent below Finland). The unemployment to population ratio in Sweden has increased by a total of 7.5 per cent since 1990.

In Denmark, the unemployment to population ratio among 15-19 year-olds remained within the same level in 1998 as it was in 1990. However, in 1994 there was a dip to 4.3 per cent, while there in 1996 was a peak in levels to 7.4 per cent. Norway likewise, experienced a peak in 1996 and 1997 reaching 7.5 per cent. Thus, both Denmark and Norway surpassed the Swedish ratio, which was at 6.4 per cent in 1996. The ratio has fluctuated within a 1-2 per cent range both in Denmark and Norway in the period from 1990 to 1997, with Norway about 2 per cent above Danish averages. However, from 1997-1998, Norway experienced a dip in levels of about 3.5 per cent down to 4.1 per cent, probably the lowest level of the four countries (Data are not available for Sweden). In Norway, from 1990 to 1998 unemployment to population ratios have fallen by 3 per cent in this age group.

In the older age group the levels in Denmark were the highest of the four countries in 1990 (11.1 per cent) and there was a rising tendency until 1993, when levels peaked at 14.4 per cent, after which levels started dropping. This stands in contrast to Norway, where the ratio fluctuated between 7.1 per cent and 8.6 per cent in the same period. Both Denmark and Norway have experienced a dip of 1-2 per cent in levels from 1993-1997, since when both countries have had a rise of about 2-3 per cent. However, the total unemployment to population ratio has dropped from 1990-1998 by 0.4 per cent in Denmark and by 1.5 per cent in Norway. Norway, ending up at a low level of 2.6 per cent, which is more than 50 per cent below the total ratio of the other Nordic countries.
Table 4 Unemployment to population ratios for teenagers and young adults

<table>
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<tr>
<th>Year</th>
<th>Denmark</th>
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<th>Norway</th>
<th>Sweden</th>
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<td>9.1</td>
<td>6.0</td>
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<td>8.6</td>
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<td>5.6</td>
<td>4.7</td>
<td>4.1</td>
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<th>Norway</th>
<th>Sweden</th>
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</thead>
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<td>1991</td>
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</tbody>
</table>

1. Students who are in the labour force are included. Source: OECD labour force data base

Employment to population ratios

Between 1990 and 1998 employment to population ratios in Sweden among youth aged 15-24 dropped by about 15 per cent, and in Finland by about 17 per cent placing both countries below the OECD average in 1998. In Sweden, the employment level for youth aged 19-20 has decreased by about 30-40 per cent from the beginning of the decade until today. In the adult population of 24-54 year-olds the dip was between 9-10 per cent in both countries. In Norway and Denmark employment to population ratios have increased by respectively about 4 per cent in Norway and 1 per cent in Denmark in both age groups from 1990-1998. Employment levels in Denmark among 15-24 year-olds are about 10 per cent higher than in Norway. Both Denmark and Norway have higher employment levels among youth than the OECD average, i.e. 12 per cent higher in Norway and about 21 per cent higher in Denmark. The OECD data base shows that overall employment to population ratios in the OECD among 15-24 year-olds declined by about 4 per cent in the same period. Among adults aged 24-54 however, the ratio has remained approximately at the same level in 1998 as in 1990.
Table 5 Employment to population ratios, 1990 and 1998

<table>
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<tr>
<th>Age 15-24</th>
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<th>Sweden</th>
<th>OECD total</th>
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<tr>
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<td>1998</td>
<td>66.4</td>
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<tr>
<td>1990</td>
<td>84.0</td>
<td>87.9</td>
<td>82.3</td>
<td>91.6</td>
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<td>1998</td>
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<td>78.9</td>
<td>85.7</td>
<td>81.3</td>
<td>75.5</td>
</tr>
</tbody>
</table>

1. Students who are in the labour force are included. Source: OECD labour force data base

Table 6 Unemployment rates by level of education, 1996

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<tr>
<th>Age 15-19</th>
<th>Denmark</th>
<th>Finland</th>
<th>Norway</th>
<th>Sweden</th>
<th>OECD average</th>
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<td>Below upper secondary education</td>
<td>2.4</td>
<td>24.9</td>
<td>18.9</td>
<td>22.2</td>
<td>22.0</td>
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<tr>
<td>Upper secondary education</td>
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<td>36.0</td>
<td>14.3</td>
<td>23.8</td>
<td>23.3</td>
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<tr>
<td>Age 20-24</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Below upper secondary education</td>
<td>14.7</td>
<td>39.5</td>
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<td>9.7</td>
<td>20.2</td>
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<td>Non-university tertiary education</td>
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<td>University-level education</td>
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</table>


Unemployment among youth by level of education in 1996

Table 6 shows that among 15-19 year-olds who had not completed upper secondary education only 2.4 per cent were unemployed in Denmark in 1996, that is about five times below rates in the other three countries, as well as the OECD average at that age. The unemployment rate of this group ranges from about 3 per cent below OECD average in Norway to about 5 per cent above
the OECD average in Finland. Sweden is within the range of the OECD average of 22 per cent. Among 15-19 year-olds who had completed an upper secondary education the same tendency is found.

There is also a tendency that unemployment rates are higher among 20-24 year-olds who have a non-university tertiary education than among those who have university-level education, with the exception of Norway where unemployment rates among those with non-university tertiary education is about 2 per cent lower than among those who have university level education. All levels of education taken into consideration shows that unemployment rates among 20-24 year-olds are about 5 per cent below the OECD average in Denmark and Norway, while Finland and Sweden have rates of about 14 per cent and 5 per cent respectively, above the OECD average.

In Finland, Norway and Sweden unemployment rates are higher among 25-29 year-olds who have non-university tertiary education, than among those who have university level education, while the picture is opposite in Denmark. Taking all levels of education in this age group into consideration, Denmark has unemployment rates at the OECD average, Norway has rates 4 per cent below the OECD average, while the unemployment rates in both Finland and Sweden are above the OECD average of 10.4 per cent.

In 1996 Norway and Denmark had rates below the OECD average in all age groups (except among 25-29 year-olds in Denmark who have not completed upper secondary education). Unemployment rates in Finland were the highest of the four countries irrespective of age group and educational level. While Finland had unemployment rates considerably above the OECD average in 1996, with only a few exceptions, when the unemployment rates dipped to the average level of the OECD. Sweden was at the OECD average in the youngest age group, but in the older age groups, with a few exceptions, rates were above the OECD average. Comparing the beginning of the decade with the situation today, unemployment rates among those aged 19-29 in Sweden have jumped by about 4-7 per cent. Rates among migrants are up to twice as high as among native born. Also in the other Nordic countries, especially migrant youth are affected by high unemployment.

The overall tendency in the Nordic countries, as in nearly all other OECD countries, is that well educated young people and young adults have been absorbed relatively rapidly by the labour market, while unemployment among less educated young people and young adults has been greater.
Table 7

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| OECD average    | 2.7  | 2.6  | 2.7  | 2.8  | 2.8  | 2.9  | 2.9  | 3.0  | 3.1  |

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<td>2.0</td>
<td>1.8</td>
<td>1.8</td>
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<td>Norway</td>
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<td>1.7</td>
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</tbody>
</table>

| OECD average    | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  | 1.9  |

1. The ratio of the age group’s share of total unemployment divided by its share of total employment. Source: OECD labour force database

Table 7 above shows the relative labour market disadvantage among young people and young adults in the Nordic countries compared to the average of the Thematic Review countries and the OECD average. From 1990-1998, among 15-19 year-olds, there has been an increase in ratios in Norway and Denmark, while there has been a decrease in ratios in Sweden and Finland. Among 15-19 year-olds in 1998, the ratios of the Nordic countries were below the average of the Thematic Review countries (3.2 per cent) and the average of the OECD (3.1 per cent), with the exception of Norway, where the ratio was almost 3 per cent higher than Denmark and about 2 per cent higher than in Sweden and Finland.

From 1990-1998, there was a decrease in ratios among 20-24 year-olds in Denmark and Finland, while there was an increase in ratios in Norway. Sweden experienced a rise until 1996, after which levels dipped within the average of 1990. In 1998, the ratio in Denmark was below the averages of the Thematic Review countries (1.2 per cent) and the OECD (1.9 per cent). Finland’s ratio was 1.8 per cent i.e. below OECD average, while both Sweden and Norway exceeded the average of both the Thematic Review countries and the OECD. There seems to be structural barriers for youth both in the Swedish and Norwegian labour market.
The incidence and trends in long-term unemployment among teenagers and young adults

Denmark, Finland and Norway have each experienced a falling incidence of long-term unemployment among both teenagers and young adults during the 1990s, and now each is well below the average of the Thematic Review countries and the OECD average (Table 8 below). In Denmark, the incidence of long-term unemployment has been halved from 1990-1998 among 15-19 year-olds. In Finland, figures from the peak years of the recession are not available, but since 1995 the incidence of long-term unemployment among teenagers has declined by about 2 per cent. In Norway, long-term unemployment among 15-19 year-olds has to all intents and purposes ceased to exist, as the figures dropped from 30 per cent in 1995 to zero in 1996, where they have remained ever since. In Sweden, however, the incidence of long-term unemployment in this group rose from 22.4 per cent in 1990 to 23.3 per cent in 1998, peaking in 1995 at a level of 29.8 per cent.

In contrast to the other Nordic countries, in which long-term unemployment among 20-24 year-olds has been almost halved from 1990-1998, Sweden has experienced a steady rise in the incidence of long-term unemployment through the 1990s, from a low 11.8 per cent in 1990, peaking at 44.6 per cent in 1998. This is about 7 per cent above the average of the other Thematic Review countries. Despite a deteriorating labour market, both overall and for youth, Sweden was still consistent within the average range of the OECD in 1998, when rates were more than 4 per cent below OECD average.

50 Figures are not available (n.a.) for the peak years of the recession in Finland.
Table 8 Per cent of unemployed 15-19 and 20-24 year-olds unemployed for six months or more, 1990-98

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<td>23.4</td>
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<td>18.6</td>
<td>25.8</td>
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<td>51.7</td>
<td>51.3</td>
<td>49.7</td>
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Source: OECD labour force database

The proportion of youth neither in education nor in the labour market

As discussed in Chapter 1, the proportion of youth of all ages who are in education has risen significantly during the 1990s. There is also a trend that poorly educated young people tend to withdraw from the labour market entirely, even when the general employment situation is relatively good. As many as 6.1 per cent of 15-19 year-olds in Denmark, about twice as many as in Sweden and Finland51, are found neither in education nor in the labour market (Table 9 below). That is more than 1 per cent above the OECD average. As mentioned in chapter 1, quite a few 19-20 year-olds are found neither in education nor in the labour market in the Nordic countries. In the 20-24 age group, the three countries range from 1-3 per cent below the OECD average of 12 per cent. In the age group 25-29, Finland has about twice as many neither in education nor in the labour market as Denmark and Sweden and is only 3 per cent below OECD average for that age group.

Among 15-19 year-olds who neither participate in education nor are employed, Denmark is within the average range of the OECD and about 3 per cent above Finland and 1 per cent above Sweden. From age 15-19 to age 20-24 there is a sharp rise in both Finland and Sweden, which range 2-3 per cent above the OECD average of 16.9 per cent. There is also a 50 per cent rise between these two age groups in Denmark. At age 25-29 this rise levels out in Denmark, while about 2 per cent and 5 per cent fewer 25-29 year-olds are not in education and not employed in Finland and Sweden respectively. At this age the three countries range below the OECD average

51 Figures are not available (n.a.) for Norway.
of 19.8 per cent.

### Table 9 Proportion of young people neither in education nor in the labour market

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<tr>
<th></th>
<th>Denmark</th>
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<th>Norway</th>
<th>Sweden</th>
<th>OECD total</th>
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<td><strong>Not in education and not in the labour force as a per cent of the population of the same age</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>1996 Age 15-19</td>
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<tr>
<td>1996 Age 25-29</td>
<td>8.4</td>
<td>16.3</td>
<td>n.a.</td>
<td>9.8</td>
<td>19.5</td>
</tr>
</tbody>
</table>

|                  |         |         |        |        |            |
| **Not in education and not employed as a per cent of the population of the same age**<sup>1</sup> |         |         |        |        |            |
| 1996 Age 15-19   | 8.6     | 8.4     | 5.5    | n.a.   | 7.4        |
| 1996 Age 20-24   | 16.5    | 19.0    | n.a.   | 18.3   | 16.9       |
| 1996 Age 25-29   | 16.6    | 17.4    | n.a.   | 14.1   | 19.8       |

1. Source: OECD INES Network B 1998 special transition collection. Averages are based upon only 16 the OECD countries supplying data.
Table 10 below, sums up a number of indicators of transition outcomes in the Nordic countries. If the country is in the top (most favourable) quartile of OECD countries, this is indicated with ➤➤. If the country is in the bottom (least favourable) quartile of OECD countries, this is indicated with X. A blank indicates that the country is in the middle 50 per cent of the OECD range. If data is not available, this is indicted with m.

Table 10

<table>
<thead>
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<td>ii Non-student unemployed as a per cent of all 15-19</td>
<td>M</td>
<td></td>
<td>X</td>
<td></td>
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<td>iii Long term unemployment, age 15-19</td>
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<td>➤➤</td>
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<tr>
<td>iv Unemployment to population ratio, 20-24</td>
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<td>X</td>
<td>X</td>
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<tr>
<td>v Long term unemployment, age 20-24</td>
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<td>➤➤</td>
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<tr>
<td>vi Employment to population ratio, 20-24</td>
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<td></td>
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<tr>
<td>vii Per cent of non students aged 20-24 employed</td>
<td>M</td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>viii Youth to adult unemployment ratio</td>
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<td>ix Per cent not in education one year after the end of compulsory schooling</td>
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<tr>
<td>x Apparent upper secondary graduation rates</td>
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<td>xi 16-25 year-olds at document literacy level 4/5</td>
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<td>M</td>
<td>M</td>
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<tr>
<td>xii Per cent of 20-24 year-olds with low qualifications</td>
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<td>➤➤</td>
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</tr>
<tr>
<td>xiii Relative disadvantage of low qualified 20-24 year-olds</td>
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<tr>
<td>xiv Per cent tertiary qualified at age 25-29</td>
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2.4 Policies, labour market measures and other programmes for early school leavers and young people and young adults who are without work

Denmark

In Denmark those who are unemployed and less than 25 years of age are required to accept offers of education, training or a job before the end of an unemployment period of six months duration. They also have to report to a counsellor. The primary aim of the activation for this age group is to ensure access to education and training, but adults may be activated into education, training or a job creation programme. By the end of the year 2000 the activation requirement will be extended
to all unemployed people before the end of 12 months of unemployment, and by the same time the unemployed will only be able to remain on benefits for a maximum of five years.

In addition to the individual programmes described in section 2.2, the AMU centres provide an option to unemployed aged 18-25 years. The AMU centres offer 18-month courses where periods at school are interspersed with training periods in an enterprise in order to improve the unemployed young person’s chances of entering employment or further study. The AMU courses also emphasise development of personal competencies. Labour market training may also be aimed at preventing imbalances in the labour market and at underpinning initiatives to promote employment, as well as at stimulating job rotation in the labour market. In practice, labour market training covers a wide range of continuing training courses, which are open to persons who are already in, or seeking employment as semi-skilled workers, persons who have completed a vocational education and training programme, and persons with a further technical qualification.

**Finland**

In Finnish employment policy an obligation has been imposed on young people who do not have an upper secondary qualification to participate in active labour market measures in order to be entitled to benefits from the Labour Market Support Scheme. As of 1997, the measure also applies to unemployed youth aged 18-25\(^2\) (for 17 year-old unemployed the support is paid only for periods in apprenticeship or in labour market measures, but not for other educational activities). The right to labour market support will only be restored when the applicant shows that he or she has completed a vocational qualification. These measures are considered to be the most cost-efficient way of improving the employability of young people at risk and also a strong incentive to gain upper secondary vocational qualifications.

Two evaluation studies support this assumption\(^3\): The first evaluation which included leavers from compulsory school, showed that the active participation measure reduced registered unemployment and increased application for upper secondary vocational education. There was, however, a difference in success rates among girls and boys. It seems that the measure has motivated more girls than boys to remain in some kind of education or training scheme. It is thought that the measure leads to an increase in unreported unemployment among boys as there was only 1/3 decrease in unemployment of which ½ was due to participation in education, while among girls the decrease in unemployment corresponded to the increase in education.

The other evaluation showed that among young people who had previously been unemployed and who had finished compulsory education, 52 per cent of the boys and 30 per cent of the girls started in labour market training, subsidised employment or an attended a period of apprenticeship as a result of positive experience from the active participation offer.

One of the possibilities open for young people at risk is to participate in the career counselling and work education experiments provided by one of the 350 youth workshops. Many youth

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\(^2\) The measure was first implemented in 1996 for young people aged 18-20.

\(^3\) Source: Draft Country Note on Finland.
participated in these workshops during the economic recession\textsuperscript{54} when unemployment rates were high. The youth workshops have been highly popular following the introduction of the requirement to participate in practical training as part of the eligibility criteria for labour market support in 96/97. The youth workshops support young people’s occupational orientation and customise individual work experience schemes. They have participants among those who need to be “activated” and prepared for future study or labour market entry, among those who have problems deciding on an educational route or a future occupation and among those who already have a vocational qualification, but who want to gain the necessary experience in order to start their own company. The municipalities maintain the workshops, but the local employment office allocates funds for the practical training of the youth (either as labour market support or employment assistance for employers). Just over 80 workshops also receive development grants from the Ministry of Education. Follow-up studies show that 60-70 per cent of the young people that have participated in the workshop schemes avoid early marginalisation, as they either find a place in further education or employment.

Special pilot projects for developing new and innovative strategies for young people threatened by social exclusion have also been set up under the Community Initiative Employment Youth Start Programme. The background analysis in the Operational Programme shows that 20 per cent of compulsory school leavers -- about 10,000 young people -- dropped out of initial education or have not been accepted for further studies. 6 to 8 per cent of an age group, 3,500 to 5,000 young people, were estimated to be threatened by exclusion. Results from the programme show that the projects seem to have succeeded in re-motivating young people to participate in active in job-searching or education and training opportunities.

Labour market training in Finland is mainly targeted at unemployed adults and those at risk of losing their jobs. Most courses are practice-oriented ranging from basic to supplementary type courses. Also courses on training and working life are given. All courses are free of charge and the participants can receive a grant equalling their unemployment benefit during the training.

\textbf{Norway}

In Norway, measures for 16-19 year-olds are provided for by the Follow-up Service as described in section 2.1. Young people below the age of 20 without either a place in an educational institution or work shall also be offered participation in a Trainee Place Scheme or a combination of a Trainee Place Scheme and ordinary upper secondary education.

20-24 year-olds who have been unemployed, without a place in school, or in a labour market programme for the last six months, are offered a place in a Youth Guarantee Programme. In order to follow up the unemployed in this age group more systematically, individual plans of action are set up, which provide for a more structured co-operation between the unemployed and the Employment Office. In Norway, there has been a tendency to move away from short-term labour market measures, and instead focus on measures, which provide an opportunity to finish an incomplete education. Government allocations to labour market measures have in fact been reduced in Norway in 1999, as a result of a tendency of falling unemployment rates and as a result

\textsuperscript{54} After the collapse of the Soviet Union in 1991, Finland subsequently lost a share of its export markets, thus slipping into economic recession. This leading to a new economic focus point i.e. the European Union.
of the negotiations to balance the national budget for 1999\(^55\).

Also the new Competence Reform focuses on providing adults with an opportunity to finish an incomplete education at either compulsory, upper secondary or tertiary level. Adults’ non-formal learning will be assessed and validated upon entry into a regular programme.

**Sweden**

Since 1996, the municipalities\(^56\) have had responsibility of following up young people who are without work up to the age of 20. Different types of programmes, often combining studies with a trainee place in an enterprise or other times of employment, have been devised according to individual needs. Staff has been assigned to follow-up the young person’s progression. Income support, whether it be unemployment benefit or social allowance, is only provided upon the young person’s active participation. For young people this has been a strong incentive to continue in or return to some kind of education and training.

As of January 1998, the municipalities were also given responsibility for young people aged 20-24. Within 90 days after the young person has registered as unemployed, an action plan for the young person has to be drawn up in co-operation between the young person and the local employment office in consultation with the municipality. If the local employment office has not been able to provide suitable activity within 100 days, the responsibility for the young person is passed on to the municipality. Usually, the municipality will apply the same type of programmes for this age group as they do for those under the age of 20.

Participation in labour market measures (in the non-summer months) is particularly high among 18-19 year-olds, i.e. about 15 per cent higher than among 20-24 year-olds who are registered at the employment office. This implicates that Swedish policy makers give labour market measures high priority in attempting to smoothen out the transition to work for young people at school-leaving age who are unemployed. As a result of the municipalities taking over the responsibility of labour market assistance for 20-24 year-olds, the degree to which work experience programmes are used has decreased, as they are more likely to be referred to programmes with an educational focus. This is in line with the recent Adult Education Initiative, where the target group, adult unemployed without upper secondary education, are more likely to be guided into programmes provided within the komvux system, instead of being guided into short-term or occupationally oriented courses provided by the AMU centres.

The Swedish National Labour Board (AMS) is responsible for guidance for those seeking work. The guidance scheme consists of information on job opportunities and an individual support which shall provide the unemployed person with in sight into their own resources, so that the person is enabled to make decisions about his/her future.

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\(^{55}\) As the Norwegian coalition minority government depends upon support from other parties in order to get majority for the national budget in Parliament, labour market measures were one of posts that were cut as a result of the negotiations in relation to the 1999 budget. For the first time in years Norway experienced a rise in unemployment rates in certain sectors in the summer months of 1999.

\(^{56}\) Prior to 1996 this was the responsibility of the local job centres.
**Unemployment benefit levels**

The level of financial assistance Nordic young people who are unemployed can get will depend upon whether they are eligible for unemployment benefit.

**Unemployed youth in Denmark receive compensation for loss of wages during participation in labour market training as well as partial and full unemployment benefits during education and training. Young people who graduate with a vocational qualification from upper secondary or tertiary studies, will often immediately become part of a union’s unemployment insurance system. Graduates from Gymnasia, HF, HHX and HTX programmes, however, are not eligible, as they are not covered by similar unemployment insurance plans. The latter group therefore has to seek assistance from the social security system that is administered by the municipalities, where benefit levels are lower.**

As mentioned above, young people in Finland aged 18-25 are only entitled to receiving benefits when they are active participants in labour market measures. As of the autumn of 1997, a reform was introduced allowing the long-term unemployed with good enough work records to continue to receive unemployment benefits even while training.

Whether a young person is eligible for unemployment benefit in Norway is based on previous income. The unemployed have to have earned at least NOK 58,688 (1999) in order to be eligible for unemployment benefits. Most early school leavers have not reached this level through part-time work. It is an absolute requirement that all benefit recipients are job-seekers, even if they are participants in Labour Market Training Courses\(^57\) (LMT) and Trainee Place Schemes. Participants in such schemes can receive unemployment benefit if they are entitled to it or a grant of NOK 160 (youth below 19) or 215 (above 19) a day (per 1999) from the Labour Market Service. The grant is only paid for the training part of the scheme. In addition, allowance for dependants and travel costs can be given.

Swedish young people who are unemployed at the time they commence their studies can be entitled to widely different benefits depending on their past labour market experience. Unemployed with limited education, may however apply for a special student grant (SVUXA). The special education grant is equivalent to the amount the student would have been entitled to in payment from the unemployment fund. The grant can be applied for by persons between 25 and 55 years old for study at nine-year compulsory and upper secondary school level in local authority or state-run adult education, or at folk high-school.

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\(^{57}\) The age limit for participation in Labour Market Courses is 19 years of age, those below 19 may participate in Trainee Place Schemes.
2.5 Counselling and guidance within and outside schools for young people at risk and for early school leavers

The incidence of unemployment and withdrawal from both the educational system and the labour market in the 1990s described above, intensifies the need of proper counselling and guidance for young people at risk, and needless to say proper counselling and guidance is particularly important in periods of educational reform.

It is the Nordic philosophy that all special educational measures are conducted in or in connection with the mainstream education. According to the Education Acts of all four countries, the school has a special responsibility to provide students who have difficulties and special needs with the help and support they require at school. It is therefore the teacher’s task to differentiate his teaching, so that it is adapted to the pupils’ prerequisites and needs. Students with special needs are provided with various forms of support such as technical aids, interpreter's assistance and personal assistance (e.g. support for the disabled or visually handicapped, special education by specially-trained teachers and remedial instruction)\(^{58}\).

Common to all the Nordic countries is the teachers’ responsibilities with regard to pupils and students with special needs and young people at risk. Each school also has a guidance counsellor. If a teacher finds out that a student has problems, (such as family problems, behavioural problems, learning problems e.g. reading or writing disabilities, or simply is not motivated to learn or abide by social rules) it is the teacher’s responsibility to contact the school’s guidance counsellor. If the problem or need is of such a nature that it cannot be solved without professional help, the school counsellor will ask the School Psychological Service to look into the nature of the need and make proposals for remediying it. It is also the School Psychological Service which follows the development of the pupil with a view to making the necessary adjustments, including the discontinuation of the support. In primary and lower secondary schools there will usually be both health personnel and Psychological Services at the school’s premises. In upper secondary schools it may vary to which extent these professionals are located at school premises. As a rule, guidance for pupils with special needs shall be tailored to meet the individual needs.

In Norway, two methodological guides for teachers have been developed, providing guidance and advice on methods to use when teaching students with special needs, one is focused on specially adapted education of migrant groups and the other is focused on specially, adapted education in general.

The National Centre for Educational Resources (NLS), which is under the auspices of the Ministry, is inter alia responsible for developing a plan of action for special needs education. NLS also provides a web based guidance service, which includes relevant articles and projects within the field of special needs education, information about available educational resources, including ICT based learning tools. A web based meeting place for psychological counselling staff has been

\(^{58}\) The authorities are responsible for providing places at special schools for those young people who do not have the necessary prerequisites to attend the regular state schools. This applies, for example, to young people who are mentally handicapped.
established and currently a web based guidance scheme for young people with special needs is being developed in co-operation with Sweden and England.

As a follow-up of the Norwegian Parliament’s Recommendation to White Paper no. 23 (1997-98) on special needs education, a three-year competence development scheme is being established as of year 2000. The following are included in the target group of the scheme: Psychological Service staff and staff responsible for school management in municipalities or county municipalities, headmasters and other staff responsible for pedagogical management within both primary and upper secondary education. The aim of the scheme is to develop the staff’s competence to handle students with reading and writing disorders, social and emotional difficulties or complex learning difficulties. The establishment of learning environments within and outside of schools, which promote the pupils’ social development, is to be focused. Networks between the Psychological Services, the competence centres, pre-schools, primary and lower secondary schools, upper secondary schools, enterprises which take on apprentices, other types of educational institutions, public services and parents are also being established.

The Educational Offices in each county are responsible for the appointment of professional teams, which shall be in charge of the training. These teams may consist of professionals within the field recruited from universities, colleges, competence centres or School Psychological Services. In addition, research centres, organisations and institutions working within the field of specially adapted education will co-operate closely with the teams. Both instruction, project work, dissemination and local development work will be included among the learning activities and educational resources will be developed as additional support to the activities.

The Norwegian State Institution for Distance Education (NFU), which is under the auspices of the Ministry, has been given a particular responsibility of developing multimedia-based and flexible learning and teaching material for those at risk. At the moment multimedia-based learning tools are being developed for young people and adults with reading and writing disabilities; a multimedia course packet consisting of printed material, video and audio cassettes for use in interactive programmes is being developed for immigrants learning Norwegian as a second language; and analogue and interactive resources are being developed for disabled who have none or little knowledge of ICT.

In the Nordic countries the Employment Offices work in close co-operation with educational and training institutions in the provision of guidance and counselling services in order to reinsert early leavers and unemployed into some kind of education or training.

The services provided at local Labour Offices are available to all that need information and guidance about education, training or job possibilities. Both written and electronic data are available and personal guidance is offered. In Norway, the first of a total of 19 “virtual” Employment Offices was opened in September this year. Here job-seekers may communicate with an employment officer at a real employment office through the computer.

In Finland counselling and guidance is available and given to all students in secondary and upper secondary education. As of 1 August 1999 the employment services are requested to give priority
to the acquisition of additional vocational qualifications through advice and guidance for young people who are unemployed. A job-seeking plan is tailored to the young unemployed person’s needs.

Concerning schemes for those at risk in Denmark, special attention should be paid to the individual guidance scheme in schools. This scheme comprises guidance of the individual pupil in connection with his or her choice of subjects, education and occupation, guidance in the elaboration of the individual pupil's education and action plans.

In Sweden increased attention is being paid to guidance for those at risk in connection with the upper secondary individual programmes, which involve workplace contacts among other things.

(Please see section 3.2 for more information on counselling and guidance in schools in all four countries.)

### 2.6 Coherence in the relationship between education, labour, income support and welfare policies in terms of reducing the incidence of early school leaving

In the Nordic countries much attention has been paid to finding strategies to reduce the incidence of early leaving. As described above, intensive interventions have been carried out to support and reintegrate those who do leave early into mainstream education and training.

It should be noted that it is the duty of personnel working in schools to provide information to the Child Welfare Services and to the Social Services when circumstances entail measures to be taken on part of those services. In Norway this duty is described in the new Education Act as follows: “The duty of confidentiality notwithstanding, the personnel shall on their own initiative inform the Child Welfare Service when there is reason to believe that a child is being ill-treated at home or that other forms of serious failure or care are occurring, or when a child has shown serious and lasting behavioural problems. Personnel is also obliged to give such information if so instructed by the bodies responsible for the implementation of the Act relating to child welfare services”. The same duty applies to the personnel in schools pursuant to the Education Act in cases concerning individual clients i.e. to provide advice and guidance to the social service in the municipality. The information may however only be provided on the consent of the pupil, or the appropriate parent, or otherwise to the extent that the information is not subject to duty of confidentiality.

There is relatively good coherence in the relationship between education, labour, income support and welfare policies in terms of reducing the incidence of early school leaving when taking into account the co-operation that is required between the different authorities in relation to the Nordic Follow-up Services. The Youth Guarantee Scheme also presupposes the integration of labour market measures with those in the education and social welfare domains in terms of addressing the needs of those who leave early.
The Youth Guarantee Scheme was introduced in the 1970s for all youth under the age of 20, as a response to high unemployment rates among youth at that time. During the 70s and 80s the scheme consisted of such measures as temporary jobs, short labour market courses or a place in upper secondary education. The intention was to avoid young people’s marginalisation and to integrate them into the labour market. It was however found that the measures that were tried out during the 70s and early 80s had mostly short-term impact. Then in the late 1980s measures to increase capacity in upper secondary education were tried out and efforts were also made to encourage employers to hire young people. This had the presupposed effect and rates dropped relatively quickly among 16-17 year-olds. However, they remained high in the age group 18-19 and also in the age group 18-24 year-olds rates were still high. Therefore the labour market authorities increased their efforts to reduce unemployment among the 22-24 year-olds and this group has been prioritised with regard to labour market training program until 1997. On account of young adults being attractive on the labour market, special efforts towards 20-24 year-olds are not in effect. They are prioritised if long-term unemployed.

In areas where different authorities have jurisdiction over different programmes and over the institutions that provide them, whether it be the State, the Counties, the Municipalities; Education Authorities, the Social Security System and Labour Market Authorities the young person at risk is most likely to end up in the programme or institution that is controlled by the respective authority, rather than according to their current needs.

In Denmark, for example, if young people go to a local labour office because they need education and training, the Labour Office is more likely to refer them to an AMU Centre, a VUC, a commercial or technical institution or a Folk High School than to refer them to a Production School, an EGU programme or an FUU programme, which are under municipal authority59.

59 Source: Country Note on Denmark.
Chapter 3: Building effective pathways from initial education to working life

3.1 Building more effective pathways through structural and curricular reform

3.1.1 Initiatives to broaden and reduce the number of entry ports to vocational education

An indicator of effective pathways is the combination of broad entry ports with multiple exit points. Experience from trying this approach in the Nordic countries seems to suggest that this increases their attractiveness for young people and that it also makes it easier to cross from one pathway to another, compared to previous experience when students had to start over again at square one. Thus, through-flow in upper secondary education is increased.

The Finnish reform of creating new and more effective pathways within vocational upper secondary education was phased in over a decade starting in 1982 and included a curriculum reform and a new structure of vocational education fields. The reform included a broadening of contents by reducing the number of specialisations (650) available after the twenty five basic study lines, by more than 50 per cent. The new areas of study were also made available for students having completed upper secondary education.

The number of entry ports to vocational education were reduced in the 1994 upper secondary reform in Norway, when the number of foundation courses were reduced from more than a 100 to 13 (vocational entry ports were reduced by more than a 100). In White Paper no. 32 (1998-99) on upper secondary education it is pointed out that the reduction of courses at advanced level I to the extent as foreseen by Parliament in 1994, has not occurred. This has resulted in recruitment problems to certain trades. White Paper no. 32 foresees a future reduction of courses at this level from more than a 100 to 50. The reductions will be negotiated in co-operation with the social partners.

In Sweden, the number of entry points to upper secondary education were reduced and their educational focus broadened following the 1991 legislation. A system with 33 programmes, each containing sub lines, representing more than 500 courses available for students was replaced by the new 16 national programmes, of which 14 are vocational.

The forthcoming Reform –2000 of the Danish VET-system also includes the reduction of the vocational education and training programmes from 90 to 7 allowing for a more transparent educational structure.
3.1.2 **Initiatives to modularise the curriculum**

In the Nordic countries initiatives to modularise the curriculum are taken in order to provide young people and adults with varied opportunities for repeated returns to education and training throughout working life. The modules are organised as components of the broader programmes and they provide a partial qualification that allows those who take the modular course to either construct their own skill profile or to aim at a full vocational qualification over time.

In Denmark, the individual programmes are modularised, and so are labour market training programmes. The individual modularised courses consist of alternating training at school and in an enterprise or workshop training with elements of vocational guidance. As a result of the 2000 reform of the VET system, vocational programmes will be modularised and include possibilities for individualised pathways and the option of receiving partial qualifications.

In Finland, education and training pathways are organised in modules and credits. (Traditional subject areas no longer exist). One module normally gives 2-3 credits. The allocation of content matters to modules is done by the schools, on the basis of national objectives and guidelines. Modules in vocational education are competence based and linked to working life tasks. The same kind of modularised curricula is used in labour market training (competence-based qualifications) and in upper secondary education (initial vocational qualifications), although there are some differences. The core curriculum is the same in both qualifications.

In Norway, prior to Reform 94 there were separate study programmes for young people, adults and labour market training. Today, the study programmes are modularised and apply to regular students, to individual students and groups of students who for some reason cannot follow the full course of training and need to build their education in smaller units with a view to gaining a recognised qualification, as well as to adults and participants in labour market training. The modularization also makes it possible for students to acquire partial qualifications. The modules may be organised as a subject or part of a subject or related to a certain working process within a vocation. The smallest possible modular unit is 2 hours.

(Please see annex one and two for examples of modularised curricula in Finland and Norway.)

The Swedish Parliament approved of a Government Bill in spring 1999, which among other things include a modular course system (course lengths in four different standardised categories) from the autumn 2000.
Table 11 below shows distribution of upper secondary students by type of programme in 1996. A tendency in all four countries is that distribution between vocational programmes and general education programmes is quite equal, with a slight majority in vocational programmes.

### Table 11  Distribution of upper secondary students by type of programme, 1996

<table>
<thead>
<tr>
<th>Per cent of upper secondary students in:</th>
<th>Denmark</th>
<th>Finland</th>
<th>Norway</th>
<th>Sweden</th>
<th>OECD Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General education programmes</td>
<td>47</td>
<td>48</td>
<td>42</td>
<td>46</td>
<td>46</td>
</tr>
<tr>
<td>2. Vocational and technical programmes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Of which school based</td>
<td>5</td>
<td>47</td>
<td>X</td>
<td>x</td>
<td>35</td>
</tr>
<tr>
<td>2.2 Of which combined school and work</td>
<td>48</td>
<td>5</td>
<td>X</td>
<td>x</td>
<td>19</td>
</tr>
</tbody>
</table>


x: Data included in another column.

The general tendency in all the Nordic countries regarding the distribution of students by type of programme is that this distribution almost corresponds to the OECD average for the year 1996.

Table 12 to 15 below shows distribution of students in vocational areas of study expressed as a total of all vocational areas of study.

### Table 12  Distribution of students at upper secondary level and vocational area of study in Denmark in 1996, expressed as a total of all vocational areas of study 60

<table>
<thead>
<tr>
<th>Vocational programmes</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory parts of technical programmes</td>
<td>12.4</td>
</tr>
<tr>
<td>Introductory parts of administrative, retail and finance programmes</td>
<td>14.3</td>
</tr>
<tr>
<td>Industrial industry</td>
<td>15.7</td>
</tr>
<tr>
<td>Construction industry</td>
<td>13.4</td>
</tr>
<tr>
<td>Graphic industry</td>
<td>1.3</td>
</tr>
<tr>
<td>Transport</td>
<td>0.8</td>
</tr>
<tr>
<td>Agriculture</td>
<td>2.0</td>
</tr>
<tr>
<td>Food industry</td>
<td>7.4</td>
</tr>
<tr>
<td>Service industry</td>
<td>2.6</td>
</tr>
<tr>
<td>Administration, retail and finance</td>
<td>29.2</td>
</tr>
<tr>
<td>Others</td>
<td>0.8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

60 The general education stream accounts for a total of 51.7 per cent (general programmes - 36.3 per cent, HHX programme and HTX programme 15.4 per cent)
Source: Danish Ministry of Education

Table 13  Distribution of students by educational level and vocational area of study in Finland in 1996, expressed as a total of all vocational areas of study

<table>
<thead>
<tr>
<th>Area of study</th>
<th>Upper secondary</th>
<th>Post secondary</th>
<th>Vocational higher level</th>
<th>Polytechnics</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renewable natural resources</td>
<td>6.0</td>
<td>2.1</td>
<td>7.1</td>
<td>3.9</td>
<td>4.6</td>
</tr>
<tr>
<td>Technology and transport</td>
<td>40.7</td>
<td>18.3</td>
<td>92.9</td>
<td>35.3</td>
<td>35.2</td>
</tr>
<tr>
<td>Administration and commerce</td>
<td>10.6</td>
<td>30.0</td>
<td>0</td>
<td>33.0</td>
<td>19.9</td>
</tr>
<tr>
<td>Hotel, catering and home econ.</td>
<td>16.6</td>
<td>6.3</td>
<td>0</td>
<td>3.5</td>
<td>10.8</td>
</tr>
<tr>
<td>Social and Health care</td>
<td>19.9</td>
<td>33.7</td>
<td>0</td>
<td>20.1</td>
<td>23.0</td>
</tr>
<tr>
<td>Culture</td>
<td>5.0</td>
<td>6.6</td>
<td>0</td>
<td>4.2</td>
<td>5.1</td>
</tr>
<tr>
<td>Humanist and teaching</td>
<td>1.1</td>
<td>2.9</td>
<td>0</td>
<td>0</td>
<td>1.3</td>
</tr>
<tr>
<td>Other areas of study</td>
<td>0.05</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.02</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Statistics Finland

Table 14  Distribution of students by vocational areas of study in upper secondary education in Norway in 1998, expressed as a total of all vocational areas of study

<table>
<thead>
<tr>
<th>Area of study</th>
<th>Percentage area of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and Social studies</td>
<td>22.1</td>
</tr>
<tr>
<td>Agriculture, fishing and industry</td>
<td>4.7</td>
</tr>
<tr>
<td>Arts, crafts and design studies</td>
<td>14.8</td>
</tr>
<tr>
<td>Hotel and food processing trades</td>
<td>9.7</td>
</tr>
<tr>
<td>Building and construction trades</td>
<td>9.2</td>
</tr>
<tr>
<td>Technical building trades</td>
<td>3.2</td>
</tr>
<tr>
<td>Electrical trades</td>
<td>14.6</td>
</tr>
<tr>
<td>Engineering and mechanical trades</td>
<td>18.3</td>
</tr>
<tr>
<td>Chemical and processing trades</td>
<td>1.7</td>
</tr>
<tr>
<td>Woodworking trades</td>
<td>1.8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

The figures do not include technical schools and students who receive special needs education. The percentage includes pupils per 1.10.99 and apprentices per 31.12.99, the latter only includes apprenticeship contracts signed under R-94

Source: Norwegian Ministry of Education, Research and Church Affairs

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61 It should be taken into consideration that the post secondary level is gradually disappearing from the Finnish educational system and that the polytechnics are expanding.
62 The three areas of study within the general education stream account for a total of 49 percent of the students.
Table 15  Distribution of students at upper secondary level by vocational areas of study in Sweden, expressed as a total of all vocational areas of study

The percentage of first-year upper secondary school students studying on vocational programmes during academic years 1996/97 and 1997/98, expressed as a total of all vocational programmes.

<table>
<thead>
<tr>
<th>Programme</th>
<th>Academic year 1997/98 No. of first-year students On 15 October - per cent</th>
<th>Academic year 1997/98 No. of first-year students On 15 October - per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Recreation</td>
<td>10.4</td>
<td>8.9</td>
</tr>
<tr>
<td>Business and Administration</td>
<td>8.6</td>
<td>8.3</td>
</tr>
<tr>
<td>Arts</td>
<td>7.7</td>
<td>8.1</td>
</tr>
<tr>
<td>Hotel, Restaurant and Catering</td>
<td>7.3</td>
<td>7.8</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>6.9</td>
<td>7.3</td>
</tr>
<tr>
<td>Health Care</td>
<td>6.0</td>
<td>5.4</td>
</tr>
<tr>
<td>Vehicle Engineering</td>
<td>6.4</td>
<td>6.5</td>
</tr>
<tr>
<td>Media</td>
<td>5.1</td>
<td>5.3</td>
</tr>
<tr>
<td>Industrial</td>
<td>4.5</td>
<td>3.6</td>
</tr>
<tr>
<td>Construction</td>
<td>3.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Natural Resource Use</td>
<td>3.5</td>
<td>3.9</td>
</tr>
<tr>
<td>Handicraft</td>
<td>2.1</td>
<td>2.2</td>
</tr>
<tr>
<td>Energy</td>
<td>1.3</td>
<td>1.4</td>
</tr>
<tr>
<td>Food</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Specially designed</td>
<td>6.1</td>
<td>7.3</td>
</tr>
<tr>
<td>Individual programmes</td>
<td>19.2</td>
<td>19.5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


63 The general education stream (social science programme and natural science programme) accounted for 40.3 per cent of first-year students on 15 Oct. 1996/97 and 41.5 % of first-year students on 15 Oct. 1997/98, with the social science programme ranging about three per cent above the natural science programme both years.
Proportion of young people in each country who enter tertiary study

Figures for 1998 upper secondary general graduates (after matriculation exam) in Finland show that 18 per cent continued at university and 12 per cent at AMK institutions. (79 per cent applied)\(^6^4\). In Sweden the per cent of leavers from three annual cohorts entering university within one year was 17.6 per cent among 1994 leavers, 21.9 per cent among 1995 leavers and 16.8 per cent among 1996 leavers. Of 1994 leavers 30.3 per cent entered within two years and among 1995 leavers 37.3 per cent entered within two years\(^6^5\). In Denmark close to 3/4 of upper secondary general education stream graduates enter tertiary education today, while 11-14 per cent of vocational education graduates enter tertiary studies\(^6^6\). In Norway, the number of students from each cohort aged 19 – 21 entering higher education through the Universities and Colleges Admission Service ("Samordna opptak") in 1997 amounted to approximately 40 per cent of the cohorts\(^6^7\).

As the percentage entering tertiary study in the year immediately after the end of upper secondary education can be a misleading indicator of eventual participation rates, the readers are encouraged to review section 1.3 which highlighted the Nordic phenomenon of delayed entry to tertiary study.

3.1.3 Existing arrangements and recent initiatives to create different types of pathways from vocational education to tertiary study

The Nordic approach to improving the links between vocational education pathways and tertiary education, includes possibilities of combining general and vocational education within single vocational programmes and initiatives to increase the general education content of vocational programmes. In the future, working life is expected to make increasing demands upon general competencies. Therefore Nordic policy makers have emphasised possibilities for vocational students to have a broader preparation for future working life requirements as well as possibilities of transferring from vocational pathways to tertiary study.

In Finland as of 1992, experiments to create greater flexibility in the upper secondary school curricula were introduced, the so-called “Youth Education Experiment” or as it later was called the “Mutual Enrichment Strategy”. Today it is possible to draw up individual curricula, in which courses from general and vocational institutions can be combined. Students in Finland are free to choose 40 per cent of their credits and may thus choose to take these at another school. This allows vocational students to take general education courses, while general education students can develop work-related knowledge and skills by taking vocational courses. Through these experiments it has been possible to obtain double upper secondary qualifications and to some extent, it has also been possible to choose courses provided by universities and AMK institutions, thus easing transfers to tertiary level. (The Finnish background report indicates that 37 per cent of students (1997) have used this opportunity and approximately 4 per cent of students in vocational education after finishing matriculation examination in 1998.

\(^6^4\) 8 per cent continued in upper secondary vocational education after finishing matriculation examination in 1998.
\(^6^5\) Source: Draft Country Note on Sweden.
\(^6^6\) Source: Danish Background Report.
\(^6^7\) Source: Norwegian Ministry of Education, Research and Church Affairs.
education took the matriculation examination and 2 per cent of upper secondary school students completed a vocational qualification in addition to their own studies). By the year 2001, all vocational programmes will provide entrance qualifications for tertiary study in Finland.

An important feature of the 1991 reform in Sweden, was that the general education content of the vocational programmes was increased from less than a quarter to a third of students’ study time. This extends the student’s possibility to progress from vocational education to tertiary study.

The same thing was done in Norway in the 1994 reform, when core general subjects were included in all vocational programmes. Vocational students may transfer to the general education pathway after two years for the tertiary entry qualification to be obtained, or they may after having obtained their vocational qualification, take a 6-month-course to obtain the level in the general education core subjects which provides entrance qualifications for tertiary study.

The HHX and HTX programmes offered at technical and commercial colleges in Denmark provide eligibility for tertiary study, but may in many ways be characterised as being vocational, in that both general subjects and vocational subjects are interspersed in the programmes. The programmes cannot be characterised as double qualifying pathways, but it might be the case that employers still find the competence obtained by students having completed these programmes attractive, despite the fact that the programmes do not lead to a recognised vocational qualification. However, about 50 per cent of HHX students and about one in six HTX students taking a vocational qualification after they complete the programmes.

Research shows that “weak” students are having more problems passing the courses as a result of the increased general education content in vocational programmes. Therefore measures are being implemented in the four countries in order to link the general education theory more closely to vocational practice and increased attention is also being paid to differentiation in teaching methods.

3.2 How are counselling and guidance used to assist students in their choice of pathways?

Counselling and guidance is particularly crucial in periods of reform. Even though policy makers have emphasised and put in place such measures, there is a problem in the Nordic countries as in other OECD countries that there often is a contradiction between the expectations placed upon careers’ staff in schools and the means, time and resources available to them. In addition, school counsellors tend to know more about the general education programmes than the vocational programmes, as most of them have an academic education themselves. However, during the 1990s, counselling and guidance measures have been intensified in the Nordic countries to make both teachers and school counsellors more up to date with the new options available to young people as a result of the reforms of the educational systems.

Denmark
In the Danish Folkeskole the school guidance scheme is responsible for providing pupils with advice and guidance in preparation of their choice of education and vocation. The school guidance scheme comprises a collective guidance and an individual guidance. The collective guidance comprises orientation on the elective and optional subjects of the school, the structure of the education system, admission requirements etc. and job and labour market conditions. The individual guidance comprises guidance of the individual pupil in connection with his or her choice of subjects, education and occupation, guidance in the elaboration of the individual pupil’s education and action plans.

One of the latest initiatives to ensure young people an educational qualification is an act (1995) on bridge-building courses. The intention of the bridge-building courses is to increase young people’s motivation not only for commencing on a course of education but also for making the right choice - the first time, thus facilitating the transition from compulsory school and youth education. Bridge-building courses are organised as combined teaching and guidance courses of up to 1 year duration, where the young participants are introduced to different youth education programmes. The bridge-building courses are also meant to strengthen the vocational competence and personal development of the individual young person.

The elements in the bridge-building courses may be

- parts of the 10th form of the "Folkeskole"
- introductory parts of recognised youth education programmes
- preparatory courses introducing the participants to the youth education programmes
- different courses for young people held under the auspices of the municipalities.

All institutions offering upper secondary education in Denmark have a number of educational guidance counsellors appointed locally among teachers who have received special training. A third of their working time is devoted to counselling.

At each Gymnasium or HF establishment, there are one or more educational guidance officers, whose task it is to give the students educational and vocational guidance. It is the aim to help the students complete the programme within the officially stipulated time and with the best possible result, to enable them to make qualified choices of subjects during the programme and to give them knowledge about the higher education system and the labour market. Both collective and individual guidance is offered. The collective guidance is of a total extent of approx. 20 hours during the entire programme and a.o. comprises: general study techniques, financial and social conditions during the programme, orientation about choice of subjects, orientation about the major written assignment, orientation about the structure of education system etc.

Educational and vocational guidance in the HHX and HTX programmes and the apprenticeship programme is taken care of by guidance officers appointed from among the teachers of the college. These guidance officers give individual and collective guidance in connection with the students’ choice of education and occupation - both in Denmark and abroad, assist in the solution of problems, plan and organise introduction arrangements for new students, and they make available information material about all relevant higher education programmes.
All the university-sector institutions have educational and vocational guidance counsellors to advise the students. The Student Counselling Service is an independent institution which is available to students in need of assistance for the solution of social, economical, study-related and personal problems. The staff of the service are social workers, psychologists and secretaries who are all subject to the rules on professional secrecy.

**Finland**
Students have the opportunity to receive educational guidance and careers counselling at all educational levels provided as individual or group guidance either by the institutions’ student counsellors and teachers or by the Careers Counselling Services and Educational and Occupational Information Service of the Employment Offices.

The National Board of Education publishes educational guidebooks, which provide applicants with information on the provision of education, application procedures and student selection. All pupils in ninth form receive their own copy. During compulsory education the most important purpose of evaluation is to guide the pupils in their studies. Guidance is needed both in the everyday work and especially when choosing elective subjects.

For youth, careers counselling and work education experiments have been carried out in Youth workshops (described in chapter 2). At tertiary level, recruitment and career planning services have recently been established. Also co-operation with companies has been emphasised in universities’ research activities.

Koulutusnetti (Education Net) is a database which provides up-to-date information on the vocational training, polytechnic and upper secondary school education in Finland. The database contains basic information on all vocational training institutes, polytechnics and upper secondary schools as well as the branches they offer. Courses are available for young people as well as adults. Education Net is free of charge and is intended for all who are interested in training/studying.

The purpose of Education Net is to facilitate finding a study place. Various information can be entered into the search screen of Education Net and the database will seek suitable institutes and courses based on this information. The data contained in the Education Net database is obtained from OPTI, the National Board of Education’s Educational Institutes Data System. The National Board of Education in co-operation with the provincial authorities maintains the data on the vocational training and upper secondary school education on offer.

**Norway**
In compulsory education, each school has at least one counsellor, who provides information and individual advice regarding upper secondary education and employment possibilities. A book (Pedlex) is distributed free of charge to all pupils in the 10th grade with information on all the study-programmes from which they can choose in upper secondary education and with short summaries of the contents of these study-programmes.
In Norway regional plans of action have been developed and put into use at lower and upper secondary schools in order to develop competence within the field of vocational and educational guidance. The purpose of these plans of action has been to create coherence between the young people’s choice of education and the availability of apprenticeships and jobs. Experience so far shows that there is better co-ordination and more effective co-operation between the different bodies that are responsible for providing vocational guidance. However, there is still a need for better educational and vocational guidance in lower and upper secondary schools in order to cope with the mismatch problem between supply and demand in apprenticeship places.

Experience shows that girls and boys still choose professions that correspond to traditional gender roles and that girls have more difficulties than boys in obtaining an apprenticeship place. The project “Conscious Career Choices” is aimed at counterbalancing these trends by including actions to encounter problems with vocational guidance related to gender, ethnic background and differences of physical and mental abilities.

As a basis for young people’s right choice of educational pathway vocational and educational guidance is to be strengthened in close co-operation with the social partners. This includes among other things prognosis for future work force needs and the development of an updated electronic-based guidance providing educational and vocational guidance on available apprenticeship places and jobs, as well as educational and vocational opportunities in upper secondary education for each county and the country as a whole.

Sweden
Study and career guidance activities (Syo) is offered throughout the whole compulsory school period. Many schools have special Syo staff. The main aim is to provide personal guidance for the pupils on various study directions and career opportunities after the nine-year compulsory school. Since 1993 the counselling resource has been reduced by 7.5 per cent, probably due to increased attention being paid to the upper secondary individual programmes, which involve workplace contacts among other things.

Upper secondary school guidelines state that the staff shall “assist in providing the foundation for the student’s choice of education and career”. It is emphasised that guidance shall focus both on choice of courses, further studies and career options and that limitations based on gender, social or cultural background shall be counteracted. Also, a contact to working life and tertiary education institutions is required. Knowledge acquired through working life contacts shall be utilised in school education.

Study guidance is given centrally at each university and college. The guidance is comprehensive and is supplemented by the information which is provided for the different study programmes. Also university and college study counsellors co-operate with the Swedish National Labour Board (AMS), often through the local employment office, thus promoting mutual awareness of education as the route to work.

69 Swedish Background Report.
3.3 The role of employers and trade unions within the education and training systems

Denmark and Norway
Denmark and Norway have strong traditions of co-operation with the social partners. Central, national bargaining between employers and trade unions plays a very important role in the Danish and Norwegian labour market and trade union membership is high in both countries. The social partners participate actively in designing provisions for vocational training which qualify skilled workers. Not only do they set the content of training and assessment requirements for qualifications, they also lay down the basic frameworks for working conditions and wages, including apprenticeship wages. They function as advisory bodies to the national policy makers in all questions concerning initial and continuing vocational or labour market training. They are represented on advisory trade committees/councils, which supply advice on the content of the training required for occupations that need a qualification, on curricular content in vocational education and training, anticipation of labour market needs etc. In Norway the social partners are satisfied with the tripartite co-operation at upper secondary level, but they think it can be improved in higher education.

Finland
The social partners are involved in various degrees in different expert committees, commissions and working groups, which are advisory bodies to Finnish policy makers in issues involving labour, education, social affairs and health. They were advisory bodies to the Youth Committee, which prepared an action plan for the National Youth Programme (see chapter 2), to the Working Group on Employment which produced a Programme for Employment in Finland 1996-1999 and to the Committee for Lifelong Learning which developed a report on the basic principles of Finnish lifelong learning policy.

In January 1998, the Confederation of Finnish Industry and Employers and five major trade unions co-signed together with the Prime Minister and the Minister of Education and Science a common recommendation, which favoured the provision of training places in industry and of teacher and trainer training. Also the social partners will play an active role when apprenticeship/traineeship contracts between schools and enterprises are to be signed.

Recently, thirty Training Committees (6 sectoral committees and 24 occupational sub-committees) corresponding to the new structure of education and training fields were established. These committees will advise on the content of vocational courses, development of competency-based vocational qualifications and anticipate skill requirements, so that the number of education and training places corresponds to labour market needs.

In addition, industry contributes to adjusting educational provision to local needs and opportunities through participation in boards of educational institutions and of local and inter-municipal education consortia as well as in regional advisory councils.
Sweden
As a consequence of not having a national scheme for vocational qualifications and the abolition of the apprenticeship system in 1970, the role of employers and trade unions has been weak in the initial education and training system. The Ministry of Education has been dominant in determining the level and content of initial vocational education. Employers and trade unions have, however been actively involved in negotiations and matters that are of concern in the existing work force, such as study leave, in-firm training and provisions for continuing education and training.

With the introduction of the new modern apprenticeship scheme they will be involved when contracts for traineeships are being signed between employer, school and student. Employer and trade union representatives are represented on the school’s local programme committee.

In May 1998 a bill was presented to Parliament which contained proposals aimed at raising the quality in education by strengthening the links between business and industry and upper secondary school.

3.4 Models of co-operation between the classroom and working life and methods used to provide students with experience in the work place

In compulsory school in all four countries all pupils have a practical training period (one or two weeks) in working life. In general education provided at upper secondary schools, issues related to working and business life are mostly dealt with in the form of course contents. In both general and vocational courses problem based teaching methods such as project work are used in classroom teaching, and the establishment of working life contacts is encouraged in projects within different subjects. Research shows however, that general education teachers are not taking advantage of working life contacts to the extent that vocational teachers are. In student counselling at upper secondary level, working life contacts are established in all four countries. In tertiary education, working methods and working life contact is more common in the non-university institutions than in universities in all four countries.

Finland
In Finland all pupils in compulsory school have a 2-week placement period with an enterprise.

Institutional vocational education in Finland includes practical training in an enterprise worth a minimum of four credits for all students. Students are also participating in entrepreneurship training, diploma projects done in companies, simulated practice enterprises operating in educational institutions and practical assignments commissioned by external customers from the institutions. Vocational teachers are required to have one to three years’ experience in their own field and are expected to keep up their work practice by working in enterprises from time to time. Vocational institutions have one or more consultative committees to develop their contacts in local working life. The new comprehensive legislation, which came into effect as of 1 January

1999, requires increased co-operation between upper secondary schools, vocational institutions and other educational institutions.

The vocational reform currently being implemented in Finland focuses on the transferring of vocational education to workplaces and the expansion of on-the-job training through two channels:

- By including a requirement of a mandatory six-month period of on-the-job training
- By expanding the use of apprenticeship training to young people.

The expansion of on-the-job training challenges the institutions, which are going to lead the development work, in that stronger co-operation between institutions and companies is required.

Experience from the Mutual Enrichment Strategy mentioned above shows that networks between upper secondary schools and vocational institutions have been developed both regionally and locally through common provision of courses, student counselling, and teaching arrangements to support personal study programmes. In addition, students are entitled to get credit for those courses completed elsewhere, which comply with the objectives and core content of the curriculum.

At tertiary level students’ options have been increased, among other things to make the education comply better with working life needs. Also universities have established guidance and counselling services to promote working life relations and job placements in co-operation with employment offices. In universities the flexibility in minor subjects has been increased. At AMK institutions it is possible for students to choose study modules, which meet the requirements of working life and in the degree programmes practical training in working life is compulsory. AMK institutions also use teaching methods which involve independent study and project work (topics and problems come from real working life) instead of class-form studies. Work experience plays an important role in AMK teachers’ professional skills and instruction is often provided by working life experts. In addition, AMK institutions have extensive working life networks and consultants.

**Sweden**

In Swedish compulsory schools all pupils shall have an opportunity for working life experience through prao\(^1\) (period of practical training with a company). The access to prao has however declined after the previous requirement for six to ten weeks of compulsory work experience was removed when the new curriculum for compulsory school was introduced in 1994.

In the 14 vocational programmes at least 15 weeks of the education duration shall be carried out in the workplace (APU). In the two general education programmes, there is an opportunity to include some work-based education, in addition to the opportunity to include subject-linked practice within the programmes. Teachers are required to seek close co-operation with individual employers, as a similar obligation is not imposed on employers to participate. Taking into account

\(^1\)Ten Point Action Plan for Quality and Equivalence in the School, released by the Ministry of Education and Science in June 1998.
the difficult labour market situation in Sweden in the 1990s, schools have been quite successful in gaining the required number of places. There has however been a problem that participation varies from programme to programme and from school to school. According to the Swedish background report 63 per cent of students receive the APU they are entitled to, taking all programmes into consideration.

The individual programmes allow for flexibility in that students may combine education within special vocational fields or apprenticeship training with studies at the upper secondary school. Thus, APU is an option within the individual programmes.

A survey of 1996 school leavers (Statistics Sweden, 1997) showed that 78 per cent of students in the vocational programmes undertook APU, 62 per cent in the individual programme, and 15 per cent in the general programmes. According to data from Statistics Sweden, it does not seem that participation in APU has the impact it is hoped to have upon school leavers’ chances of getting a job when they leave school. Part-time work seems to have greater impact on job opportunities.

At upper secondary level links have been established between individual schools and their local employers to improve programme development and implementation.

The new apprenticeship system that was introduced in 1997 as an option within the national programme requires 50 per cent of the time to be spent at the work place. The normal training period is three years, but there is provision for the training period to be extended to four years. As opposed to the apprenticeship systems of the other three countries the young person has status of student and is not paid for the time in the work place. It is the school that is responsible for managing the apprenticeship and an apprenticeship contract is signed between the young person, the school and an employer. Enterprises taking on apprentices are required to have trained workplace supervisors, but it is the school that is responsible for ensuring the quality of the training. Employer and trade union representatives are represented on the local programme committee.

In every upper secondary school programme committees for school-working life co-operation are to be established. The Government intends to appoint a special group consisting of parties in the labour market, which shall look into the way co-operation between school and working life can be further developed.

The Government has stated priority areas for 1997/98-98/99 in the national development plan. For the upper secondary level this includes developing the quality of programmes with vocational subjects.

At tertiary level several universities and colleges co-operate with business and industry with regard to range and design of courses, design of syllabuses, periods of work practice etc. This is done to increase the students’ opportunities to gain employment after the completion of their studies. In Sweden non-university post-secondary programmes are a significant pathway for many upper secondary leavers. Non-university post-secondary programmes are of one or two years duration, and are supplied by different public and private educational providers and employer
organisations. Instruction is mostly applied and some work-based component is included in many of the programmes. There is no nationally-recognised system of qualifications for these courses.

The new pilot initiative in post secondary education “Qualified Vocational Education” is a course which is designed to correspond to real needs in the labour market. One third of the time to be used is based on application of theoretical knowledge in the work place. Close co-operation between enterprises and various course providers (upper secondary schools, municipal adult education, higher education and enterprises) is foreseen. The courses will be open for those who have completed upper secondary education as well as for gainfully employed who wish to develop their skills in a particular field. It is a requirement that the work place itself is organised as to make learning feasible. Employers will participate actively in course design. Based on the experiences gained from the project, the Swedish government intends to decide on the further development of QVE.

Denmark
In the Gymnasium periods of practical experience in a business may be included in the instruction in some subjects and in connection with the educational and vocational guidance. Such periods of practical experience must ensure that the students function in roles other than the usual student roles and that they carry out meaningful and as far as possible realistic tasks of a practical nature. In the HF programme no training-employment relationship provision exists. In the HHX and HTX programmes there is no practical training involved, but visits to businesses, institutions or the like may be included in the instruction in some subjects. The pedagogy of the HTH and HHX programmes is more project-based than in the Gymnasium.

The individual programmes are mainly practical, designed to meet the individual student’s needs of applied training which involves work-place training (See chapter 2 for description of programmes).

Both the HHX, HTX and apprenticeship programmes are offered in vocational colleges. The apprenticeship or sandwich-type programmes vocational education and training, involve 2/3 of the time being spent in practical training in an enterprise, the rest is supplied by the vocational college. The vocational colleges also offer short cycle courses at the tertiary level, so upper secondary students work alongside both tertiary students and master craftsmen. The social partners are highly involved at all levels, as consultative bodies. Therefore the system is also very responsive to and supported by industry.

In tertiary education some short-cycle higher technical education programmes contain a practical training element, whereby the student must spend a certain period of practical training in a business. Most medium-cycle programmes are very practically oriented with practical training periods. In long-cycle tertiary programmes however, there is generally no practical training or other provision of a similar nature incorporated in the courses.
Norway

All pupils in compulsory education have one-week training placement during the 8th grade. Most compulsory schools also have programmes which include working life contacts; for example representatives from local industry or the community may be invited to schools and pupils are also given the opportunity to visit local industries and community services. Guidance and information about the world of work is also part of the curriculum at both compulsory and upper secondary level.

In both compulsory and upper secondary education the establishment of pupil enterprises is possible. The social science study programme is compulsory for all pupils in upper secondary education and gives a basic introduction on which steps to take in working towards establishing an enterprise. There are two models/projects in Norway for the organisation of pupil enterprises:

- Local active schools (Distriktsaktiv skole), particularly used at lower secondary level
- Young Enterprise, which is linked to an international organisation, Young Enterprise Europe, is aimed especially towards the upper secondary level.

One out of every two upper secondary schools participates actively in some kind of resource centre activity. The resource centre is usually a separate department within an upper secondary school. These centres stimulate the co-operation between upper secondary schools and the local labour market and industry and contribute to find new areas and forms of co-operation - between schools, institutions, public and private enterprises responsible for general education, vocational training and adult education and the local industry. The aim is to create more adapted educational and training opportunities for young people and adults and create more jobs in the local community. Many of the centres have tasks from the employment authorities as their main activity.

At upper secondary level most vocational programmes are part of the 2+ model with two years of training in an enterprise. The other vocational programmes are provided at upper secondary school. In addition, those who are not able to find an apprenticeship place are provided with a place in an advanced course II. Reform 94 research shows that those who have been offered an alternative advanced course II, due to lack of apprenticeship places are having more problems passing the trade or journeyman’s examination than apprentices who have received their training in an enterprise. Therefore it is suggested in White Paper no. 32 (1998/99) to extend the time allocation for the alternative advanced course II in order to provide possibilities for student placements in enterprises. In tertiary education contact with working life varies from institution to institution, but it is agreed that it should be developed through co-operation between state colleges and industry in the different regions. The social partners emphasise the establishment of contacts with state colleges as early as in upper secondary education. This is thought to improve the through-flow of pupils from upper secondary education to higher education and also improve young people’s transition to working life.
3.5 Importance of occupational qualifications

In Denmark and Norway occupational qualifications have great importance. In both countries vocational education and training is offered in a nation-wide system conveying qualifications which are without exception valid all over the country and which all have the approval of the social partners.

In Finland occupational qualifications are becoming increasingly important as a result of the development of new structures of qualifications which respond better to the needs of the employment system. Development began in the 1980s with the changes in the qualification structure in upper secondary vocational education and is currently being accelerated through the reform of curriculum structure in vocational schools, the creation of a new level of qualifications in the non-university AMK institutions and through the system of competency-based qualifications in adult education which are soon to be applied to the secondary and post-secondary levels of initial education and training as well. Today there are thirty occupational categories in seven sectors.

The Swedish labour market is the least occupationally organised labour market of the four countries. Even though 14 of the upper secondary programmes are vocational, certificates of formal occupational qualifications are only required for a small number of jobs.
ANNEX 1

Examples of modularised study programmes in Norway

The modularization concept, as it is used in Norway, is difficult to give a specific definition as it is defined differently in different study programmes, but one might say that modularization is both a quantitative and a qualitative concept. The concept is quantitative in the sense that it refers to allocation of time i.e. a module can be a year course, or a smaller unit of a course or a subject (the smallest being two hours a week).

The concept is qualitative in the sense that it is related to a competence specified through objectives that the student is to strive to attain i.e. a module can consist of one or more objectives. A module is a partial qualification, and it is only when all the modules of a course are completed successfully that a student receives a full qualification and can receive a school-leaving certificate or a trade or journeyman’s certificate.

The graph that follows shows how the study programmes for the core subjects are divided into modules in order to provide possibilities for vocational students to obtain university entrance qualifications by taking additional modules in the core subjects. The two alternative ways of receiving such a qualification is described in the graph. It should be noted that some of the terms used in the graph are not official (e.g. History (post 1850) is the official name of the subject, not Modern History).
Alternative 1

After completing 2 years at school (foundation course and advanced course I), apprentices attending a vocational area of study may attend an advanced course II consisting of general subjects, building on the general subjects of the two first years in order to gain full matriculation qualifications.

Alternative 2

After obtaining a trade or journeyman’s certificate, it is possible to gain full matriculation qualifications by taking extra modules in the subjects Norwegian, English, Social Sciences, Mathematics and Natural Sciences.

A module is the documented partial competence within a single

- Modules within an area of study resulting in vocational qualifications
- Additional modules to be taken in order to obtain higher education qualifications
The curriculum (abridged copy) that follows illustrates how modularization is done in Media Studies, a specialised subject in the area of General and Business Studies.

Curriculum for Upper Secondary Education

Media Studies

Specialised subject in the area of study
General and Business Studies

Oslo, September 1994
Ministry of Education, Research and Church Affairs
Contents

Chapter 1: General information
  1.1 Introduction
  1.2 Media Studies in the area of study General and Business Studies
  1.3 The structure of the study programme

Chapter 2: Objectives and learning targets
  2.1 Common objectives for specialized subjects
  2.2 Media Studies 1
  2.3 Media Studies 2
  2.4 Media Studies 3
  2.5 Media Studies 4

Chapter 3: Assessment
  3.1 Why assessment?
  3.2 What shall be assessed?
  3.3 How shall assessment be carried out?
  3.4 Special conditions – Project work

Appendix 1
  Number of teaching hours and modules
1.3 The structure of the curriculum

Media Studies consists of the modules Media Studies 1, 2, 3 and 4, of respectively 5, 5, 5 and 5 hours per week. All modules are combinations of theory and production. Media Studies 1 and 3 mainly emphasise theory, while media studies 2 and 4 mainly emphasise production. Many combinations are allowed, the only restriction being that pupils who take Media Studies 2 and/or 4 are also required to take Media Studies 1.

**Media Studies 1.** The course is designed to provide pupils with a basic knowledge of communication, media in social contexts, the media’s forms of expression and the possibility of creating their own productions.

**Media Studies 2.** The course is both practical and theoretical. The theoretical element emphasises journalism, however most of the course consists of productive work, whereby the pupils create text, sound and vision productions. Pupils work within the three basic media: text, sound and vision.

**Media Studies 3.** The course involves a study of the media in a cultural development perspective, past present and future, in both national and international contexts. The course also includes a project associated with one of the topics.

**Media Studies 4.** The course is mainly taken up by productive work whereby pupils concentrate on one medium. It is intended that the pupils shall gain insight into information retrieval, information processing and production within the chosen medium. They create and direct media productions associated with different categories within the chosen area.
Appendix 1

Number of teaching hours and modules

Media Studies consists of 4 modules: Media Studies 1, 2, 3 and 4.

<table>
<thead>
<tr>
<th>Modules</th>
<th>Hours per year</th>
<th>(average hours per week)</th>
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</thead>
<tbody>
<tr>
<td>Module 1: Media Studies 1</td>
<td>187</td>
<td>5</td>
</tr>
<tr>
<td>Module 2: Media Studies 2</td>
<td>187</td>
<td>5</td>
</tr>
<tr>
<td>Module 3: Media Studies 3</td>
<td>187</td>
<td>5</td>
</tr>
<tr>
<td>Module 4: Media Studies 4</td>
<td>187</td>
<td>5</td>
</tr>
</tbody>
</table>

Note to appendix 1
The basis for the number of tuition hours is the total number of tuition hours per year. The average number of tuition hours per week is equal to the number of tuition hours per year divided by 38. Cf. the contract of employment, where it is laid down that teaching shall be arranged on 190 days of the year, divided into 38 weeks.*

* Specially arranged courses for adults may be completed more rapidly (intensive courses). Training may also be extended over longer periods when this is needed by groups or by individual pupils.
The curriculum (abridged copy) for Able Seaman in the Electrical Trades area of study is an example of how modularization is done in an area of study leading to trade or journeyman’s certificate where training is provided by an enterprise. The curriculum covers the two last years of the 2+2 model (i.e. one year of instruction and one year of productive work).

The appendix specifies the modules and the percentage of total training. (It should be noted that this differs from the areas of study leading to higher education qualifications in which modules are specified in hours per week- see media studies above).

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Curriculum for Upper Secondary Education

Electrical Trades

Apprenticeship Training
Able Seaman

Oslo, July 1996
Ministry of Education, Research and Church Affairs
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Appendix 1
The apprenticeship training modules of the able seaman course
## Appendix 1

The apprenticeship training modules of the able seaman course

<table>
<thead>
<tr>
<th>Modules</th>
<th>Content</th>
<th>Percentage of total training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module 1: Watchkeeping</td>
<td>Chapter 2.2 Objective 1.</td>
<td>25%</td>
</tr>
<tr>
<td>Module 2: Loading and discharge</td>
<td>Chapter 2.3 Objective 1.</td>
<td>20%</td>
</tr>
<tr>
<td>Module 3: Arrival and departure</td>
<td>Chapter 2.4 Objective 1.</td>
<td>10%</td>
</tr>
<tr>
<td>Module 4: Maintenance work</td>
<td>Chapter 2.5 Objectives 1 and 2.</td>
<td>20%</td>
</tr>
<tr>
<td>Module 5: Knowledge of the vessel</td>
<td>Chapter 2.6 Objectives 1 and 2.</td>
<td>10%</td>
</tr>
<tr>
<td>Module 6: Safety and emergencies</td>
<td>Chapter 2.7 Objectives 1, 2 and 3.</td>
<td>10%</td>
</tr>
<tr>
<td>Module 7: Knowledge of the shipping company</td>
<td>Chapter 2.8 Objectives 1, 2 and 3.</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

It is the responsibility of the training establishment to ensure that the apprentice receives training in accordance with the objectives of the curriculum and the specified learning targets. Theoretical studies should as far as possible be acquired by the means of practical tasks. In areas where the training enterprise does not consider that it has the necessary competence to conduct parts of the training itself, it must ensure that the apprentice receives this training in some other way.
ANNEX 2

Examples of modularised study programmes in Finland

Studies included in the Vocational Qualification in Construction

Composition of the Qualification

Composition of studies

The scope of the Vocational Qualification in Construction is 120 credits. One year of study comprises 40 credits and one credit is equivalent to 40 hours of study. The nominal scope of the Qualification is the same, although the time taken to complete the Qualification may vary between individual students according to their educational track and previous studies or work experience.

The Qualification is composed of vocational studies, core subjects and free-choice studies in accordance with the Government Resolution (25.2.1999).


Vocational studies

The scope of the vocational studies is 90 credits, of which at least 20 credits are carried out in on-the-job training. Each educational institution decides on when the on-the-job training periods should take place as part of the vocational studies.

All Study Programmes require the completion of study module 1, ‘Basics of construction’, which carries a scope of 30 credits.

Each Study Programme carries a total of 60 credits of specialist vocational studies (Figure 1).

The educational institutions may change the scopes of vocational study modules by +/- 20%. However, the total scope of vocational studies must be 90 credits. Any increase or reduction must not influence the objectives of the study modules, but the study modules are to be implemented in
compliance with the objectives specified in the core curriculum. A student should have the opportunity to choose ten credits’ worth of free-choice studies included in vocational studies.

The educational institutions divide the study modules into study units in accordance with the teaching arrangements they have set. The educational institutions will, where necessary, provide guidelines on the order of completion of the study units.

**Core subjects**

Of the core subjects, 16 credits are compulsory and four credits are elective. In Swedish-language education, however, the scope of compulsory subjects is 17 credits and there are three credits for elective subjects.

**Free-choice studies**

The scope of free-choice studies is ten credits.

**Final project, competence-based examinations and student counselling**

The Qualification includes a final project of at least two credits, competence-based examinations to demonstrate vocational competence and at least 1.5 credits of student counselling.
<table>
<thead>
<tr>
<th>COMMON VOCATIONAL STUDIES OF QUALIFICATION</th>
<th>30 CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basics of construction</td>
<td>1 30 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPECIALIST VOCATIONAL STUDIES</th>
<th>60 CREDITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study Programme in Construction, Builder</td>
<td></td>
</tr>
<tr>
<td>Compulsory study modules</td>
<td>2, 3 30 credits</td>
</tr>
<tr>
<td>Minimum of two to be chosen from study modules</td>
<td>4–8 20 credits</td>
</tr>
<tr>
<td>Plus elective study modules from the whole selection</td>
<td>10 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Programme in Infrastructure Construction, Infrastructure Builder</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory study modules</td>
<td>11, 12, 13, 14 50 credits</td>
</tr>
<tr>
<td>Plus elective study modules from the whole selection</td>
<td>10 credits</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Programme in Earthmover Operation, Earthmover Operator</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory study modules</td>
<td>11, 18, 19, 20 50 credits</td>
</tr>
<tr>
<td>Plus elective study modules from the whole selection</td>
<td>10 credits</td>
</tr>
<tr>
<td></td>
<td>Basics of construction</td>
</tr>
<tr>
<td>---</td>
<td>------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Basics of construction</td>
</tr>
<tr>
<td>2</td>
<td>Carcassing work</td>
</tr>
<tr>
<td>11</td>
<td>Civil engineering and earthwork</td>
</tr>
<tr>
<td>3</td>
<td>Construction engineering</td>
</tr>
<tr>
<td>12</td>
<td>Municipal engineering</td>
</tr>
<tr>
<td>18</td>
<td>Earthmover technology</td>
</tr>
<tr>
<td>4</td>
<td>Masonry</td>
</tr>
<tr>
<td>13</td>
<td>Road construction</td>
</tr>
<tr>
<td>19</td>
<td>Earthmover operation</td>
</tr>
<tr>
<td>5</td>
<td>Tiling and plastering</td>
</tr>
<tr>
<td>14</td>
<td>Road maintenance</td>
</tr>
<tr>
<td>20</td>
<td>Traffic engineering (Earthmover Op. only)</td>
</tr>
<tr>
<td>6</td>
<td>Foundations and carcassing carpentry</td>
</tr>
<tr>
<td>15</td>
<td>Basics of property maintenance</td>
</tr>
<tr>
<td>21</td>
<td>Lorry technology</td>
</tr>
<tr>
<td>7</td>
<td>Interior carpentry</td>
</tr>
<tr>
<td>16</td>
<td>Waterproofing</td>
</tr>
<tr>
<td>22</td>
<td>Business and IT in infrastructure construction</td>
</tr>
<tr>
<td>8</td>
<td>Concreting and reinforcing</td>
</tr>
<tr>
<td>17</td>
<td>Steel construction</td>
</tr>
<tr>
<td>23</td>
<td>Construction and utility equipment</td>
</tr>
<tr>
<td>9</td>
<td>Renovation</td>
</tr>
<tr>
<td>24</td>
<td>Study module of the educational institution</td>
</tr>
<tr>
<td>10</td>
<td>Log construction work</td>
</tr>
<tr>
<td>25</td>
<td>Free-choice studies included in vocational studies</td>
</tr>
</tbody>
</table>
Core Subjects

The core subjects include 16 credits of compulsory studies and four credits of elective studies. The compulsory subjects are:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native language, Finnish/Swedish</td>
<td>4</td>
</tr>
<tr>
<td>Other national language, Swedish/Finnish</td>
<td>1</td>
</tr>
<tr>
<td>Foreign language</td>
<td>2</td>
</tr>
<tr>
<td>Mathematics and natural sciences</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Physics and chemistry</td>
<td>2</td>
</tr>
<tr>
<td>Humanities and social studies</td>
<td></td>
</tr>
<tr>
<td>Social, business and labour-market subjects</td>
<td>1</td>
</tr>
<tr>
<td>Physical and health education</td>
<td>2</td>
</tr>
<tr>
<td>Art and practical subjects</td>
<td></td>
</tr>
<tr>
<td>Arts and culture</td>
<td>1</td>
</tr>
</tbody>
</table>

Where the language of instruction is Swedish, the scope of compulsory studies is 17 credits and that of elective studies 3 credits, whereas studies in the other national language (Finnish) comprise 2 credits. Of the compulsory core subjects, physical and health education and art and practical subjects are optional to those students, who start their studies after they have reached the age of 18 (Vocational Education Act 630/98, Section 12).

If a student’s mother tongue is neither Finnish nor Swedish, the education provider may decide on a different distribution of studies in the native language and the other national language, provided that the total scope of these studies is 5 credits.

Elective studies are chosen from advanced courses in the above-mentioned compulsory core subjects and from the following studies in mathematics and natural sciences or humanities and social studies: environmental studies, information and communications technology, ethics, other cultures, psychology and entrepreneurship.

Since it is important to command the core subjects common to all fields, educational institutions will also be prepared to offer those studies as free-choice studies included in vocational studies and as other free-choice studies, in compliance with the Government Resolution. These studies enable students to increase either their vocational skills or their aptitude for further study and also to make them better prepared to participate in the general upper secondary school matriculation examination.

In addition, compulsory core subjects must be included in vocational studies in so far as is necessary to reach the vocational competence provided by the Qualification. In this case, the objectives of these studies are included in those of the vocational studies.
**Elective studies, 4 credits**

The task of the elective studies is to expand and diversify students’ vocational skills and to consolidate their aptitude for further study. Students will choose 4 credits’ worth of studies from the following subjects:

<table>
<thead>
<tr>
<th>Subject</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native language, Finnish/Swedish</td>
<td>0–4</td>
</tr>
<tr>
<td>Other national language, Swedish/Finnish</td>
<td>0–4</td>
</tr>
<tr>
<td>Foreign language</td>
<td>0–4</td>
</tr>
<tr>
<td>Mathematics and natural sciences</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>0–4</td>
</tr>
<tr>
<td>Physics and chemistry</td>
<td>0–4</td>
</tr>
<tr>
<td>Environmental studies</td>
<td>0–4</td>
</tr>
<tr>
<td>Information and communications technology</td>
<td>0–4</td>
</tr>
<tr>
<td>Humanities and social studies</td>
<td></td>
</tr>
<tr>
<td>Social, business and labour-market subjects</td>
<td>0–4</td>
</tr>
<tr>
<td>Ethics</td>
<td>0–4</td>
</tr>
<tr>
<td>Psychology</td>
<td>0–4</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>0–4</td>
</tr>
<tr>
<td>Physical and health education</td>
<td>0–4</td>
</tr>
<tr>
<td>Art and practical subjects</td>
<td></td>
</tr>
<tr>
<td>Arts and culture</td>
<td>0–4</td>
</tr>
<tr>
<td>Other cultures</td>
<td>0–4</td>
</tr>
</tbody>
</table>

The educational institutions determine the objectives and the assessment criteria for attaining the ‘satisfactory’ (T1) grade for those elective studies, which are designed as advanced courses in the compulsory core subjects. The objectives for other elective studies have been prepared in such a way that they cover 4 credits.