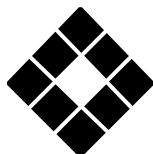


Eurydice Finland

EUROPEAN TRENDS IN ANTICIPATION OF  
TEACHER TRAINING NEEDS  
SUMMARY OF ANSWERS FROM THE EURYDICE NETWORK

ANTICIPATORY PROJECT TO INVESTIGATE TEACHERS' INITIAL AND  
CONTINUING TRAINING NEEDS (OPEPRO), REPORT 11



Reports published by OPEPRO, anticipatory project to investigate teachers' initial and continuing training needs:

1. Jakku-Sihvonen, R. & Rusanen, S. 1999. Participation of teaching staff in continuing training in 1996–1998. Report 1. (Summary available in English)
2. Hakala, J., Kiviniemi, K., Teinilä, S. 1999. Provision of continuing training in the field of teaching in 1996–1998. Report 2. (Summary available in English)
3. Joki-Pesola, O. & Vertanen, I. 1999. Teachers in vocational institutions at the beginning of 2000. Report 3. (Summary available in English)
4. Turunen, K.E. 1999. Teaching and teacher training. Conversation material based on opinions of teachers and teacher trainers. Report 4. (Available in Finnish)
5. Koivisto, J., Huovinen, L, Vainio, L. 1999. Teachers as builders of learning environments – future challenges of information and communication technology. Report 5. (Summary available in English)
6. Majaniemi, P. 2000. The need for teacher training in the Romany language in Finland. Report 6. (Summary available in English)
7. Jokinen, M. 2000. Sign language teacher training. Report 7. (Summary available in English)
8. Koponen, H. 2000. Educational contents preparing for immigrant education in teacher training. Report 8. (Summary available in English)
9. Välijärvi, J. (editor) 2000. School in the world – the world in school. Future challenges for general education and teacher training. Report 9. (Summary available in English)
10. Honka, J., Lampinen, L. & Vertanen, I. (toim.) 2000. Towards new teaching profession. Teachers in vocational upper secondary education by the year 2010. Report 10. (Summary available in English)
11. Eurydice – Finland. 2000. European trends in anticipation of teacher training needs - Summary of answers of the Eurydice network. Report 11.



The project was co-funded by the European Social Fund and the Finnish Ministry of Education.

Project Number 98 05 16

© National Board of Education and writers

Layout: Layout Studio Oy/Marke Eteläaho

ISBN 952-13-0855-9

## PREFACE

In August 1998, the Finnish National Board of Education launched an anticipatory project to investigate teachers' initial and continuing training needs, OPEPRO (see <http://www.edu.fi/projektit/opepro/english/index.html>). The project is funded by the Finnish Ministry of Education and the European Social Fund. The aim of the project is to investigate teachers' current profile of expertise, to form scenarios on the changes and challenges in the field of teaching by the year 2010 and, based on these findings, to create a permanent system to anticipate the qualitative and quantitative needs of teacher training.

In March 1999, the Finnish Unit of Eurydice, information network of education in Europe, located at the National Board of Education sent a questionnaire to other European Units concerning the anticipation of teachers' initial and continuing training needs. The enquiry aimed to obtain answers to the following questions:

- 1) Has your Ministry launched similar activities in the field of forward planning for teacher training?
- 2) In your country, is there a national strategy or plan for future development needs of teacher training in primary and secondary education? Who sets the goals for development of teacher training?

The questions were answered by a total of 23 countries: Austria, Belgium (the Flemish Community), Bulgaria, Cyprus, the Czech Republic, Finland, Denmark, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom (England, Wales, Scotland and Northern Ireland).

The answers varied considerably in terms of content and detail. Therefore, there were differences between the way the results for different countries have been reported. The summary was prepared at the National Board of Education. We hope that this report will help other countries in their efforts to plan and produce their own qualitative anticipations.

We would like to express our warm thanks to all Eurydice Units for the information we have received. Sincere gratitude goes particularly to Milla Vähäkainu, University Trainee, who prepared the first summary and to the Finnish Eurydice Unit at the National Board of Education. Hanna Autere, Kimmo Hämäläinen, Matti Kyrö and Petra Packalén processed the answers and prepared the final report.

Helsinki, 31 March 2000

Olli Luukkainen  
Project Manager  
OPEPRO project

## SUMMARY

Eurydice Finland. 2000. European trends in anticipation of teacher training needs – Summary of answers from the Eurydice network. Anticipatory project to investigate teachers' initial and continuing training needs (OPEPRO), report 11. National Board of Education.

It is becoming increasingly difficult to identify the basic skills that active citizens of the future will need. It is even more difficult to define the substance of these skills in detail. It has been estimated that information-related work will account for more than 60% of all occupations in working life by 2030. This is one of the main reasons why we have started a project in Finland to investigate teachers' current profile of expertise, to form scenarios on the changes and challenges in the field of teaching by the year 2010. As part of this project, the Finnish Eurydice Unit, located at the National Board of Education, completed an investigation into anticipation projects in other European countries.

According to replies received from 23 countries, anticipation of teacher training needs primarily aims to chart quantitative demand. On the contrary, qualitative anticipation is quite rare and where it does exist, it tends to be organised by individual institutions rather than by the national authorities. Only seven countries replied that there are similar activities to the Finnish OPEPRO project. In almost all the countries, the goals for development of teacher training are set by the ministry responsible for education or by the government. Some countries mentioned that, even though there is no separate national teacher training plan, the development of teacher training is part of a more general paper on education strategy.

Given the huge variation of settings (systems, regions and institutions) between the countries that make up the Eurydice network, it is difficult to give general descriptions of the trends in teacher training. Teacher training is broadly divided into what is provided before and during employment as a teacher: (i) pre-service or initial education and training, or (ii) continuing professional development or in-service education and training.

In most replies, the importance of continuing professional growth in all stages of a teacher's career was underlined. Another trend seems to be an effort to create synergy between research, education and the practical level. This sort of collaborative development or networking

between different educational institutions and support institutions is aimed at improving the quality of education. Teacher training is commonly acknowledged to be one of the most important factors favouring quality. Most of the challenges mentioned in the replies appear to be linked to the adaptation of teacher training to changes in society. Both teaching and learning need to be adapted to the school of the future and the learning society. There is a common understanding among the countries in question that teachers need to strive to understand their actions in various social contexts, such as scientific, pedagogical, technological, social, political, economic and cultural. This request for teachers to understand their actions in a broader social frame of reference is translated into actions, such as strengthening of teachers' knowledge of didactics, sources of learning, student assessment, teamwork and interaction skills.

The report is part of an extensive two-year anticipatory project to investigate teachers' initial and continuing training needs (OPEPRO), co-funded by the National Board of Education and the European Social Fund (ESF) and co-ordinated by the National Board of Education.

**KEYWORDS:**

anticipation, qualitative needs in education, teacher training,  
Eurydice – Information Network on Education in Europe

## TIIVISTELMÄ

Eurydice Suomi. 2000. Eurooppalaisia trendejä opettajien koulutustarpeiden ennakkoinnissa. Eurydice-koulutustietoverkolta saatujen vastausten yhteenveto. Opettajien perus- ja täydennyskoulutuksen ennakkointihankkeen (OPEPRO) selvitys 11. Opetushallitus.

Tulevaisuuden kansalaisen tarvitsemien perustaitojen tunnistaminen on vaikeaa. Vieläkin vaikeampaa on määritellä yksityiskohtaisesti näiden taitojen sisältö. On arvioitu, että vuoteen 2030 mennessä kaikista työelämän ammateista yli 60 % tulee olemaan informaatiopainotteisia. Tämä on eräs perussyistä, miksi Suomessa on aloitettu projekti opettajien nykyisen ammattitaidon selvittämiseksi. Näin voidaan muodostaa skenariorioita opetustoimen muutoksista ja haasteista vuoteen 2010 mennessä. Osana tätä projektia Opetushallituksen yhteydessä sijaitseva Suomen Eurydice -yksikkö suoritti tutkimuksen muiden Euroopan maiden vastaavista ennakkointiprojekteista.

23 Euroopan maasta tulleiden vastausten mukaan opettajien koulutustarpeiden ennakkointi tähtää ensisijaisesti määrällisten vaatimusten kartoittamiseen. Sen sijaan laadullinen ennakkointi on hyvin harvinaista ja tuolloinkin ennakkointia suorittavat pikemminkin yksittäiset institutiot kuin kansalliset viranomaiset. Vain seitsemän maata ilmoitti, että heillä on Suomen OPEPRO -projektia vastaavia hankkeita vireillä. Melkein kaikissa maissa opettajien koulutuksen kehittämistavoitteita asettavat joko opetusasioista vastaavat ministeriöt tai hallitukset. Jotkut maat ilmoittivat, että vaikka niillä ei olekaan käytössä varsinaista kansallista opettajien koulutussuunnitelmaa, koulutuksen kehittäminen on osa laajempaa koulutusstrategiaa.

Ottaen huomioon Eurydice-koulutustietoverkkoon kuuluvien maiden koulutusjärjestelmiä koskevat, alueelliset ja oppilaitoskohtaiset suuret erot, opettajankoulutuksen trendien yleiset kuvaukset ovat melko ongelmallisia. Opettajankoulutus voidaan karkeasti jakaa seuraavasti:

- a) Peruskoulutuksessa tai ennen työsuhteen alkua saatu koulutus.
- b) Ammatillinen jatko- tai täydennyskoulutus.

Useimmat vastaukset painottivat jatkuvan ammatillisen täydennyskoulutuksen keskeistä asemaa. Myös tutkimuksen, opetuksen ja harjoittelun välisen synergian luomista pidettiin tärkeänä. Tämän tyyppinen yhteistoiminnan tai verkottumisen kehittyminen oppilaitosten ja niiden

toimintaa tukevien instituutioiden välillä tähtää opetuksen laadulliseen parantamiseen. Opettajankoulutuksessa on perinteisesti pidetty laatua eräänä keskeisistä perustekijöistä. Suurin osa vastauksissa mainituista muutoksista näyttää liittyvän opettajankoulutuksen sopeutumiseen muuttuvan yhteiskunnan tarpeisiin. Sekä opetuksen että oppimisen tulee mukautua tulevaisuuden kouluun ja oppimisyhteiskuntaan. Kyselyyn osallistuneiden maiden kesken vallitsee yhteisymmärrys siitä, että opettajien tulee pyrkiä ymmärtämään toimintaansa erilaisissa sosiaalisissa konteksteissa, on kyse sitten tieteellisestä, pedagogisesta, teknologisesta, poliittisesta, taloudellisesta tai kulttuuriympäristöstä. Tätä opettajilta vaadittavaa tarvetta mukauttaa toiminta kulloiseenkin viitekehukseen voidaan käyttää heidän didaktisen pätevyytensä, oppimateriaaleihin ja oppilasarviointiin liittyvien taitojensa sekä ryhmätyö- ja vuorovaikutuskykyjen vahvistamiseen.

Tämä selvitys on osa laajempaa opetusministeriön ja Euroopan sosiaalirahaston (ESR) yhteisrahoituksella toteutettavaa kaksivuotista opettajien perus- ja täydennyskoulutuksen laadullisia ja määrällisiä tarpeita ennakoivaa hanketta (OPEPRO).

**AVAINSANAT:**

ennakointi, opettajankoulutus, opetuksen laadulliset tarpeet, Eurydice



## SAMMANDRAG

Eurydice Finland. 2000. Europeiska trender i prognostisering av lärarutbildningsbehov. Sammandrag av Eurydice-utbildningsnätverkets svar. Utredning 11 i projektet för prognostisering av behovet av grundutbildning och fortbildning för lärare (OPEPRO). Utbildningsstyrelsen.

Det är svårt att förutspå vilka basfärdigheter framtidens medborgare kommer att behöva. Ännu svårare är att i detalj definiera innehållet i dessa färdigheter. Det har uppskattats att 60 % av alla yrken i arbetslivet kommer att vara informationsinriktade år 2030. Detta är en av basorsakerna till att man i Finland har startat ett projekt för att utreda lärarnas yrkesfärdigheter för närvarande. Det gör det möjligt att skapa scenarier till förändringarna inom utbildningsväsendet och de utmaningar det står inför fram till år 2010. Som en del av detta projekt har Finlands Eurydice-enhet, som verkar i samband med Utbildningsstyrelsen, gjort en undersökning om motsvarande prognostiseringsprojekt i andra länder.

Enligt svaren från 23 Europeiska länder är syftet med prognostiseringen av lärarutbildningsbehoven i första hand att kartlägga de kvantitativa behoven. Däremot är det mycket ovanligt med kvalitativ prognostisering och då sådan förekommer utförs prognostiseringen i allmänhet av privata institutioner och inte av de nationella myndigheterna. Endast sju länder meddelade att de planerar eller har inlett motsvarande projekt som det finländska OPEPRO-projektet. I så gott som alla länder uppställs målen för lärarutbildningen av de ministerier eller styrelser som ansvarar för undervisningsärendena. En del länder meddelade att fastän de inte har någon egentlig nationell plan för lärarutbildningen så är utvecklandet av utbildningen en del av en vidare strategi.

På grund av de stora regionala och skolvisa skillnaderna i utbildningssystemet i de länder som hör till Eurydice-utbildningsnätverket, är det ganska problematiskt att beskriva trenderna i lärarutbildningen i allmänna ordalag. Lärarutbildningen kan grovt delas in enligt följande:

- a) Utbildning som fått i grundutbildningen eller innan arbetsförhållandet inletts
- b) Yrkesinriktad påbyggnadsutbildning eller fortbildning.

De flesta svaren betonade vikten av kontinuerlig yrkesinriktad fortbildning. Att skapa synergi mellan forskning, undervisning och praktik ansågs också viktigt. En sådan samverkan eller inrättandet av nätverk

mellan läroanstalterna och de institutioner som stöder deras verksamhet har som syfte att utveckla undervisningens kvalitet. I lärarutbildningen har kvaliteten traditionellt ansetts som en viktig basfaktor. Största delen av de förändringar som nämns i svaren förefaller att ansluta sig till anpassning av lärarutbildningen till ett samhälle som förändras. Både undervisningen och inläringen måste anpassa sig till framtidens skola och inläringssamhälle. De länder som deltog i enkäten är ense om att lärarna bör försök förstå sin verksamhet i olika sociala kontexter, om det sedan gäller den vetenskapliga, pedagogiska, teknologiska, politiska eller ekonomiska miljön eller kulturmiljön. Detta behov att anpassa verksamheten till den rådande referensramen, som man kräver av lärarna, kan användas till att förstärka deras didaktiska kompetens, färdigheter beträffande läromedel och elevbedömning och färdigheter för grupp- arbete och samverkan.

Denna utredning är en del av det tvååriga projektet för prognostisering av de kvalitativa och kvantitativa behoven av grundutbildning och fortbildning för lärare (OPEPRO). Projektet finansieras av undervisningsministeriet och Europeiska socialfonden (ESF).

NYCKELORD:

prognostisering, lärarutbildning, undervisningens kvalitativa behov, Eurydice

# TABLE OF CONTENTS

1	FINNISH ANTICIPATORY PROJECT TO INVESTIGATE TEACHERS' INITIAL AND CONTINUING TRAINING NEEDS (OPEPRO)	12
2	SUMMARY OF REPLIES FROM THE EURYDICE NETWORK	17
2.1	THE EUROPEAN UNION	17
2.1.2	AUSTRIA	17
2.1.2	BELGIUM (THE FLEMISH COMMUNITY)	18
2.1.3	DENMARK	19
2.1.4	GERMANY	21
2.1.5	GREECE	23
2.1.6	ITALY	25
2.1.7	LUXEMBOURG	25
2.1.8	THE NETHERLANDS	25
2.1.9	PORTUGAL	26
2.1.10	SPAIN	28
2.1.11	SWEDEN	29
2.1.12	UNITED KINGDOM – ENGLAND, WALES AND NORTHERN IRELAND	34
2.1.13	UNITED KINGDOM – SCOTLAND	37
2.2	EFTA	39
2.2.1	NORWAY	39
2.3	PRE-ACCESSION COUNTRIES	41
2.3.1	BULGARIA	41
2.3.2	CYPRUS	41
2.3.3	THE CZECH REPUBLIC	42
2.3.4	HUNGARY	43
2.3.5	LATVIA	43
2.3.6	LITHUANIA	43
2.3.7	POLAND	45
2.3.8	SLOVAKIA	45
2.3.9	SLOVENIA	46
3	CONCLUSIONS	48

# 1

## FINNISH ANTICIPATORY PROJECT TO INVESTIGATE TEACHERS' INITIAL AND CONTINUING TRAINING NEEDS (OPEPRO)

([HTTP://WWW.EDU.FI/PROJEKTIT/OPEPRO/ENGLISH/INDEX.HTML](http://www.edu.fi/projektit/opepro/english/index.html))

A two-year project to investigate the quality and quantity of teachers' initial and continuing training needs, known as OPEPRO, was launched on 1 August 1998. It is being co-ordinated by the National Board of Education and is co-funded by the Finnish Ministry of Education and the European Social Fund (ESF). The aim of the project is to investigate the current status of teachers and, as a result, to establish the qualitative and quantitative basic and continuing training development needs of teachers in general and vocational education, and to create a permanent anticipatory procedure.

### THREE SUBPROJECTS

**The first subproject, Teachers' profile of expertise**, will form a picture of the present structure of the teaching profession. As part of this subproject, a detailed survey of teachers in vocational youth level education was carried out in the spring of 1998. The survey charted qualifications, degrees, education in progress, work contacts outside school, etc. Replies were received from 97 % of teachers and rectors, that is, – a total of 14,869 replies – so the material is very representative. A similar survey is being conducted among comprehensive school and upper secondary school teachers. It is an arduous task, as it involves a total of 51,369 teachers. An analysis of the results will be published in May.

The purpose of the second subproject, **Scenarios of change in the field of teaching by 2010**, is to determine and anticipate the future of teaching by the target year 2010. Our aim is to consider changes in working life, the development of society, the effects of internationalisation, the increased flexibility of the statutes that regulate school work, etc., from the viewpoint of the changes which education needs to face. The content of the training needs and the resulting teachers' training needs arise from these changes.

The third subproject, **Procedure for anticipating teachers' needs for initial and continuing training**, includes a requirement to develop an actual anticipatory procedure for the qualitative and quantitative training needs of teachers.

## BASED ON FUTURE COMPETENCE NEEDS

Individuals have greater responsibility for their own well-being than ever before. Temporary work assignments and rapidly changing working conditions require employees to be flexible and capable of constant learning. A good basic knowledge creates a good foundation for on the job learning. In addition, education systems, instructors and learners all need to improve their learning skills. The purpose of the education system is to give extensive general education in order to facilitate new learning. Lifelong learning is a necessity and plays a central role in tomorrow's world.

It is likely that individual educational careers will replace traditional qualifications in the future. People will be offered various 'course trays', from which to choose the appropriate studies, which they will then complement as they go through life according to their needs. People will need to be able to display and market their own expertise. Titles and formal qualifications will become less significant; instead, expertise must be evident in actions and accomplishments.

We are currently going through a transitional period, standing at the intersection of the industrial society and the interaction society of the future. In transitional periods, the grounds for activities will always lose significance, whilst new models of operation come in to replace the old ones. For the future, teachers need to strive to understand their actions in a broader social frame of reference. In addition to pedagogics and disciplinary didactics, fields of knowledge such as sociology, social psychology and history will gain in significance in the work of teachers. One characteristic of this time is a shift from an approach of mass production towards smaller units both in work organisations and in administration.

Various networks have emerged to enable communication between many units. Indeed, a typical feature of the interaction society is the emergence of various networks both in work organisations and in private life. Organisations in working life have become less hierarchical; work is increasingly being done in teams, which take combined responsibility for results. Co-operation with representatives from working life and other external bodies requires good negotiation and interaction skills. Moreover, the connection of education with everyday life also has specific value in shaping young people's faith in the future and in their assuming responsibility for their own skills. Teachers' and teacher-trainers' contacts with working life will also have to be part of everyday life.

## ORGANISATION AND METHODS

It is always difficult to contemplate the future, yet we need to prepare for it. That is why networking has been used extensively as part of the project. In addition to the various departments of the Finnish National Board of Education and the Ministry of Education, project participants include the Institute for Educational Research, the Chydenius Institute and the Faculty of Education at the University of Jyväskylä, the Research Centre for Vocational Education at the University of Tampere, the Vocational Teacher Education College in conjunction with Häme Polytechnic, the ICT Learning Centre and the Department of Teacher Education at the University of Helsinki, Statistics Finland etc.

The basis of our approach has been to extensively involve various interest groups in society. We have therefore set up a consultative committee for the project with invited representatives from a broad range of educational interest groups. Naturally, the consultative committee includes representatives of all providers of teacher training, such as departments of teacher education, teacher training schools, faculties of education, subject faculties and vocational teacher education colleges. In addition, there are representatives of employer and employee organisations, student organisations, a parents' organisation, the social welfare sector (National Research and Development Centre for Welfare and Health, STAKES), future research (Finnish National Fund for Research and Development, SITRA), industrial employers' organisations, agricultural producers' organisations etc. A total of almost one hundred different involved parties.

We started by surveying a few topics concerning the future of education from the parties listed above. The material was collected, analysed and grouped under several main themes. Then we arranged a workshop, which included presentations. The material was further developed in groups of representatives from the different parties. Afterwards, the material was further processed by including an extensive amount of material about the future of education: research, literature, views, etc. This process took approximately a year.

After the third large assembly in the second year of the project, we discussed the material in small groups on the Internet. One month later, when this process was completed, it was time for an intermediate evaluation of the project, which discussed the key challenges for education and teachers.

The remaining part of the project will be spent summing up the results. The final report will be put together in the summer of 2000.

## FIRST RESULTS

### INCREASED NEED FOR CO-OPERATION AND NETWORKING

Teachers have traditionally worked alone. Co-operation with external parties is a necessary challenge for the entire educational sector. Openness to various learning environments outside school is one of the required changes. The deregulation that has occurred in the steering system and the transfer of decision-making powers to the local level will increase the significance of co-operation in teaching. Successful work performance requires competition to be transformed into a strength that arises from co-operation. This presents a major challenge to rectors in particular, but also to individual teachers. In addition to the ability to co-operate, a strong inclination towards it is needed.

It is becoming increasingly difficult to identify the basic skills that an active citizen of the future will need. It is even more difficult to define the substance of these skills in detail. It has been estimated that information-related work will account for more than 60% of all occupations in working life by 2030. The proportion of manual work will remain below 5%. People will primarily produce information instead of material goods. People in information professions will need to solve complex problems, which requires a high level of expertise and information processing skills. The ability to participate in creative cultural activities is important in the development of expertise. An expert creates new information and introduces it for common development. Knowledge, skills and competence will be very different from what they are today. In the future, people will work more and more with the aid of abstractions and graphical symbols. In the development of expertise, everyone is also required to have network competence. Since one cannot exactly know the specific skills needed, co-operation between the labour market and schools is essential.

### CHANGING LEARNING ENVIRONMENT

The expanding provision of educational technology creates opportunities for real-time co-operation. The importance of information and communications technology (ICT) in building learning environments has been emphasised in this project. Future learners will largely build their own learning environments while teachers will assist students with this. Distance-independent communication and study will increase dramatically. This is particularly prominent in supplementary education as well as in vocational continuous training. In particular, the principle

of lifelong learning requires all teachers to be sufficiently familiar with and capable of guiding the learner in the use of various new tools. Mastering the ICTs will bring new dimensions to the concept of exclusion.

On the other hand, the globalisation of information and increasingly rapid transfer of information will decrease the certainty brought about by science and technology. There has been a shift from the age of permanent information to one of changing belief systems. In learning ICT skills, it is advisable to bear in mind that learning, which aims at repetition or mechanical mastery, will not easily yield to new innovations. It is therefore important to sufficiently understand the main operating principles of both hardware and software, which will allow us to learn and to take new systems into use.

The society of the future will be increasingly based on cultural pluralism and on ideological diversity. In a world where borders are opening up, tolerance of cultural diversity will be a challenge. Tolerance is based on high self-esteem and information. On the other hand, the ability to embrace contacts with less familiar cultures presents a necessary challenge both for individuals and their communities.

## BENEFITING FROM THE RESULTS

The starting point in preparing the collection of data has been the opportunity to use the results in a variety of ways. Naturally, the primary users of the data will be in central education administration. They will need the data to anticipate teacher training quotas. Based on its duty in development and as an expert department of teaching, the National Board of Education will also need this data. Therefore, it is obviously essential to know the training and age structures of teachers. Teacher training needs the data for the same reasons.

Our planning for the procedure for anticipating teachers' needs for initial and continuing training will be presented in our main report in the summer of 2000. The report will be based on experiences gained from this project and on our views on the research methods of the future.



# 2

## SUMMARY OF REPLIES FROM THE EURYDICE NETWORK

Established in 1980, Eurydice has been an integral part of Socrates, the Community Action Programme in Education, since 1995. The Network comprises National Units and a European Unit. National Units set up by the corresponding education ministries now exist in 29 countries, namely the 15 EU Member States, the three EFTA/EEA countries, ten Central and Eastern European countries and Cyprus. These Units provide and check the basic information needed to sustain network activity.

In March 1999, the Finnish Eurydice Unit sent a questionnaire to other National Units concerning the anticipation of teachers' initial and continuing training needs. The questions were answered by a total of 23 countries: Austria, Belgium (the Flemish Community), Bulgaria, Cyprus, the Czech Republic, Finland, Denmark, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom (England, Wales, Scotland and Northern Ireland).

The answers varied considerably in terms of content and detail. There are therefore differences between the way the results for different countries have been reported.

Should you wish to see further information on teacher training or education systems in the countries of the Eurydice Network, please visit the Eurydice web site at <http://www.eurydice.org>.

### 2.1 THE EUROPEAN UNION

#### 2.1.2 AUSTRIA

Austrian law obliges all teachers to complement their teaching skills in terms of both knowledge and teaching methods. Consequently, teachers' continuing training is compulsory in practical terms, although there is no specific law governing the content or timetables of training.

#### VERSATILE TEACHER TRAINING SYSTEM

There is no established continuing training system in Austria, but the form and content of training vary considerably. Training can be arranged in workshops, discussion groups, conferences, excursions, in connection

with industrial visits or traditionally at seminars with the aid of visiting lecturers. In terms of continuing training, efforts to create a compulsory system that would, for example, oblige teachers to participate in courses on an annual basis have mainly failed due to the high costs of such a system.

According to the School Organisation Act (*Schulorganisationsgesetz, SchOG*), teachers' continuing training shall be provided by institutes specifically intended for that purpose (*Pädagogische Institute*), which are institutions operating under the auspices of the School Boards of the Provinces. The main national responsibility rests with the Austrian Ministry of Education and Cultural Affairs.

The development of the contents of Austrian teacher training is based on the notion that they should adapt to changes in society and to the reform of teaching methods. Recent amendments to the School Organisation Act (Sections 14 and 15) have granted schools more authority for their own affairs, while teachers have gained better opportunities for additional training.

A specific Centre for School Development (*Zentrum für Schulentwicklung*) was established to evaluate primary and secondary school education. Its 15 members of staff evaluate the success of schools' pilot projects, attend to long-term structural changes and publish the results of their research.

New methods used in evaluation include teachers' in-service training, familiarisation with new technical aids, teaching in a multicultural environment and the European dimension.

### 2.1.2 BELGIUM (THE FLEMISH COMMUNITY)

In Belgium, the Government is responsible for planning teacher training, especially in terms of content. Since decrees issued in 1991 and 1994, universities and other institutions of higher education have been able to decide on their degree programmes autonomously. In terms of teacher training institutions, however, this is not complete autonomy. The Decree on Teacher Training and In-service Training of 1996 reformed teacher training. It determined a framework for the organisational structure of the different forms of teacher training and contains conditions concerning the content of teacher training.

The Flemish Government determines the basic qualifications required of teachers and the core curriculum of teacher training. The basic qualifications mean the abilities, knowledge and attitudes required of teachers. Determination of the core curriculum and qualifications required of teachers is influenced by the changes in pedagogical and social reality

and the developments in educational theories, didactics and psychology. Teacher training institutions are free to design their own educational content independently, provided that they are based on the qualifications requirements set by the Government.

The Flemish Government provides financial support to pilot projects aiming to develop teacher training to better meet the needs of society. At present, for example, the Government is supporting an ongoing project, which aims to encourage immigrants and the more disadvantaged to take part in teacher training.

### 2.1.3

#### DENMARK

In Denmark, no similar activities regarding teacher training have been launched. Nevertheless, improvements have recently been made to the primary and lower secondary teacher training programmes, and new initiatives to strengthen the continuing training of teachers and research in didactics have been launched by the Ministry.

In the area of initial training of teachers for the “Folkeskole” (primary and lower secondary school), a new reform with effect from 1998 is based on the idea that primary and lower secondary school teachers must have better subject-specific preparation. They must therefore have more main subjects to study. The previous 2 main subjects have been replaced by 4 main subjects, and it is the objective that the teachers are only to teach those subjects they have had as the main subject in their study programme. As a result of this reform, the quality of the teacher training programme is further enhanced through the establishment of central knowledge and proficiency areas for each of the subjects taught at the Folkeskole.

In Denmark, the aims of teacher training at this level are set by the Minister and the College Council for Teacher Training (Seminarierådet for Læreruddannelsen) who advises the Minister on issues relating to the initial teacher training programme and is consulted in connection with passing new legislation.

In-service training for teachers at the Folkeskole is primarily organised by the Royal Danish School of Educational Studies (Danmarks Lærerskole) and by the colleges of education. Specialised State training institutions, county resource centres, teacher’s associations and the Ministry of Education also offer in-service training activities. Generally speaking, there is no legislation governing in-service training for teachers in Denmark.

At the moment, the Ministry is preparing new legislation on the establishment of a university of educational studies (Danmarks

Pædagogiske Universitet, DPU) which is to be a centre for didactic research and education covering education at all levels in Denmark. The task of the DPU will be to build bridges between the areas of research, education and the practical level and to strengthen teachers' knowledge of didactics and sources of learning through general distribution of knowledge, new offers of continuing training and establishment of closer relations between the colleges of education and the field of educational and didactic research.

New legislation on higher education centres is also being prepared. The purpose of creating these centres is to invite the colleges of education to join forces in order to improve the quality of the initial teacher training and the continuing training and to make sure the two are brought together.

Furthermore, new legislation for medium-cycle non-university higher education will introduce a bachelor's degree in the Folkeskole teacher education.

In the area of general upper secondary education, the Ministry is responsible for initial training. The Ministry also has general responsibility for in-service training at this level, but the counties must see to it that the schools have sufficient financial means to provide in-service training for their teachers, and the counties also offer courses at regional level.

A new institute for general upper secondary pedagogy (Dansk Institut for Gymnasiepædagogik) has recently been established. The tasks of the Institute will be to carry out research into subject matter and general didactics. In addition, the Institute will take part in the continuing training of upper secondary school teachers. The aim of the new institute is to develop and strengthen research into upper secondary didactics in terms of both quality and quantity and to improve working relations between the upper secondary sector and the university sector.

#### INFORMATION TECHNOLOGY

The Ministry of Education has laid down a strategy for the integration of information and communications technology in the education system, which is directed towards both the initial training of Folkeskole teachers and the continuing training of both Folkeskole and general upper secondary school teachers. The upgrading of training in IT in these areas is aiming at providing the teachers with a better understanding of the didactic possibilities in the use of information and communications technology and to make the teachers capable of using IT in their personal planning of their work and as an integrated element in their teaching to benefit the learning process of the pupils.

## TEACHER TRAINING

In Germany, teacher training is basically divided into two stages, a course of higher education and practical pedagogic training. Teacher training courses are offered at universities, *Technische Hochschulen/Technische Universitäten*, *Universitäten-Gesamthochschulen*, colleges of education (*Pädagogische Hochschulen*) and colleges of art and music. Practical pedagogic training in the form of a preparatory service is arranged at teacher training colleges (*Studienseminare*) and training schools.

The basic entry requirement for teacher training courses is the higher education entrance qualification (*Hochschulreife*), which is acquired, as a rule, after attending school for 13 years and passing the *Abitur* examination.

Six types of school teaching careers can be distinguished:

- 1) at the *Grundschule* or primary level;
- 2) general careers at primary level and all or individual lower secondary level school types;
- 3) at all or individual lower secondary level school types;
- 4) for the general education subjects at upper secondary level or for the *Gymnasium*;
- 5) in vocational subjects at upper secondary level or at vocational schools; and
- 6) in special education.

Studies at university or an equivalent institution of higher education include at least two subjects or subject areas as well as subject-related didactics, educational science and teaching practice. The details of the courses are specified by the *Länder* in study regulations, training regulations and examination regulations.

A pass in the First State Examination (*Erste Staatsprüfung*) is the requirement for admission to the preparatory service (*Vorbereitungsdienst*). All teaching career studies at university or an equivalent institution of higher education are followed by the *Vorbereitungsdienst* (preparatory service) as the second stage of teacher training. Generally lasting 2 years and with particular focus depending on the *Land* and the type of teaching career, it involves lessons, guided as well as independent teaching at training schools and studies in educational theory and subject-related didactics at teacher training colleges which reappraise and consolidate experience gained through practical training.

Following successful completion of the *Vorbereitungsdienst*, which concludes with the Second State Examination (*Zweite Staatsprüfung*), newly-qualified teachers can apply for permanent employment at public-sector schools. Successful applicants are usually appointed civil servants for a qualifying period. During this period, a teacher's aptitude and performance are monitored with consideration for his future appointment as a permanent civil servant.

#### IN-SERVICE TRAINING FOR TEACHERS

In Germany, there is no common statutory in-service training for teachers but all 16 *Länder* have their own legal norms governing the in-service training and its objectives, which are in the form of teacher training legislation, educational legislation or directives.

In-service training is the responsibility of each Ministry of Education and Cultural Affairs in their function as the highest school supervisory authority and usually as the employer of teachers. The duty of teachers to undergo in-service training is expressly laid down in all *Länder* by law or ordinance, whilst it is the duty of the Ministries of Education and Cultural Affairs to ensure provision of suitable training programmes.

State-run in-service training is organised in the *Länder* at central, regional and local levels. It can also take place within schools or in the form of guided private study. In-service training generally involves training sessions in the form of courses, study groups and conferences, which can last half a day, a full day or several days.

The entry criteria for in-service training courses are shown on the relevant course programme, which is published regularly by the relevant Ministry of Education and Cultural Affairs, by in-service institutions themselves or by other organisers of in-service teacher training.

The range of subjects is extremely broad and course contents can relate to school subjects, school types or educational and teaching goals.

#### FUTURE PROSPECTS FOR TEACHER TRAINING

A special commission was established in September 1998, the job of which was to further define the contents of German teacher training and, as a result, a report was published in August 1999, which introduced the future perspectives and guidelines. One of the most important issues in the report was an emphasis of the role and responsibility of the *Länder* as a key factor in German teacher training.

It is very important to take the individual needs of teachers into consideration at all stages of their professional careers. During the early

years in particular, there must be plans for the development of teachers' socialisation and professional qualifications in order to improve their professional competence and professional identity. In-service teacher training for teachers in the middle of their teaching careers should focus on improving their acquired routines and established working methods. Thus, it will be possible for teachers to keep improving their skills throughout their careers.

The above-mentioned commission suggested that individual schools where teachers work should take over greater responsibility for the in-service training needs of individual teachers and set up study plans tailored to the school's teachers. This could help establish the continuing self-improvement of teachers as a self-evident task lasting throughout their careers.

#### 2.1.5

#### GREECE

In Greece, teacher training aims to create an established training network connected to the continuous change of different forms of education and training. The objective of the training system is to develop teachers' skills and knowledge and to link their professional attitude and profile with the principles of lifelong learning and continuing development.

The responsibility for both initial and continuing training of teachers at primary and secondary level rests with the following bodies:

- Higher Education Institutions;
- the Pedagogical Institute;
- Regional Educational Centres;
- the School for Trade and Technical Education Teachers;
- the Research Centre for Issues of Equality;
- the Greek Language Centre.

For the purpose of complementing initial teacher training and guaranteeing continuing professional development, teacher training projects have been launched in Greece, directed at currently employed teachers in primary and secondary education, substitute teachers and those who have not been appointed to a post.

#### COMPULSORY TRAINING PROGRAMMES

The implementation of the project started at the beginning of 1997. Its purpose is to prepare teachers to better meet the demands set by the new curriculum, new teaching material and student assessment.

## PROGRAMMES FOR NEWLY APPOINTED TEACHERS

Implementation of this project started at the same time as the Compulsory Training Programmes project. The target group of the project includes:

- newly appointed teachers, in their first teaching jobs;
- substitute teachers, who have experience of teaching but who are in their first job as an appointed teacher.

The training aims to provide capabilities for the use of teaching methods, assessment and class management.

## ADVANCED OPTIONAL TRAINING PROGRAMMES

The project was implemented in 1995–1996 and has attracted a lot of interest, particularly among teachers. The training programmes offer training in various themes. The training includes scientific, pedagogical, technological, social, politico-economic and cultural fields. The approach is to demonstrate how these fields are related to educational work. The aim is to make teachers pursue continuing professional growth.

## SPECIAL TRAINING PROGRAMME OF ACADEMIC AND PROFESSIONAL DEVELOPMENT OF THE PRIMARY EDUCATION TEACHERS

Implementation of the project started in 1997. The training aims to support and equalise the status of teachers at the primary level (two-year training). The focus is on increasing the command of the teaching subject, training teachers in scientific, pedagogical and vocational issues and adopting new teaching approaches.

## OTHER PROGRAMMES

In addition to these, there are six-month training programmes available to teachers who are on work leave during these courses, long-term in-service training, in-service training connected to long-term research, distance training programmes and programmes that aim to develop teaching in the field of technology.

The Regional Development Project aims to consolidate people's resources by investing in lifelong learning. This project is supported by projects at Regional Educational Centres, the Academic and Vocational Development project and the Technical and Vocational Education project.



## 2.1.6 ITALY

The labour contract of 1999 has significantly changed the role of teacher training. While updating knowledge was previously considered a teachers' right, which was also a duty: today prominence is given to the right of personnel to training, hence, to the duty of the school administration to constitute a high quality comprehensive system of educational opportunities. Three levels of activities can be foreseen:

- (i) At the level of individual or associated schools, for planning of initiatives that are functional to the formative Offer Plan of each school;
- (ii) at the level of peripheral school administration, for services of support to projecting activities of schools and equalising interventions or connected to territorial characteristics or various types of teaching professions; and
- (iii) at central level (Ministry of Education), for interventions of general interest. An Observatory for Guidance and Monitoring of Training is foreseen.

## 2.1.7 LUXEMBOURG

Initial training for secondary school teachers was recently reorganised in Luxembourg. Before the reform was passed, there were lengthy discussions and negotiations between teachers' trade unions and political institutions; consequently, future planning of teacher training has been considered necessary in Luxembourg. In addition, there are plans to reform initial training for primary level teachers as well.

Analyses of demand for teachers are being carried out in Luxembourg on a continuous basis, but these are solely based on statistics and do not provide any suggestions on qualitative needs. Initial training for both primary and secondary level teachers is organised by the Ministry of Culture, Higher Education and Research whereas continuing training is the responsibility of the Ministry of Education, but there are close links between the two ministries on this.

There is no actual national anticipation strategy for teacher training needs in Luxembourg.

## 2.1.8 THE NETHERLANDS

On 13 April 1999, a document entitled 'Maatwerk voor morgen' was presented to Parliament by the Minister of Education. This document includes descriptions of both qualitative and quantitative teacher demand

from primary education up to university level, as well as ongoing and prospective development projects. The primary objective of measures presented in the report is to prevent a shortage of teachers without, however, neglecting quality demands. (The document is only available in Dutch; the main points were presented briefly in the response.)

Demand for staff at primary and secondary schools will increase significantly in the years to come. The forecast for the next ten years shows that annual demand for new teachers in primary and secondary education will be 8,500 and 5,500 respectively. The reasons for this include the ageing of the teaching profession, demographic developments and the image of the teaching profession. In addition to quantitative changes, teacher training will also have to take a stand on qualitative aspects. Societal changes place high demands on teachers and educational institutions. Teachers' qualifications must change and adapt along with changes in society.

Solutions for staff shortage can be sought by developing a more open labour market. The objective is that people from other fields and other sectors of experience would more easily be able to become teachers in the future. New target groups will increase the supply of teachers, and experience from other sectors of working life may be seen as an additional contribution to the world of education. In addition, development of more flexible and versatile study opportunities and co-operation between teacher training institutions and other educational institutions are also regarded as being desirable. The task of abolishing obstacles in legislation will remain with the Government.

By modernising terms of employment and staff policy, it is possible to improve the image of the teaching profession. Career opportunities, the chance for self-training and the opportunities to reconcile work with family life will also make the teaching profession more attractive. Modern technologies are another way of enhancing the image. These will bring about new forms of co-operation, new methods and new ways of working. In the autumn of 1999, the Netherlands is launching a campaign with the express objective of improving the image of teachers and of increasing the attractiveness of the educational sector.

## 2.1.9

### PORTUGAL

#### TEACHERS' RIGHT TO CONTINUOUS TRAINING

The Education System Act of 1986 states that every teacher has a right to continuous training intended to compliment and update one's

knowledge and skills as well as to permit career progress and mobility. Also, it is specifically mentioned in the Act that initial training institutions play a major role in Portuguese continuous training, which is carried out “in close collaboration with the establishments where teachers and nursery school teachers work”.

The “specific professional right of the teaching staff” is deemed to be “the right to training and information in order to carry out teaching functions and is guaranteed by teachers being given the rights to regularly attend continuous training actions, the purpose of which is to update and evaluate the teacher’s professional knowledge and capacities, as well as the objectives of professional enhancement, mobility and progress in the teaching career”.

The Education System Act acknowledges that initial training institutions play a major role in continuous training, which is carried out “in close collaboration with the establishments where teachers and nursery school teachers work”.

Subsequently, the teacher training legal system established that continuous training “can be provided by specialised institutions, namely those for initial teacher training and national, regional and local departments of the Ministry of Education, by other State departments, by employers’ organisations and associations, or by teachers themselves, including their own professional and scientific associations”.

Initiatives may also come from teaching establishments of various levels and providing different types of education and teaching whose management bodies decide to form associations for the creation of training centres and groups of trainers for each of the levels and types of education and teaching that they provide, so as to meet the respective teachers’ training requirements and priorities.

#### CONTINUOUS TRAINING AND SCHOOL LEVELS

Higher education teaching staff may be granted leave from teaching in order to update their scientific and technical knowledge, as well as to obtain the academic degrees necessary for progress in their careers. Leave from the teaching service may also be granted in the form of a one school year sabbatical. Access to sabbaticals is available to [“educadores de infância”] and teachers of the [“ensino básico”] and [“ensino secundário”] holding permanent teaching posts, who have taught for eight consecutive years and deserved a classification of “satisfactory” in their last performance appraisal.

Continuous training and guidance of non-university higher education [“assistentes”] is the responsibility of teachers specifically appointed to

this role by the Scientific council of each institution, and takes place during the first semester of each school year.

In [“ensino superior universitário”], each institution’s Scientific council appoints the teachers who will be responsible for monitoring and guiding the [“assistentes”] and [“assistentes estagiários”] each year, according to working programmes which must be fulfilled by the [“assistentes”] and [“assistentes estagiários”].

[“Educadores de infância”] and teachers of [“ensino básico”] and [“ensino secundário”] levels can also benefit from the system of equivalence to scholarship students, in order to carry out studies or research, take [“Doutoramento”], [“mestrado”], post-graduation or specialised training courses, or else to develop educational projects in areas of direct interest to education and teaching in general. To obtain the equivalence to scholarship students, teachers have to hold permanent teaching posts, they must have effectively taught for five years, and must have obtained the qualitative classification of “Satisfactory” in their last performance appraisal.

In Portugal, studies on needs of initial teachers’ training and quantitative studies are systematically done in order to understand the needs of initial and continuous teachers’ training. In relation to qualitative needs, a process is being started, which will lead to the outlining of the teachers’ performance.

The General Inspectorate of Education, “Inspecção-Geral da Educação” is responsible for monitoring continuous training activities.

Continuous training is considered a necessary requirement for progression in a teaching career.

#### 2.1.10 SPAIN

In Spain, no anticipation projects similar to those in Finland have been launched. There is also no national strategy to anticipate the development needs of future teacher training. Nevertheless, there exist certain mechanisms so that initial and continuing training is geared to the demand for teachers and to in-service teachers’ professional needs.

The 1990 Organic Act on the General Organisation of the Education System (LOGSE) and the 1995 Organic Act on the Participation, Evaluation and Administration of Educational Establishments (LOPEG) constitute the legal framework for initial and continuing teacher training. According to the LOGSE, teacher training is one of the most important factors favouring quality and teaching improvement. On the other hand, the law specifies the requirements for initial training of teachers in the

various education levels as well as establishes teachers' rights and obligation to take part in continuing teacher training activities. Universities are in charge of providing initial teacher training through the following procedure:

- The State government, at the proposal of the Universities Council, establishes the titles, which are official and valid in Spain, as well as general guidelines for studies that should be taken in order to earn these certificates.
- Then, on the basis of such guidelines, individual Universities specify the studies to be taken to earn the various different certificates; once approved, these programmes are submitted to the Universities Council for consistency.

It is also a right and an obligation of teachers to take part in continuing teacher training and it is the responsibility of the Education Administrations and the educational establishments to provide for it. According to the LOGSE, teachers must participate in activities leading to scientific, pedagogic and professional updating. The corresponding Education Authorities are in charge of defining the continuing teacher training plans in the geographical area under their authority. As a consequence, there are different continuing teacher training models and plans in Spain, depending on the Autonomous Community.

When planning continuing teacher training, the corresponding Education Authorities usually take into account, among other issues, the following: the results on training needs obtained from the questionnaires, the outcomes of the evaluation of other experimental courses, the recommendations of the European Union on continuing teacher training, collaboration with other institutions and ministerial bodies, the training demands from Universities and the evaluation of the results of previous training plans.

#### 2.1.11 SWEDEN

On the initiative of the Swedish Ministry of Education and Science, a meeting was arranged in August 1998 with representatives of the Teachers' Union, the National Union of Teachers, the Swedish Association of Local Authorities and the schools' management. The purpose of the meeting was to discuss development opportunities for teachers and how to increase recruitment into the teaching profession. The negotiations resulted in a declaration of intent concerning four areas in need of development measures. A working group made up of the representatives

was set up to consider and develop concrete solutions to meet the development challenges.

#### WORKING GROUP REPORT ON DEVELOPMENT OF THE TEACHING PROFESSION AND RECRUITMENT

The working group report makes proposals concerning four areas of development:

- 1) development of teaching as a profession;
- 2) increase in co-operation (school – university – research);
- 3) recruitment and admission to teacher training; and 4) the school as an attractive workplace.

In the working group's opinion, an individual body (local/central administration) cannot manage development of the teaching profession alone. It is important that the central administration and the local level co-operate to promote development. Awareness of objectives and ongoing work at the local level are the most important prerequisites in aiming to consolidate the idea of school as an attractive workplace.

#### QUALIFICATIONS AND CAREER OPPORTUNITIES AT SCHOOLS

The development of the teaching profession involves development of qualifications and career opportunities at schools and promotion of co-operation between schools, universities/university colleges and research. Along with decentralisation and the transition to steering by objectives and results, altered prerequisites and clearer quality requirements have been introduced to schools in terms of achieving the objectives. The underlying key idea is to bring development of schools to the local level and, ultimately, to provide pupils with a better learning environment. In order to be able to reach these objectives, teachers' powers must be increased.

The working group believes that the role of the head of school is essential in developing teaching. The head of school is responsible for creating a positive spirit and a school atmosphere that provides developing and varied assignments. The task of the head of school is to function both as a pedagogical and an administrative leader. The success of school development at a local level is closely connected with the professional leadership skills of the head of school.

New demands are continuously being attached to the role of the teacher. Teachers are required to have the ability for high-quality pedagogical work together with their colleagues and pupils. Pedagogical work should be

based on objective setting and assessment. With the development of assessment criteria and the demand for continuous participation in training, teaching has also become more important, richer in content and, at the same time, more demanding. In issues of school development, a significant responsibility is assigned to a teacher with researcher training. More in-depth knowledge of science and research provides teachers with opportunities to function as engines of local school development activities, through developing methods for monitoring and evaluating school activities, for example. In addition, people with expert competence (in the field of modern technology, for example) may be utilised in school instruction. These people cannot replace teachers, but they may facilitate and complement teachers' contribution to work.

#### SCHOOL – UNIVERSITY – RESEARCH CO-OPERATION

During the past decade, the school institution has undergone several changes related to issues of responsibility and steering arrangements. Extensive reforms have been carried through both in compulsory education and at upper secondary schools. New curricula emphasise issues such as the significant bearing of pre-school education as the first stage of lifelong learning. These changes have not yet been sufficiently reflected in research activities. Research must be tied more closely to the school system, and co-operation between schools and institutions of higher education must be reinforced. Research information into many important fields is still missing, or is unavailable to schools.

In the working group's opinion, more opportunities must be created for teachers to combine the duties of their job with their personal research in a meaningful manner. Through the higher education system, the Government channels support into researcher training, which aims to develop co-operation between schools and institutions of higher education. Consequently, teachers have the opportunity to participate in research projects while working as teachers. This enables channels to be opened up between schools and institutions of higher education; the results and experiences benefit both sides.

The Teacher Training Committee (lärarutbildningskommittén, LUK) has also made a proposal on research projects of schools and teachers, etc.

#### RECRUITING NEW TEACHING STAFF

In the next few years, the need for teachers will increase considerably and there will also be a need for people with teacher training in sectors

outside the school system in the future. A partial reason for the impending teacher shortage is scarce interest in teaching, which is in turn caused by the scarce career development opportunities within the profession. Another factor with a bearing on the increase in teacher demand concerns demographic factors (such as the retirement of teachers). Special attention needs to be paid to the recruitment of teachers to mathematical, scientific and technical fields. At the same time, it seems that there is already some oversupply in some teaching categories.

In order to prevent a shortage of teachers, teacher training must also be made as flexible as possible by providing those interested in teaching with the opportunity to utilise their previous academic education and work experience. Teachers' chances to obtain further training and to complement their qualifications must also be facilitated.

#### THE SCHOOL AS AN ATTRACTIVE WORKPLACE

Teaching is a profession of the future, and the school of the future will be a learning organisation where the head of school and teachers are responsible for their own and the whole school's development and growth. The school must develop into a stimulating and motivating workplace, which will encourage well-educated young people to make teaching their chosen profession.

#### THE 'SCHOOL – A DEVELOPING ORGANISATION' PROJECT

The working group has submitted a proposal to launch a development project focusing on the school as a modern and stimulating workplace, where different development and career opportunities are adjusted to practical activities. The project will last three years, and its further purpose will be evaluation. Experiences obtained from the project will form a foundation for further development projects. Co-operation between local authorities, schools, institutions of higher education and research will play a significant role in carrying through the project. Different bodies will have different responsibilities as part of the project. The local authorities as employers will be responsible for creating development and career opportunities for teachers. Heads of school will be responsible for the results of the schools and for development of their activities. Teachers will be responsible for their own contribution and for actively attending to their own professional growth. Successful implementation of the project will require interest and responsibility from all parties.



The main objectives of the project are to develop the quality of schools, to increase the attractiveness of the teaching profession and to disseminate the know-how and experiences generated by the project. The project will start in the year 2001. The State and the school administration will assist in and provide support to implementation of the project.

#### PROGRESS OF THE PROJECT

The local authorities will prepare an analysis on teacher demand over the next 5–10 years. The purpose of the analysis is to determine the fields in which teachers will be needed. Institutions of higher education will be responsible for training and selecting people for training. The main target group consists of serving teachers who have teaching qualifications, but also those who do not have such qualifications. Another target group may include people with some other higher education degree, which can be supplemented with teaching studies. It would be desirable to formulate the training so as to provide opportunities to partially participate through distance learning, which would make it possible to combine study and work. The aim is to adjust training individually so that it can be planned on the basis of each student's previous education and experience.

#### QUANTITATIVE ANTICIPATION OF TEACHER TRAINING NEEDS IN SWEDEN

The National Agency for Education is responsible for the quantitative forecasting of demand for teachers. The most recent forecast, published in 1998, covers the period 1997–2017. Forecasts are based on analyses of supply and demand; these will be compared every five years, and the difference provides a basis for drawing conclusions on recruitment needs.

Universities and university colleges receive educational assignments from the Government, which set out the goals and framework for the activities they need to carry out over the next three years. However, teacher training and degree programmes in technology, for example, will be set goals for the number of finished degrees over a nine-year period (2000–2002, 2003–2005, 2006–2008). This aims to ensure the achievement of the competencies that will be necessary in the society of the future.

## CHALLENGES AND OBJECTIVES OF TEACHER TRAINING

In order to keep up with the rapid pace of a changing society, there is a strong need for highly educated, motivated and professional teachers at all levels of education and training. Teachers must be eager to constantly enhance their professional skills.

Among other things, the following potential new challenges for education must be met:

- What will the school of the future look like; how will learning and teaching need to adapt?
- How will schools and the curricula be influenced by the objective of educating young people to adulthood, so that they will be able to manage their own learning and develop varied employment careers?
- What do we mean by a learning society?
- Should more of the funds allocated to supporting lifelong learning be channelled to individuals instead of to institutions?

The Department for Education and Employment (DfEE), which is generally responsible for England, has set the following three specific objectives for its activities:

1. To ensure that, at the age of 16, everyone has the skills, attitudes and personal qualities that will give them a secure foundation for lifelong learning, work and citizenship in a rapidly changing world.
2. To develop in everyone a desire to commit to lifelong learning, which in turn will improve their employment opportunities in a changing labour market.
3. To help people who do not have a job; in particular, to improve employment opportunities for young people and the long-term unemployed.

Similar arrangements exist in Wales and Northern Ireland.

## POLICY PROGRAMME AND THEMES

To achieve these objectives, the Government has put in place a wide-ranging policy programme and has set a number of specific targets for 2002. The policy programme must be seen as being an opening for continuous discussions and development work. Underpinning the programme are six cross-cutting themes:

- raising standards and achievement in schools;
- encouraging innovation, diversity and new ways of working;
- promoting equal opportunities;
- increasing access to and participation in education and training;
- promoting employability;
- supporting the development and implementation of reforms at a local level.

Preparation of a policy programme will not be enough; working methods must be modernised on a continuous basis. If the practices used do not produce the expected results, more efficient approaches must be adopted. The DfEE predominantly aims to modernise its activities

- by working in partnership within Government and with organisations outside Government;
- by co-operating with other countries and by trying to learn from partners;
- by exploiting the potential of technology (such as Virtual Teacher Centres, Standards and Effectiveness Databases);
- by being outward-looking, innovative and willing to learn.

#### FUTURE DEVELOPMENTS WITHIN THE TEACHING PROFESSION

The DfEE has published a Green Paper under the name of **Teachers: meeting the challenge of change**, which proposed an entirely new career structure for teachers in England. The emphasis was put on rewarding outstanding performance and offering better incentives for success. Based on this, the DfEE announced a project called **A Fast Track for Teachers: A Prospectus**, which, in addition to introducing the Ministry's development plans in the area, includes several pilot programmes that will begin during the 2000–2001 academic year. The prospectus is available on the Internet at:

<http://www.dfee.gov.uk/fasttrack>

In the Green Paper, the DfEE has made some proposals for developing initial teacher training in England in the future. Among other things, the document proposes measures to support teachers in their continuing professional development (CPD). These include further emphasis on the management of information and communications technology (ICT) and a new focus on professional development bringing together national, school and individual priorities. This bringing together of priorities aims to support teachers' commitment to CPD. In this context, the Department

for Education and Employment proposes a national Code of Practice, which aims to ensure that the training provided delivers results.

There are efforts to make teacher training more rigorous, on the one hand, but also more flexible, on the other. The Government plans to develop national tests for teacher trainees in literacy, numeracy and ICT. The aim is to extend and diversify graduation routes into teaching.

#### TEACHER TRAINING AGENCY (TTA)

In England, the **Teacher Training Agency (TTA)** has a wide range of responsibilities for teacher training, including provision of information on teaching as a career, encouraging recruitment of teachers, approving teacher training institutions, setting standards and national curricula for teacher training, and carrying out relevant studies and research.

In the TTA's Corporate Plan for 1998–2001, the following strategic objectives have been set:

- to ensure the attractiveness of the teaching profession and the high quality and quantity of teacher candidates to meet the needs of schools;
- to raise the standard of initial teacher training;
- to ensure that teachers in the early stages of their careers are provided with the support they need;
- to improve the knowledge, understanding and skills of serving teachers;
- to improve the quality of schools and management;
- to secure teaching as a research-based profession;
- to provide information to the DfEE on current and future developments in teacher training, teaching and school leadership.

In England, Wales and Northern Ireland, responsibility for continuing professional development is shared between central government, government agencies, local education authorities, school governing bodies, headteachers and teachers. In England, the TTA has developed a framework of national standards and professional qualifications for teachers. The framework covers the standards for

- the award of Qualified Teacher Status (QTS);
- subject leaders;
- Special Educational Needs Co-ordinators;
- headteachers.

(Documents are available on the Internet at <http://www.teach-tta.gov.uk>)

## OBJECTIVES OF TEACHER TRAINING

In Scotland, the content, nature and duration of teacher training are determined by the First Minister for Scotland, who is also responsible for supervising its implementation. In addition to competencies for teaching knowledge and skills, teacher training must provide the abilities to nurture pupils and support their personal, emotional and social development. Through teaching and setting an example, teachers should be able to develop pupils' interest for learning and study. Teacher training should guide future teachers to reflect on their own work and its effects and to give thought to better and more efficient ways of working. How these competencies are achieved is up to teacher training institutions.

The qualifications requirements of teachers have been divided into four parts:

- 1) command of teaching subjects and educational content;
- 2) class management;
- 3) knowledge of the school institution and education systems; and
- 4) values, abilities and attitudes.

In terms of command of subjects and educational content, teachers are expected to have sound knowledge and practical skills in the subjects they teach. This involves the ability to provide stimuli and challenges for pupils and the skill to notice pupils' potential learning difficulties. This group also includes the use of modern technologies and the ability to understand how they can be efficiently applied to instruction, bearing in mind legal, ethical and health aspects. A teacher must be able to plan lessons and teaching periods so as to secure the development and continuous learning of pupils.

Class management skills include communication skills, management of teaching and learning methods, organisational skills and assessment. Teachers with good communication skills are able to motivate their pupils and to sustain the motivation, as well as to support pupils' participation in discussions. It is important for class organisation that all pupils have something to do and that challenging assignments are also given to more gifted pupils. The teacher's task is to create an educating, stimulating and safe learning environment, which allows for the needs of all pupils. In terms of assessment, teachers must understand the principles of assessment and must be familiar with different assessment methods. It is important for pupils' learning that teachers give them both oral and

written feedback on a regular basis. In addition, teachers must also be able to use the results of assessment to develop and improve their own teaching.

The qualifications requirements also include knowledge of administration. Teachers must understand the international, national and local emphases of their profession. Qualified teachers are also expected to have a certain attitude towards work. They must be keen on teaching and committed to their profession. This also involves the continuous development and updating of their own professional competence.

#### CONSULTATION DOCUMENT: DEVELOPING A FRAMEWORK FOR CONTINUING PROFESSIONAL DEVELOPMENT

In Scotland, the Government is committed to efforts to raise pupils' standards of achievement. In order to achieve this objective, there is a need for highly educated, up-to-date teachers as well as efficient structures for the professional development of teachers.

The Scottish Office published a consultation document concerning the continuing professional development (CPD) of teachers in July 1998. The document contains proposals for measures to support teachers' continuing professional development. The consultation period ended in October 1998, by which time the Scottish Office had received 75 responses to its enquiry: 25 from Councils, 11 from schools, 12 from institutions of higher education, 6 from teacher associations, 7 from individuals, 12 from other educational bodies and 2 from the Church.

The proposals put forward in the document are central to the Government's efforts to raise the standards of learning achievement in Scotland. On the basis of the responses obtained to the proposals, the aim is to create a framework for continuing professional growth, which would also ensure the efficiency of schools and an increased standard of achievement. The framework is expected to function as a guide for teachers, schools and educational authorities in considering the qualifications necessary in teaching. A further aim is to help teachers to see their own opportunities as a whole.

Initial teacher training only provides a foundation for functioning as a teacher, and continuing training must be built on this foundation. Therefore, CPD (continuing professional development) should be built as a continuum so that it will provide development opportunities for all stages of a teaching career. Teachers in Scotland are obliged to attend to their professional growth. Beyond initial teacher training, however, there are no requirements laid down for teachers' additional qualifications, and there are no standards set for professional development. In other

words, there is a lack of an overall framework to provide continuity for teachers' development. In his report on teacher training in Scotland, Sir Stewart Sutherland expressly calls for increased coherence in the organisation of CPD. The Government also agrees with Sutherland's demand to create a national strategic programme and believes that the national CPD framework will contribute to raising the standard of teaching and, subsequently, pupils' learning results. By developing a framework for standards and qualifications, it is also possible to better allocate resources available for education and training.

## RESPONSES TO THE CONSULTATION DOCUMENT

The responses deemed it necessary that the framework be national, but that it nevertheless take account of needs at a local level. It should include academic education, practical training and in-service training. The framework should also be such that it can be connected with schools' development plans and the setting of objectives. In their responses to the question about which body should be responsible for the development of the CPD framework, the majority proposed a national group of representatives.

Many responses emphasised the significance of flexibility. A well-functioning framework for the development of continuing professional growth will, first and foremost, provide opportunities, rather than setting barriers that might hinder teachers' professional development.

For the most part, the responses did not support regulation of participation in continuing training. Continuing professional growth should be seen as an opportunity, not an obligation.

## 2.2 EFTA

### 2.2.1 NORWAY

One of the central documents determining the guidelines for teacher training in Norway is the report on teacher training entitled 'Mellom krav og ideal' ('Between Requirements and Ideals') published in Official Norwegian Reports (NOU) in 1996. Based on this survey, the Government issued a White Paper on Teacher Education in the spring of 1997. In addition, an Action Plan for Teacher Recruitment and a White Paper on the Dimensioning of Higher Education were published in the spring of 1999. These latter two documents were not, however, available when this report was being prepared.

In addition to the documents determining the guidelines, Norway prepares framework plans, which also cover teacher training. The Ministry of Education, Research and Church Affairs (KUF) decides on the precise target figures of teacher training for each university.

There are various ongoing quality assurance measures in Norway, based on teachers' further training. These activities are steered by the Statens lærerkurs (the National Teacher Training Centre). The Forskningsrådet (Research Council) has launched research projects in the field of vocational education and training, such as in vocational didactics. In addition, the KUF has placed much emphasis on research and development activities.

#### BETWEEN REQUIREMENTS AND IDEALS

This committee report (Lærerutdanning. Mellom krav og ideal, NOU 1996:22) presents a description of teacher training in Norway, its content and objectives, application to teacher training and the structure of the teaching profession. This statistical description of the structure of the teaching profession is very similar to what was done in Finland on the teaching profession in vocational education and training and to what is currently being prepared on teachers in general education.

The committee pondered the learning visions of teacher training in Norway through the following dialectic analyses:

- initial training – continuing training (grunnutdanning – fortsettende utdanning);
- tradition – reform (tradisjon – fornyelse);
- central steering – local freedom (sentral styring – lokal frihet);
- communality – individual (fellesskap – individ);
- integrity – special characteristic (helhet – særpreg).

Similar parallels can also be found in the Finnish development measures of education policy. Furthermore, this definition of the school's task was steered more strictly towards the teacher's role by the committee. It pondered the teacher's task and the qualifications and competence requirements set for him or her in different sectors of education and training.

In its evaluation, the committee stated that there is still a need for centralised steering through framework plans. These should provide guidelines for individual forms of education and training. Other issues raised in the evaluation of teacher training included the improvement of quality, vocational didactics and teacher training as a resource centre.



Moreover, attention was paid to a cycle of problems that ensues when a school's own curriculum is weak and teachers are not sufficiently qualified to compensate for this. Consequently, students will not be motivated to study their own field, but may want to change orientation, which in turn is difficult.

The committee finally resolved to pronounce that the framework plans must have a more binding status and that they must be made clearer. In the committee's opinion, more emphasis must be placed on the integrity both of the education system and of individual forms of teacher training. All forms of teacher training must also include preparation for adult education and training, and more emphasis must be attached to adult pedagogy. In addition, the committee made several proposals with a view to developing vocational education and training and suggested a specific research and development programme to support this goal.

## GOVERNMENT WHITE PAPER ON TEACHER EDUCATION

The Government White Paper was largely based on the committee's proposals. It proposed that centralised steering be consolidated by means such as the development of framework plans and dimensioning the annual intake in teacher training for each university. The Government placed great emphasis on the development of the content of teacher training.

### 2.3 PRE-ACCESSION COUNTRIES

#### 2.3.1 BULGARIA

In Bulgaria, teacher training is planned annually based on a Decision taken by the Council of Ministers.

#### 2.3.2 CYPRUS

The Cypriot Ministry of Education and Culture has implemented some measures regarding the planning of future teacher training, but the projects have not been as far-reaching as the Finnish OPEPRO project. In 1998, a review was carried out charting English instruction at school and teachers of English. Based on the results obtained in the review, recommendations were issued on the provision of education and the research also led to the future development of training for English teachers. In addition, the research provided a stimulus to launch similar

projects among teachers of other subjects as well. In the future, surveys will presumably be carried out in Cyprus with the aim of influencing teacher training in qualitative and quantitative terms.

Initial teacher training is provided by the University of Cyprus and continuing training by the Cyprus Pedagogical Institute. The Ministry of Education and Culture and teacher training institutions have deemed the following content areas to be particularly challenging in the teacher training of today's society:

- knowledge of modern technologies (a project aiming to introduce computers in primary education has already been launched);
- interaction skills (teachers' ability to co-operate with pupils' parents in particular is perceived as being of the utmost importance);
- new methodological approaches (e.g. increasing co-operation in classwork, consideration for the needs of different pupils).

Future demand for teachers in Cyprus is anticipated by the Ministry on the basis of statistics and reports. Anticipation primarily aims to chart quantitative demand. By collecting data on graduating and retiring teachers, children of school age and the existing student population, the Ministry prepares forecasts for future demand for teachers.

On the recommendation of the Ministry of Education and Culture, the Ministerial Council has already made several decisions concerning the continuing training of teachers. These decisions were made back in 1987, but still remain unimplemented, since they have not been approved by the House of Representatives. One of the proposals concerned the provision of refresher courses for teachers every ten years. Teachers and their unions are continuously demanding that the proposal be implemented, because they consider that it will upgrade teachers' skills and lead to provision of better instruction for pupils.

### 2.3.3 THE CZECH REPUBLIC

There are no national projects and there is no strategy for anticipating future teacher training. However, teacher training is one of the topics in the current debate on educational policy and on the strategic aims of the Ministry of Education, Youth and Sports. A new policy towards in-service training teachers will be developed by the year 2002.

#### 2.3.4 HUNGARY

There are no ongoing projects for anticipating teacher training needs in Hungary. The Governmental Decree on the Teaching Profession and the Governmental Decree on the In-service Training of Teachers determine the requirements that teacher training must achieve over the next ten years.

#### 2.3.5 LATVIA

The Ministry of Education and Science co-ordinates initial and continuing teacher training. The Ministry elaborates the projects of normative documents, such as the Concept of Teacher Training, and the Concept of Teacher's Further Education, in collaboration with teacher training institutions. The Latvian strategic programme for the development of education "Education 1998–2003" includes a subprogramme "Education and Professional Development of Educators", which provides characteristics in this field, and includes details of various projects and activities.

The Education Law defines that, over a period of three years, a pedagogue has to spend 30 days on his/her further educational and professional development. Since 1993, the Ministry has invited proposals for provision of programmes of teachers' further education. As a result, the best programmes receive state budget funding. Teachers have the possibility to improve their knowledge by participating in pedagogical study programmes at institutions of higher education. About 80 different institutions are involved in the further education programmes. These institutions are Universities, Pedagogical Universities and other pedagogical institutions of higher education, district and city departments of education, municipal educational centres, etc.

The education system in Latvia offers teacher training and education both in academic and professional educational programmes, and various courses which provide teachers with knowledge on the latest developments in pedagogy, psychology, teaching methods, technologies, etc.

#### 2.3.6 LITHUANIA

At present, there are 30 teacher training centres and seven continuing training centres in Lithuania, operating in conjunction with different institutions and universities.

As a result of a decision taken by the Ministry of Education and Science in 1998, all teachers are entitled to a minimum of 15 paid continuing training days and a maximum of 50 (according to a decision

taken in 1995) paid continuing training days within a five-year period. Continuing training is provided through short- and long-term courses. The duration of short-term continuing training is 1–3 days (maximum duration 10 days). The more continuous form of continuing training is arranged in several sessions, of which the teachers may choose either an entire training programme or only those sections of relevance to them. It is recommended that teachers participate in continuing training during school holidays.

The Ministry of Education and Science has appointed a working group on planning (operations started at the end of April 1999), with the task of planning future teacher training. The idea that reform of teacher training is inevitable due to the traditional character of training is extremely topical in Lithuania. A problem that has emerged in the reform of teacher training is that teacher training institutions, similar to other institutions of higher education, are relatively autonomous and thus free to decide on their study programmes and educational content independently. However, teacher training institutions are accountable to the Ministry of Education and Science, and it is indeed considered to be necessary to narrow the gap between teacher training institutions and the Ministry.

A shortage of teachers presents a problem in Lithuania, particularly in terms of certain subjects and in those parts of the country where there are no teacher training institutions. The Ministry of Education and Science has endeavoured to improve the situation by organising retraining for those without adequate specialisation. This training is primarily targeted at those people who are unemployed or at risk of unemployment, as well as at more mature teachers, whose education no longer meets the demands of today's school world.

**The General Concept of Education in Lithuania** is a document that sets forth the fundamental guidelines for reform of the education system. It is considered that teacher training plays a central role in achieving the objectives of Lithuania's societal and educational reform. In the future, teachers must be creative individuals, who are able to nurture pupils' intellectual and physical qualities and to create conditions where pupils have opportunities for freedom of expression and for development of their own personalities. Teachers must be educators; the mere transfer of objective information is not enough. Educational work and pedagogical interaction will be built on the foundation of dialogue, broad-mindedness, respect, justice, high standards and creativity. Teachers at all levels of education must be culturally, morally, socially, intellectually, pedagogically and scientifically qualified. This is particularly important since, through their value systems and

professional competence, teachers are involved in defining the atmosphere, goals and means to achieve the objectives in educational institutions.

Teacher training in Lithuania is regulated by legislation (Law of the Lithuanian Republic on Education and Law on Science and Studies). Teachers are trained in pedagogical institutions and universities authorised by the Ministry of Education and Science. Demand for teachers in different fields is determined by the Ministry of Education and Science. Teacher training is provided at four levels: college level, universities (Bachelor's degree), Master's level studies and doctorate studies. The qualifications requirements of teachers are set by the Ministry of Education and Science. The Ministry also performs analyses of teacher needs on a continuous basis and plans and organises training in co-operation with universities and other institutions to ensure that teachers' qualifications remain up-to-date.

### 2.3.7 POLAND

Poland has developed a national strategy for anticipating teacher training needs and there are also projects concentrating on the quantitative anticipation of future teacher training needs. Qualitative anticipation similar to the OPEPRO Project does not exist at the national level.

Within the structure of the National Centre for Teacher Training in Warsaw, there is a Section for Prognosing Teacher Personnel Needs, which conducts studies or simulations, aiming to anticipate the future quantitative needs of teacher training. The main areas of activity of this Section are:

- development of expertise and diagnosis of the present situation in the field of teaching staff, their specialisation and training
- development of prognoses connected with expected changes in the demand for teachers of general subjects

The factors that are taken into account include demographic, structural and curricular changes, legislation and statistics (databases on teachers and educational institutions).

### 2.3.8 SLOVAKIA

There are currently no ongoing projects to develop teacher training in Slovakia. Nevertheless, the Ministry of Education intends to reform its education policy and school legislation in the near future; in connection with this reform, development plans for teacher training will also become topical. However, no actual anticipation projects are available.

Slovenian education policy has changed dramatically since the late 1970's. Diverse societal and political changes also called for transformation of the education system. The most significant present development trend concerning teachers and school management is the tendency towards centralisation and increased autonomy of teachers in their relationship with the state. The Ministry of Education and Sport has prepared a scenario on the changes required in the field of education and training. The new school legislation, which came into force in 1996, brought about reforms to basic and secondary education. Slovenia is currently preparing a projection for teacher demand by 2005.

General requirements for qualifications of pre-school teachers are laid down by law. An appropriate training programme is specified by the Minister of Education after consultation with the Council of Experts of the Republic of Slovenia for General Education.

Academic validation of the study programmes is wholly within the competencies of universities. Higher education study programmes are drawn up and adopted by the higher education institutions conforming to their academic standards. The senates of higher education institutions – on the approval of the university senate of which they are members – adopt the programmes offering higher professional education and programmes offering university education as well as supplementary training programmes.

The Government and its body, the National Council of Higher Education, are responsible for the procedure of accreditation, i.e. establishing if the completion of the study programme ensured good quality teaching staff. The National Council of Higher Education, assisted by the working body, the Education Commission, provides opinions on the fulfilment of requirements for the introduction of new study programmes, adopts measures for accreditation of teacher training study programmes and gives opinions on the professional suitability of the study programme in the light of the measures adopted. The Government also exercises its responsibility in this area through funding mechanisms.

Slovenian legislation guarantees teachers five days of continuing training per year. The State manages and finances continuing training. The Programme Committee appointed by the Minister determines the priority fields of training and selects and evaluates the study programmes. All programmes selected can be found in the Catalogue of Permanent and Professional Training Programmes for Teachers, which is updated annually.

The Ministry of Education and Sport operates to develop future teacher training in Slovenia. Development measures are being carried out in connection with the curricular reform project at Slovenian elementary schools. Anticipation of future teacher demand is being carried out in Slovenia. Since 1992, the Ministry of Education and Sport has kept a register of staff in elementary and secondary schools. Annual plans about teacher needs are prepared on the basis of these registers and annual reports on teacher qualifications. These reports make it possible to prepare forecasts of both qualitative and quantitative teacher demand. The general goals for teacher training are presented in the 1996 White Paper on Education in the Republic of Slovenia.

# 3

## CONCLUSIONS

According to replies received from 23 European countries, anticipation of teacher training needs primarily aims to chart quantitative demand. On the contrary, qualitative anticipation is quite uncommon and, when it exists, it tends to be organised by individual institutions rather than by the national authorities.

Only seven countries mentioned in their replies that there are similar activities to that of the Finnish OPEPRO project. Those countries are Germany, the Netherlands, Portugal, the UK (England, Wales, Scotland and Northern Ireland), Sweden and Slovenia. Norway and Cyprus pointed out that there are some pilot projects or quality assurance measures ongoing in their countries. In the future, surveys will presumably be carried out in Cyprus with the aim of influencing teacher training both in qualitative and quantitative terms. Similar ideas or plans to extend the forward planning to cover the qualitative aspect are also under consideration in other countries.

In almost all of the countries, the goals for development of teacher training are set by the ministry responsible for education or by the government. Nevertheless, several institutions in Greece are responsible for setting objectives and, in Portugal, the institute responsible is the General Inspectorate for Education. Denmark, the UK, Sweden, Norway and Poland have a national strategy or plan for the future development needs of teacher training. Poland underlined that the National Strategy concentrates on quantitative teacher training needs. In Bulgaria, the needs of teacher training are planned annually based on a decision taken by the Council of Ministers. Some countries mentioned that, even though there is no separate national teacher training plan, the development of teacher training is part of a more general paper on education strategy.

Given the huge variation of settings (systems, regions and institutions) between the countries belonging to the Eurydice network, general descriptions of trends in teacher training are somewhat problematic. Nevertheless, we tried to identify the main challenges that teacher training in Europe is facing at present based on the replies from the 13 countries, which gave some indication of the current debates over the content of teacher training

Teacher training is broadly divided into what is provided before and during employment as a teacher: (i) pre-service or initial education and training or (ii) continuing professional development or in-service



education and training. In most of the replies, the importance of continuing professional growth in all stages of teachers' career was underlined. There are several ongoing development projects in Europe aiming particularly at the continuing training aspect. Another trend seems to be the effort to create synergy between research, education and teaching practice. This sort of development in collaboration or networking between different educational institutions and support institutions is aimed at improving the quality of education. Teacher training is commonly acknowledged to be one of the most important factors favouring quality.

Some countries admit to be struggling with the low prestige of the teaching profession. Sweden is paying particular attention to the conditions of service with the aim of making a teaching career professionally attractive and rewarding. The Netherlands is trying to handle the staff shortage by modernising terms of employment and staff policy. The proposals for areas of development include development of teaching as a profession, recruitment and admission to the teaching profession and turning schools into an attractive working place.

Most of the challenges mentioned in the replies appear to be linked to the adaptation of teacher training to changes in society. Both teaching and learning need to be adapted to the school of the future and the learning society. There is a common understanding among the countries in question that teachers need to strive to understand their actions in scientific, pedagogical, technological, social, political, economic and cultural fields. This request for teachers to understand their actions in a broader social frame of reference is translated into a need to strengthen teachers' knowledge of didactics, student assessment, team work, interaction skills and sources of learning. Teachers also need to keep up-to-date with the latest developments in information and communications technology. Integration of information technology into initial and continuing teacher training is required in order to make IT available for didactic purposes and for work planning.

In Finland, the aim of the ongoing project is to investigate the current status of teachers and, as a result, to establish the qualitative and quantitative basic and continuing training development needs of teachers in general and vocational education, and to create a permanent anticipatory procedure. The basis of the approach has been to extensively involve the various interest groups within society. That is why networking has been used extensively as part of the project. As the main result we can see that, in the future, people will work more and more with the aid of abstractions and graphical symbols. In the development of expertise, everyone is also required to have network competence. As one cannot know exactly the specific skills needed, co-operation between the labour market and

schools is essential. Planning for the procedure for anticipating teachers' needs for initial and continuing training will be presented in the main report in the summer of 2000. The report will be based on experiences gained in this project and on views about future research methods.