

DOCUMENT RESUME

ED 416 388

CE 075 863

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TITLE Teachers and Trainers in Vocational Education and Training. Volume 3: Austria, Belgium, Greece, Luxembourg and the Netherlands.

INSTITUTION European Centre for the Development of Vocational Training, Thessaloniki (Greece).

ISBN ISBN-92-828-0613-8

PUB DATE 1997-00-00

NOTE 228p.; For related volumes, see ED 401 469-470 and CE 075 864.

AVAILABLE FROM Bernan Associates, 4611-F Assembly Drive, Lanham, MD 20706-4391; phone: 800-274-4888 (catalogue no. HX-06-97-344-EN-C: 10.50 European Currency Units).

PUB TYPE Reports - Research (143)

EDRS PRICE MF01/PC10 Plus Postage.

DESCRIPTORS Adult Education; Developed Nations; Foreign Countries; *Job Training; Postsecondary Education; Secondary Education; Teacher Associations; *Teacher Education; *Teacher Responsibility; *Teacher Rights; Trainers; Unions; *Vocational Education; *Vocational Education Teachers

IDENTIFIERS Austria; Belgium; Greece; Luxembourg; Netherlands

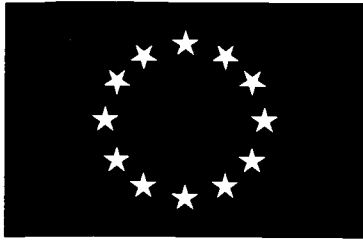
ABSTRACT

This third volume in the series provides a systematic description of the situation of teachers and trainers in vocational education and training (VET) in five European countries: Austria, Belgium, Hellas/Greece, Luxembourg, and the Netherlands. Each country report begins with an outline of the national context--the country's geographical features and the ethnological composition of its population; cultural history and religious considerations are included where they are relevant to VET. A brief description follows of the overall education system of which VET is a part. The next section of each report examines the VET system within which the teachers and trainers who are the subject of this publication serve. The following section describes the teaching and training faculty--in quantitative and qualitative terms to the extent that the relevant information is available--and an account of teachers' and trainers' legal standing, rights, and duties and also those of the teacher unions and other professional organizations that work on their behalf. The final substantive sections explore the inservice and continuing training opportunities open to teachers and trainers in VET and possibilities for career advancement. A separate section lists the addresses of institutes associated in some way with the initial or continuing training of teachers or trainers in VET. Finally, each country report presents a list of acronyms and abbreviations used in the text. (YLB)

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Teachers and trainers in vocational education and training



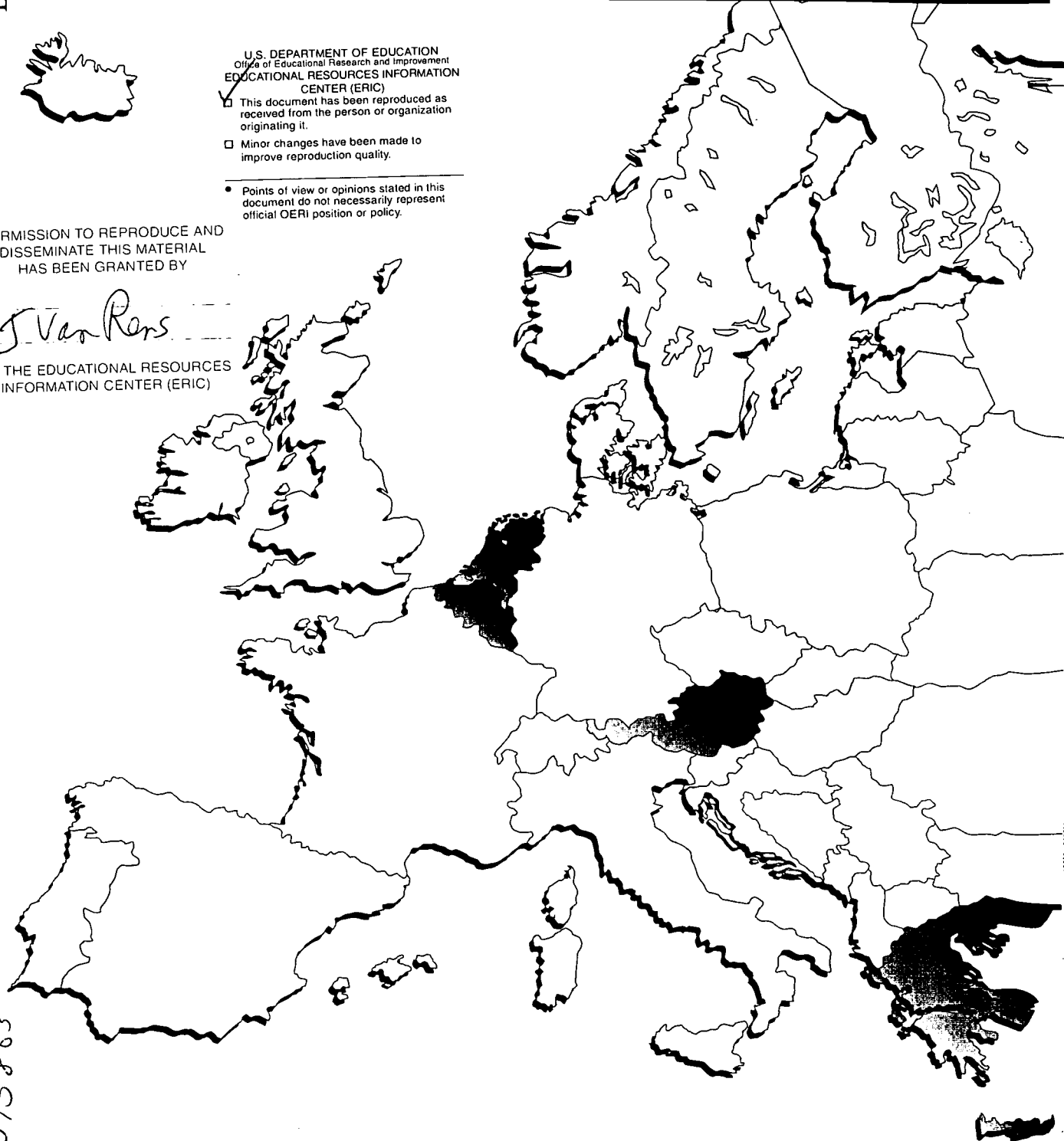
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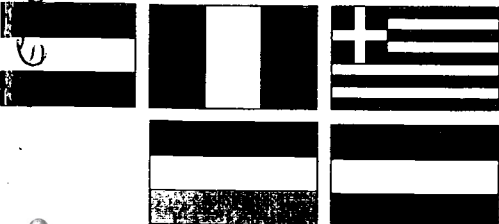
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Volume 3: Austria, Belgium, Greece, Luxembourg and the Netherlands

Teachers and trainers in vocational education and training

**Volume 3: Austria, Belgium, Greece,
Luxembourg and the Netherlands**

**Project Coordinator: Peter van Engelshoven
Project Manager: Pekka Kämäräinen**

First edition, Thessaloniki 1997

This book was written on behalf of CEDEFOP by
**Hanspeter Tusch, Albert de Winter, Stamatis Paleocrassas, Jerry
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Published by
CEDEFOP - European Centre for the Development of Vocational Training

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The Centre was established by Regulation (EEC) No 337/75 of the council of the European Communities, last amended by Council Regulation (EC) No. 251/95 of 6 February 1995 and Council Regulation (EC) No. 354/95 of 20 February 1995.

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu.int>)

Cataloguing data can be found at the end of this publication

Luxembourg: Office for Official Publications of the European Communities, 1997

ISBN 92-828-0613-8

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Printed in Italy

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Preface

Two new volumes CEDEFOP, the European Centre for the Development of Vocational Training, is publishing almost simultaneously two new volumes in the series 'Teachers and Trainers in Vocational Training'. Volumes 3 and 4 report on teachers and trainers in vocational education and training (VET) in 10 European countries. Volume 3 contains the Cartography Studies on teachers and trainers in VET in Austria, Belgium, Hellas, Luxembourg and The Netherlands.

Systematic approach To facilitate understanding, the position of teachers and trainers in VET is seen within a wider framework:

- the national education system is described against the backdrop of the national geographical, ethnological, historical and economic context,
- which shows in all cases that vocational education forms the tailpiece of the education system
- and that the situation of teachers and trainers in vocational education and training is shaped by the background contexts described while
- these teachers' and trainers' own initial education and training is strongly geared to the prevailing education culture.

This structure is adopted in all five chapters of Volume 3.

The authors The authors of these Cartography Studies are national experts, and most are affiliated to institutes which train teachers and trainers for VET. Their collective involvement in this project has laid the structural foundations for operating a European network of institutes providing training for teachers and trainers in VET, a task which CEDEFOP has undertaken to accomplish during the next few years. Each author bears responsibility for his/her own country study but also helped correct and improve the manuscript submitted by a colleague in another country. The five studies in Volume 3 were produced as follows:

Country	Author(s)	Revised in collaboration with
Austria	Hanspeter Tusch	Bengt Petersson, S
Belgium	Albert de Winter	Ellen Bjerknes, N
Hellas	Stamatis Paleocrassas	Jette Harrebye and John Houman Sorensen, DK
Luxembourg	Jerry Lenert Alexis Werné, L	Gunnar Finnbogason, IS
The Netherlands	Derk Oddens, NL	Matti Taalas, FIN

Coordination The manuscripts were coordinated and the production process managed by Peter van Engelshoven of Fontys PTH-contract, Eindhoven, NL. Peter van Engelshoven is a member of the steering committee for CEDEFOP's work programme on 'Training of Trainers'.

Acknowledgement The authors and coordinator are grateful to Ms Linda Mayes, Berlin, for checking the final manuscript for language errors.

Thessaloniki, Spring 1997

1 Introduction

CEDEFOP CEDEFOP (acronym for Centre Européen pour le Développement de la Formation Professionnelle) is the European Centre for the Development of Vocational Training. The Centre is governed by a Management Board on which each EU Member State is represented by three board members representing the government, employers and employees respectively.

In 1995, the Centre relocated from Berlin to Thessaloniki.
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1.1 Activities of CEDEFOP The geographical area to which the Centre's activities relate is limited to the Member States of the European Union and some EFTA countries such as Norway and Iceland.

The role of the Centre is to assist the European Commission in promoting the development of vocational training and in-service training at Community level and to contribute to the policy-making work of the other groups and bodies represented on its Management Board - the Member States and the social partners. The Centre fulfils this role mainly by promoting an exchange of information and comparing experience on issues of common interest to the Member States.

The Centre aims to bridge gaps between research, policy-making and practice by helping policy-makers and practitioners at all levels in the European Union acquire a clearer understanding of the developments taking place in vocational education and training. This insight should serve as a sound basis for decisions on future action. Another aim is to encourage scientists and researchers to identify and track existing and future trends and to promote research on issues which are of relevance for policy-makers.

As part of the recent effort to renew and refocus the Centre's activities, the Management Board agreed on a set of medium-term priorities for the period 1997-2000 and selected three fields of particular interest:

- promoting competence and lifelong learning,
- monitoring developments in vocational education and training in the Member States,
- facilitating mobility and exchange schemes within Europe.

1.2 Activities and task units

The Centre's annual work programme presents an overview of all activities planned within the framework of the above-mentioned priorities for the corresponding calendar year. The work programme is adopted annually by the Management Board.

The activities set out in the work programme are allocated to task units, each task unit being headed by a CEDEFOP expert with organizational and coordination responsibilities. The following fields, inter alia, are handled by separate task units:

- impact of information technology on curricula and qualifications,
- accreditation of prior learning,
- core skills and curriculum reform,
- European research directory,
- financing of continuing vocational training.

1.3 The 'Training of Trainers' task unit

The Centre's relocation from Berlin to Thessaloniki resulted in management vacancies in several task units which are presently (1996/1997) being filled or reassigned.

The 'Training of Trainers' task unit aims to apply the Centre's primary mission of development to the initial and continuing training of teachers and trainers in vocational education and training. This task unit's work programme for 1997 includes:

- publication of a 'Brief Guide' to institutes providing training for teachers and trainers in VET in the countries falling within the Centre's remit;
- synthesis of previous studies on the function of the training manager in medium-size enterprises;
- development of so-called Cartography Studies on teachers and trainers in vocational education and training in 10 European countries, namely Austria, Belgium, Denmark, Finland, Greece, Iceland, Luxembourg, the Netherlands, Norway and Sweden;
- establishment of a European network of institutes providing training for teachers and trainers in VET, including organizing an annual two-day conference for network contributors.

The management vacancy which arose in the 'Training of Trainers' task unit with the departure of Ms Africa Melis was filled temporarily by Mr Pekka Kämäräinen, who was assisted by a steering committee of field members composed of:

- Ms Anne DE BLIGNIERES-LEGERAUD, Université Paris-Dauphine, F,
- Mr Reinhard SELKA, BIBB, Berlin, D,
- Mr Brendan HARPUR, FAS, Dublin, IRL,
- Mr Peter VAN ENGELSHOVEN, Fontys PTH contract-Eindhoven, NL,
- Mr Adolfo HERNANDEZ, INEM, Madrid, E.

The organization and coordination of the ten Cartography Studies mentioned above was entrusted to Peter van Engelshoven.

In March 1997 Mr Duccio Guerra was appointed manager of the task unit and now heads its office in Thessaloniki.

2 Scope of this publication

This publication provides a systematic description of the situation of teachers and trainers in VET in five European countries (Austria, Belgium, Hella, Luxembourg and The Netherlands).

Each country report begins with an outline of the national context - the country's geographical features and the ethnological composition of its population; cultural history and religious considerations are also included where they are relevant to vocational education and training. This is followed by a brief description of the overall education system of which vocational education and training is a part. The next section of each report examines the vocational education and training system within which the teachers and trainers who are the subject of this publication serve. There then follows a description of the teaching and training faculty - in quantitative and qualitative terms to the extent that the relevant information is available - and an account of teachers' and trainers' legal standing, their rights and duties, and also of the teacher unions and other professional organizations which work on their behalf. The final substantive sections explore the in-service and continuing training opportunities open to teachers and trainers in VET and possibilities for career advancement.

In order to ensure that this publication - like the others in the series - contribute to the structuring of the network of European institutes providing training for teachers and trainers in VET which CEDEFOP intends to establish, high priority has been attached to providing detailed lists of addresses and reference material. A separate section in each report lists the addresses of institutes associated in some way or other with the initial or continuing training of teachers and trainers in VET. Owing to the rapid pace of developments in this field in several countries, however, it is possible that this information will already be out of date or incomplete by the time the reader consults the publication.

Finally, each country report presents a list of the acronyms and abbreviations used in the text; the full designation is also given at each first usage.

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To summarize, each country study adheres to the following structure:

1. Introduction
2. Initial vocational education and training
3. Teachers and trainers in VET
4. Regulations governing teachers and trainers
5. Training paths leading to qualification as a teacher or trainer
6. Initial training of teachers and trainers
7. Continuing training of teachers and trainers
8. Useful addresses
9. Institutions and courses
10. Sources and references
11. Acronyms and abbreviations

3 The target readership

As in the case of volumes 1 and 2 in this series, these reports make no claim to being of scientific merit; instead, they are intended to be of practical value to:

- a) Teachers and trainers in VET who want to compare their position with that of colleagues in other countries; the publications have aimed to cover all areas of interest arising in this respect.
- b) Trainers of teachers and trainers in VET who seek basic information on training programmes in the countries under review; those seeking more detailed information can contact partner institutes at the addresses listed.
- c) Policy-makers and decision-makers at national and European level who may find these reports useful for the purposes of comparative analysis. Now that volumes 3 and 4 are published, however, these readers might prefer to await a comparative study from CEDEFOP on the 17 countries examined to date.

4 How to use this publication

From the foregoing it should be clear that volumes 3 and 4 can be used in several ways:

- a) The reader can study the situation of teachers and trainers in VET in a specific country of interest.
- b) The reader who is interested in comparing a certain aspect of the situation of teachers and trainers in VET in several countries can consult the corresponding section in each of the country reports concerned. In this case, however, it should be borne in mind that a knowledge of the national background context is essential for correctly interpreting the facts on any given aspect.

5 Definitions and readability

In order to maximize "trans-European readability", the coordinator has ensured consistency as follows in the terminology used in volumes 3 and 4:

- VET:

These country studies examine teachers and trainers in vocational education and training, not just trainers in vocational training. The reason for this broad subject coverage is that in many countries general education and vocational training are provided together in an initial system of vocational preparation. Nonetheless, the analysis of the teaching/training personnel here refers only to those who are engaged in vocational (as opposed to general or academic) learning - persons who can be found in both vocational schools and the business world.

- Pupils, trainees, students:

A distinction is made in these studies between three categories of learner, each being indicated by a specific term:

pupils: learners in general education or in vocational education with a general education component;
trainees: learners studying exclusively the theory and practice of vocational subjects;
students: learners in higher education and at institutes providing training for intending teachers and trainers.

- Training functions:

CEDEFOP distinguishes between six different functions in teaching and training in VET:

- tutoring (tutor, coach, guide, master)
- teaching (teacher, trainer, instructor)
- counselling (counsellor, consultant)
- development (developer, designer)
- management (training manager, principal, director)
- policy-making.

This volume is concerned exclusively with the first two of the functions listed above; the focus of attention is always the direct relationship between the learner and the trainer.

6 Follow-up

To follow up the publication of these four volumes on teachers and trainers in VET, CEDEFOP's 'Training of Trainers' task unit has suggested the following possibilities:

- a) A synthesis of the 17 country reports contained in the four volumes published to date. Such a synthesis would provide a comparative view of teachers and trainers in VET in these 17 countries while future updates of the Cartography Studies are expected to provide more detailed information.
- b) An analysis of the counselling function, the development function and the training manager function, together with the associated training programmes.
- c) An update of Cartography Studies volumes 1 (Germany, Spain, France and the United Kingdom) and 2 (Italy, Ireland and Portugal) so that up-to-date information is available on the EU Member States.
- d) A further possibility for consideration is the production of Cartography Studies on the partner states in central and eastern Europe.

Any revised editions will not only examine the current situation of teachers and trainers in VET but also track current trends and developments in VET and identify the implications thereof for the situation and training of the teaching and training personnel.

7 Comments are welcome

High priority was attached to speed in producing volumes 3 and 4 of the Cartography Studies, and it proved possible to remain on schedule despite the slight delay incurred by CEDEFOP's relocation from Berlin to Thessaloniki. As a result of this policy, however, up-to-dateness of information may have prevailed over completeness. This and any other shortcoming can be remedied in future revised editions with the support of readers, who are invited to communicate their comments to the 'Training of Trainers' task unit at CEDEFOP. Such comments would be highly appreciated.

Austria

1. Introduction Austria is a federal state with a total area of 83,845 km², consisting of nine provinces (Länder).

"Land"	Capital	Area in km ²
Burgenland	Eisenstadt	3,965
Kärnten (Carinthia)	Klagenfurt	9,531
Niederösterreich (Lower Austria)	St. Pölten	19,163
Oberösterreich (Upper Austria)	Linz	11,980
Salzburg	Salzburg	7,154
Steiermark (Styria)	Graz	16,388
Tirol (Tyrol)	Innsbruck	12,648
Vorarlberg	Bregenz	2,601
Wien (Vienna)	Wien	415
TOTAL		83,845
<i>Source: Der Fischer Weltatmanach 1996</i>		

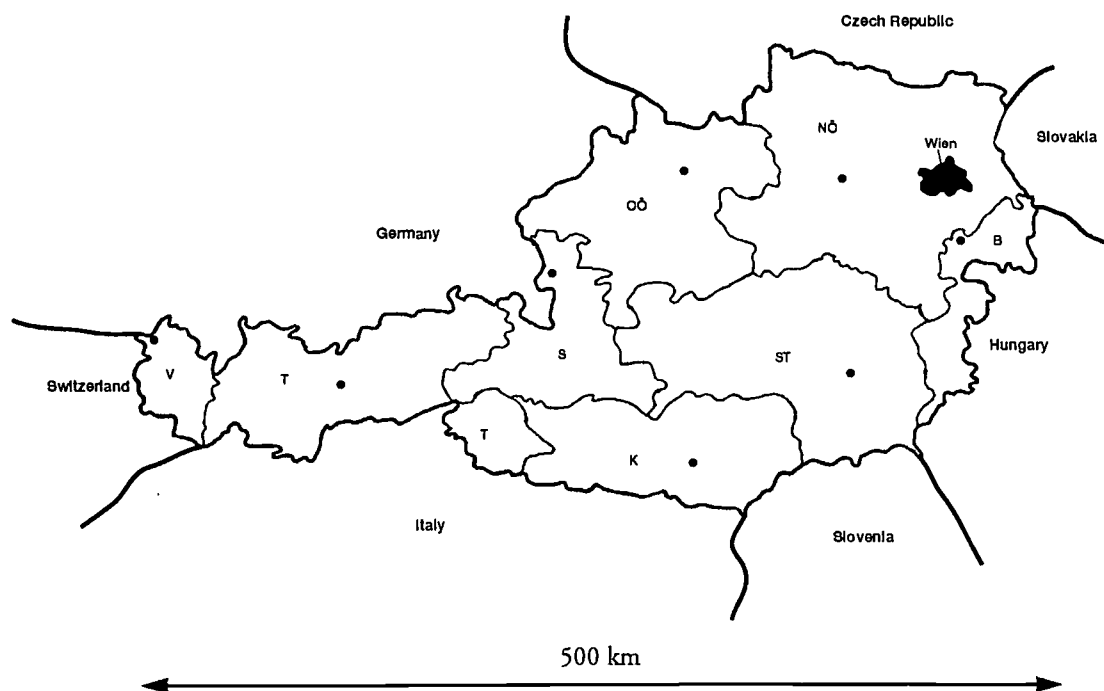
The population is about 7,862,000 and Vienna, the capital, has 1,539,848 inhabitants. Fifty-nine percent of Austria's population live in urban areas. Austria, a monarchy until 1918, is now a parliamentary democracy with a constitution, established in 1920/1929, based on republican, democratic, and federal principles and on the principles of the rule of law, the division of legislative and executive power and the separation of justice and administration.

The Federal President is the supreme representative of the state, elected directly by the people for a six-year term. The National and Federal Chambers are the legislative bodies of the Republic, the National Chamber being the more important. The members of the Federal Chamber come from the parliaments of the Länder. The Government is formed by the Federal Chancellor, the Vice-Chancellor and federal ministers. Each federal state, or "Land", has a regional government and administration.

The municipalities are not part of the general state administration but are bodies with an independent right of administration. They have their own elected municipal councils headed by mayors.

Austria makes an organizational and institutional division between church and state. Religion is taught in schools. The predominant religion is Roman Catholicism. In 1992, the percentage of the workforce employed in each sector was as follows: primary sector 3.3%, secondary sector 39.4%, tertiary sector 57.3%. The unemployment rate was 6.5% (1994).

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Source: "Österreichischer Schulatlas"

OÖ = Oberösterreich
NÖ = Niederösterreich
ST = Steiermark
B = Burgenland
V = Vorarlberg
T = Tirol
S = Salzburg
K = Kärnten

The official language is German. The rights of local Slovenian and Croatian communities are recognized under Article 7 of the 1955 State Treaty. German and Croatian are used on an equal footing for the first three years of instruction in some primary schools (Volksschule/Grundschule). The same rights obtain for the Hungarian communities in the federal state of Burgenland.

Since 1.1.1995 Austria has been a member of the European Union.

It was in the late 1960s that political priority was attached to education in the wake of a growing awareness of its importance for national social and economic development and in recognition of shortcomings in the Austrian education system. Since then, major efforts have been made to reform and expand the system, and enormous financial investment has now produced what can genuinely be called an education system which is very efficient by international standards. The ongoing process of educational reform has brought a wealth of improvements both of a quantitative nature

(e.g. an expansion of vocational education at upper secondary level) and of a qualitative nature (e.g. counteracting gender-stereotyping in school). Structural reforms, however, have been only partially effective, hence the continued existence of problem areas which still need to be tackled: These include early selection after only four years of primary education (grades 1 to 4), the structure and content of lower secondary education (grades 5 to 8), over-differentiation in upper secondary education (grades 9 to 12/13), and a still underdeveloped post-secondary, non-university education sector.

During the ongoing reform process, particular attention has been given to teaching personnel and their training. The leitmotif "professionalization" with a view to improving quality has brought about comprehensive reforms in virtually all areas of teaching and teacher training. Step by step almost all teacher training tracks have been transferred to the post-secondary level, nearly all courses now last a minimum of three years, and a closely-meshed network of in-service teacher training institutions has been set up. As a result, Austria now has an effective teacher training system.

There was and still is a close link between measures aiming at educational development and measures aiming at the reform of teacher training. This explains why the latter share both the strengths and weaknesses of the former: Whereas the favourable political environment referred to above has led to enormous quantitative and qualitative improvements in all fields of teacher training, far-reaching structural reforms of teacher training are still outstanding. This means, inter alia, that teachers aspiring for posts in different school types undergo different types of training of different lengths in different institutions - with an implicit difference in status later on. These differentiations are also carried over into in-service teacher training. The high degree of separateness and lack of permeability among teacher training programmes - and the ensuing loss of integration potential, even between initial and in-service teacher training - are generally considered to be problematic.

Table 1: The pupil population in vocational education in Austria

School-year	BPS	BMS	BHS
1994/95	134,667	52,897	101,648

(Source: Kenndaten des österreichischen Schulwesens; 1995; BMUK)

BPS Berufsbildende Pflichtschulen (compulsory vocational school; training in a company and at vocational school = "dual-system")

- BMS Berufsbildende mittlere Schulen (vocational intermediate school)
 BHS Berufsbildende höhere Schulen (vocational upper secondary school)

Table 2: The youth population in Austria (age: 14 - 18)

year	age: 14 - 18
1995	470,671

(Source: Kenndaten des österreichischen Schulwesens; 1995; BMUK)

Pupil attainment levels are graded by teachers as follows:

- very good (1)
- good (2)
- satisfactory (3)
- sufficient (4)
- insufficient (5).

In practice, pupils are allowed to proceed to the next grade only if their ratings in all compulsory subjects do not include a single "insufficient", this despite the fact that the law provides for teachers to allow pupils to proceed to the next grade even with one "insufficient" rating. The latter case, however, remains the exception. Pupils with an "insufficient" rating in no more than two subjects are usually required to sit a repeat examination at the beginning of the following school year. Those who fail or still get more than two "insufficient" ratings are required to repeat the year.

2 Initial vocational education and training

2.1 Structure and organization of the education and training system

The Austrian education and training system is basically structured according to sector (general or vocational) and level (compulsory education, intermediate secondary, upper secondary). There is thus a high degree of differentiation, a feature which can be considered one of the main characteristics of the Austrian education system.

- Kindergarden for the under-sixes is not part of the education system.
- Children start primary school (grades 1 to 4) at the age of six; some pre-school education is available for certain children. Special schools exist for children with special needs (grades 1 to 8), but there is a growing tendency towards integrated education, particularly at primary level.
- After four years in primary education pupils have a choice between

general lower secondary education (Hauptschule) (grades 5 to 8), or the first four-year cycle of academic lower secondary education (Allgemeinbildende Höhere Schule - Unterstufe) (grades 5 to 8). The main subjects at a general lower secondary school (German, English, mathematics) are taught in three ability streams (Leistungsgruppen) in order to ensure optimal learning progress. The percentage of pupils attending general lower secondary education has long been in steady decline and is currently down to about 70% of each age cohort. In urban areas the majority of learners opt for the academic track of secondary education, which runs for a total of eight years (grades 5 to 8, 9 to 12). A fairly high percentage of pupils leave after the first four-year cycle and transfer to vocational upper secondary schools.

- Although education is compulsory in Austria for the nine years from ages six to fifteen, a further choice has to be made after eight years of schooling. One option is to spend grade 9 attending a one-year "polytechnic" course (Polytechnischer Lehrgang). The polytechnic course offers general education and vocational orientation. On completion of this course the majority of pupils move on to an apprenticeship entailing part-time work in the firm (80%) and compulsory part-time study at vocational school (20%) (grades 12 to 12/13). This form of education is known as the "dual-system".
- The other options are either to proceed to the upper cycle of academic secondary education (Allgemeinbildende Höhere Schule = Oberstufe) (grades 9 to 12) or to transfer to vocational (e.g. commercial, technical) intermediate and upper secondary education (Berufsbildende Mittlere und Höhere Schulen) (grades 9 to 11, 12, 13). Approximately 95% of each cohort proceed to post-compulsory education at one of the many schools at upper secondary level. There is a noticeable trend toward technical education. Both general and vocational upper secondary education end with the "Matura" examination at the end of grade 12 or 13. The Matura qualification entitles pupils to proceed to all types of higher education.
- It is a peculiarity of the Austrian education and training system that persons holding a qualification from vocational education are entitled to take a special examination (Studienberechtigungsprüfung) which provides access to university study in a limited range of subjects, in some cases study at art college, and teacher training colleges.
- Working people also have the possibility of pursuing their education through evening classes. Those already employed in a specialized field can prepare for the matriculation examination at an academic upper secondary school or a vocational and technical upper secondary school (Handelsakademie / HAK, Höhere Technische Lehranstalt / HTL).

- Higher education: Austria has 12 universities and 6 art colleges, all of which are autonomous institutions. They offer a total of 430 study programmes and more than 600 different study options.

To be admitted to a normal course of study, students must hold the matriculation qualification (Matura) or have passed the special "Studienberechtigungsprüfung". Students apply to a particular university for a place and are required to re-register for their course each semester. In some cases, they may be required to take supplementary examinations. Students who do not meet all formal admission requirements for the course of their choice have to take supplementary examinations either before matriculation (e.g. Latin for the study of medicine) or within the first two semesters of the course (e.g. accounting for the study of industrial management). The study regulations lay down the formal requirements to be met for the various courses of study. Colleges of fine arts do not require the Matura qualification for all their courses, admission in such cases being subject to an entrance examination in which artistic talent is assessed. There are no "numerus clausus" restrictions on student intake numbers in Austria.

No tuition fees are payable by Austrian nationals at universities and colleges of higher education. Needy students are awarded a grant. The academic year lasts from October to the end of June and is divided into two semesters. Students are assessed after lecture courses by means of oral or written examinations. Final examinations are administered by a board of examiners. Diploma submissions and doctoral theses also count in the assessment.

The different types of examination are generally defined by law. The laws and ordinances governing the various study courses prescribe the number and type of examinations required (oral, written, single examination, etc.). The lecturer decides when and how often during the semester and by which of the prescribed methods the students are to be assessed.

A number of short profession-oriented study programmes do not lead to an academic degree. A distinction is made between first degree studies, doctoral studies, and additional and supplementary studies (Erweiterungs- und Aufbaustudien). Studies leading to a first degree (e.g. "Magister") are divided into two stages, both ending with a formal examination. Before the second formal examination students must submit a degree thesis. Students who have obtained a first degree are admitted to doctoral studies in their field of study or a related field. Doctoral studies include a thesis and an oral examination in several areas of study. Medical studies consist of three stages and lead direct to a doctorate. The minimum length of all courses is defined by law. Only 6% of all students complete their studies within the prescribed minimum time.

- Fachhochschulen (specialized post-secondary colleges)

Legislation enacted in May 1993 by the Austrian Parliament introduced specialized post-secondary colleges into the education landscape from academic year 1994/95 onwards as an alternative to the existing universities. They offer scientifically-based, practice-oriented vocational courses lasting a minimum of six semesters and covering a minimum of 1,950 lessons. As admission is not restricted to persons with a matriculation qualification; these colleges also cater for persons with a vocational background.

On the strength of their previous specialized education, graduates of vocational schools receive special credits which count towards their course at a Fachhochschule and reduce its total duration. Graduates of Fachhochschulen are entitled to enrol for doctoral studies in their field at a university. Funding is provided by the Government and by private bodies. No tuition fees are payable at Fachhochschulen.

The various Fachhochschulen offer specialized courses in fields such as engineering, business management, and social and health care. Some courses are already operational, others are still being organized.

- There are few non-university higher education options in Austria. Those that exist include teacher training, teacher training for technical and vocational education, teacher training for religious education, courses for social workers, paramedical courses, and specialized post-matriculation courses for technical and commercial professions.

Under the provisions of the Organization of Schooling Act of 25 July 1962:

"It shall be the task of the Austrian education system to foster the development of the talents and potential abilities of young persons in accordance with ethical, religious and social values and the appreciation of that which is true, good and beautiful, by giving them an education corresponding to their respective courses of studies. It shall give young people the knowledge and skills required for their future lives and occupations and train them to acquire knowledge on their own initiative."

Austria's constitution guarantees general access to public schools without distinction by birth, gender, race, status, class, language or religion. Private-sector schools, by contrast, may select pupils according to religion, language or gender, though this leeway is rarely used.

2.2 School autonomy From school year 1993/94 on, the 14th amendment to the Organization of Schooling Act empowers schools to establish, within certain limits, their own curricular regulations through a two-thirds majority vote of the School Committee or the School Forum. The former is composed of representatives of teachers, pupils and parents; the latter, an institution found in the compulsory education sector, involves only teachers and parents. General secondary schools have 16 units (lessons) spread over four years and academic secondary schools 8 lessons within the first four years to use as they wish. Schools may also - within certain limits - determine the number of pupils required to establish or divide a class.

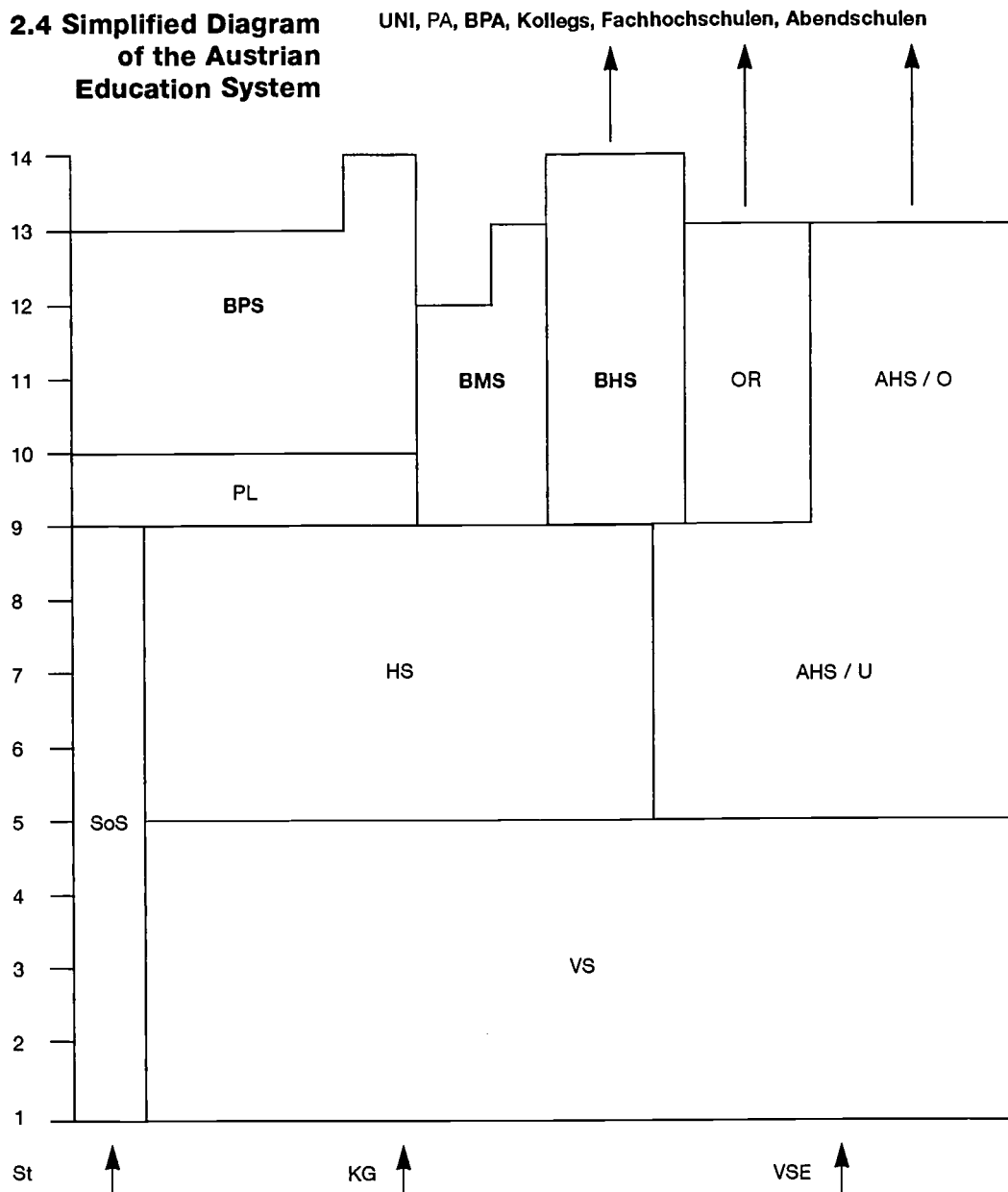
Technical and vocational intermediate and upper secondary schools also enjoy some degree of autonomy with regard to the curriculum (each type of school is free to decide on the usage of at least two hours from the list of compulsory subjects), and the provision of specialized courses.

All schools in Austria have some financial autonomy regarding investments and consumables. In technical and vocational intermediate and upper secondary education this autonomy is generally used to purchase computers and technical equipment in order to facilitate occupation-oriented, project-based forms of learning (e.g. in-company practice).

2.3 Organization of compulsory vocational education

It is a peculiarity of the Austrian vocational education system that regulatory responsibility for compulsory vocational schools (BPS) is held by the nine federal Länder whereas technical and vocational schools at intermediate and upper secondary level are regulated at national level. This means that the latter operate with common curricula, while the former have curricula which are based on the same general guidelines (Rahmenrichtlinien) but developed autonomously by the federal state concerned. Teachers of technical and vocational intermediate and upper secondary education are the responsibility of the Federal Ministry of Education and Art (Bundesministerium für Unterricht und kulturelle Angelegenheiten / BMUK), while teachers in compulsory vocational education are employees of the federal state concerned. The financial management of compulsory vocational education is likewise the responsibility of the various federal states.

2.4 Simplified Diagram of the Austrian Education System



List of abbreviations (fat letters = possibility for vocational education)

St: Grade (schulstufe)
KG: Kindergarten
VSE: Pre-school education (Vorschulische Erziehung)
VS: Primary school (Volksschule)
SoS: Special school (Sonderschule)
HS: General secondary school (Hauptschule)
AHS / U: Academic secondary school - lower level (Allgemeinbildende Höhere Schule / Unterstufe)
PL: Polytechnical course (Polytechnischer Lehrgang)
AHS / O: Academic secondary school - higher level (Allgemeinbildende Höhere Schule / Oberstufe)
OR: separate upper-level type of academic secondary school (Oberstufenrealgymnasium)

BPS: Vocational School / compulsory (Berufsbildende Pflichtschule)
BMS: Technical / Vocational School / middle level (Berufsbildende Mittlere Schule)
BHS: Technical / Vocational School / higher level (Berufsbildende Höhere Schule)

UNI, BPA, PA (Berufspädagogische + Pädagogische Akademien), **Kollegs, Fachhochschulen, Abendschulen:** Universities, Technical + Vocational Teacher-Training College, Teacher Training College, specialized courses in the Kollegs and Fachhochschulen, night schools for working people

2.5 Compulsory education Compulsory education in Austria lasts for nine years and applies to all children permanently residing in Austria, regardless of nationality. Compulsory education begins on 1st September following the child's sixth birthday and ends at the age of 15.

State schools in Austria are free. Parents are obliged to register their child at the appropriate school - in most cases that closest to the place of residence - and to make sure that he/she attends on a regular basis. There is no certificate marking the end of compulsory education, but the annual report issued at the end of grade 9 states that the pupil has completed compulsory education.

2.6 School year Depending on the region, the school year starts on the first or second Monday in September and ends on the Friday between June 27th and July 3rd, or July 4th and 10th respectively. There are two semesters, separated by a one-week holiday, the last week of January or one of the first three weeks of February. The main summer holidays are the months of July and August. Other holidays are at Christmas and Easter. In general, classes must not begin before 8.00 a.m., and morning schooling must not comprise more than six lessons if the afternoon is free or five lessons if there are afternoon classes. A lesson lasts for 50 minutes. Sufficient breaks of at least 5 minutes but no longer than 20 minutes are to be arranged between lessons.

2.7 Technical and vocational intermediate secondary education (BMS - Berufsbildende mittlere Schulen) Technical and vocational intermediate secondary schools provide not only a thorough general education but also practical vocational training for specific occupations. They are full-time schools (except for those catering for working adults). Pupils are generally accepted after successful completion of the 8th grade (i.e. at the age of 14) and after passing an aptitude test. Depending on the sector covered, the courses last from one to four years.

Courses focus on practical training in school workshops, laboratories and practical classes. Pupils must undergo compulsory practical training in an enterprise during the summer holidays (the number and duration of these training periods is laid down in the curriculum; in some school types summer placements are voluntary). The conditions for proceeding to the next grade are laid down by law.

After completing this type of education pupils may prepare for the matriculation examination by attending supplementary bridging courses. These courses (4 to 6 semesters) are organized on request, for some sectors only, and not in all parts of the country. Pupils successfully completing at least three years in technical and vocational intermediate secondary education have access to regulated occupations.

The technical and vocational segment of intermediate secondary education covers the following major sectors:

- agriculture and forestry
- industry and trade (combination of training in commerce and tourism)
- commerce
- secretarial and administrative
- business (intermediate commercial schools)
- industrial, technical, arts and crafts
(industrial and technical, textile industry, tourism, art and crafts social work)
- nursing professions.

Since 1984/85, the number of pupils attending technical and vocational intermediate secondary schools has been falling by some 4% per year. The schools of commerce have been particularly hard hit. This decline is explained by a trend in favour of the technical/vocational courses at upper secondary schools which lead to the matriculation examination.

2.8 Technical and vocational upper secondary education (BHS - Berufsbildende höhere Schulen)

To be admitted to technical and vocational upper secondary education pupils must have successfully completed the 8th grade and passed an aptitude test.

The corresponding schools provide a general and vocational education (dual qualification), and give access to skilled employment or university (matriculation examination). The course is a full-time course lasting five years.

The curriculum is divided into three equal parts: general education, vocational theory and vocational practice (in school workshops, laboratories, kitchens and other practice facilities).

Pupils at a BHS are required to spend compulsory periods of practical training in business and industry during the summer holidays (the number and duration of these training periods is laid down in the curriculum; in some school types such placements are voluntary). Pupils successfully completing a BHS course are entitled to pursue their trade independently after gaining three years of professional experience.

Alternatively, BHS graduates can access the regulated trades. After three years of professional experience in their field, those who have completed a BHS course in agriculture and forestry are entitled to bear the title "Ingenieur". A BHS qualification plus three years of professional experience also qualifies a person to sit a master craftman examination, the examination needed to set up in business.

The most important types of school in the technical and vocational segment of upper secondary education are:

- technical upper secondary school (branches: mechanical

engineering, electrical engineering, electronic engineering, electronic data processing and organization, civil engineering and construction, chemistry, textile engineering, business engineering, etc.)

- upper secondary school of fashion and garment technology
- upper secondary school of tourism
- upper secondary school of commerce (Handelsakademie)
- upper secondary school of trade and industry
- upper secondary school of agriculture and forestry (branches: agriculture, horticulture, viticulture, fruit farming, forestry, dairy farming, etc.)

There are some 50% more pupils in the technical and vocational segment of upper secondary education than in academic upper secondary education.

Table 3: Statistics 1994/95

	academic secondary schools-higher level	intermediate technical + vocational schools	higher technical + vocational schools
pupils	72,559	52,897	101,647
classes	3,296	2,445	4,440
pupils/class	22.0	21.6	22.9
teachers	19,162	18,872	

(Source: Kenndaten des österreichischen Schulwesens; 1995; BMUK)

2.9 Part-time compulsory vocational education (dual system) (BPS - Berufsbildende Pflichtschule / Berufsschule)

In addition to the technical and vocational training available within intermediate and upper secondary education, a considerable amount of initial vocational training is carried out on the basis of apprenticeship schemes ("dual-system"). Apprenticeship has always been characterized by a two-component structure entailing training in business or industry plus theoretical instruction at vocational school. Although apprenticeship is based on an apprenticeship contract under labour law, apprentices are still considered to be in compulsory education as they are required to enrol for a part-time course at a vocational school.

The apprenticeship system prepares young people aged 15 to 18 for a skilled occupation. More than 60,000 enterprises provide apprenticeship training. Most of these are small and medium-sized companies in the fields of industry, commerce, crafts and tourism, and together they train approximately 80% of all apprentices. Large industrial enterprises with their state-of-the-art training workshops also make a significant contribution to the training of young people.

Table 4: Pupils in compulsory vocational education and academic upper secondary education

School-year	BPS	AHS-O
1994/95	134,667	72,559

(Source: Kenndaten des österreichischen Schulwesens; 1995; BMUK)

At present, a total of about 220 occupations are covered by the apprenticeship scheme. The most popular ones with female apprentices are sales, hairdressing, clerical work, and waitress/chef; male apprentices prefer such occupations as car mechanic, carpenter and joiner, plumber and electrician, bricklayer and machine operator.

All apprentices attend part-time compulsory vocational education from the time they enter their apprenticeship until it is completed, i.e. until successful completion of the final year at vocational school. Apprenticeship training and part-time schooling last at least two years but no longer than four years; most apprenticeships last three years.

In order to obtain an apprenticeship, applicants must have completed nine years of compulsory education; apprentices are therefore at least 15 years of age.

Compulsory part-time vocational schools provide both basic and specialized education. Their general aim is to promote and complement the apprenticeship training provided in business and industry and to enhance the apprentice's general education. A number of specialized, compulsory subjects (theory and practice) are taught in two ability groups.

The curriculum for the general education component in all part-time vocational schools comprises politics, German and communication, economics and correspondence, accounting and occupation-related instruction in a foreign language (English, French). The theoretical and practical subjects differ depending on the apprenticeship in question.

Apprentices attend compulsory vocational school either at least one nine-hour day per five- or six-day week during the school year or for block instruction covering at least eight to ten weeks of each school year, 9 hours a day, five or six days a week. Seasonal vocational schools provide courses during a particular season of the year. The general regulations governing assessment procedures, marking and reports are laid down by law but are too voluminous to be described here.

Apprenticeship training ends with a final examination before a board examiners appointed by legally established interest groups (social

partners). Fully-trained apprentices are awarded a leaving certificate by the school (Abschlußzeugnis der Berufsschule).

3 Teachers and trainers

3.1 Teachers Teachers are free to decide on the teaching methods and materials they use. The form and contents of the latter, however, must comply with the curriculum for the grade concerned and be suited to pupils of that age. Both head teachers and school inspectors are entitled to issue directives to teachers on this matter.

Teachers are federal employees with either a private-law contract or a public-law contract (tenured service). Part-time employment is possible but not usual.

An intense discussion is currently taking place in Austria on the central issues of democratization, autonomy and deregulation in education. The advantages and disadvantages of a centrally controlled and administered education system are being compared and contrasted with those of greater regional or local school autonomy and less regulation. Further aspects under discussion are more autonomy for teachers and schools and more democratic supervision of schools.

Table 5: The age structure of teachers in BMS and BHS

BMS + BHS								
Year	until 30	31 - 40	41 - 45	46 - 50	51 - 55	56 - 60	61 - ...	Sum
87/88	3,749	6,798	2,379	2,076	1,030	788	265	17,085
88/89	3,579	7,115	2,427	2,366	1,091	794	228	17,600
89/90	3,353	7,323	2,436	2,575	1,200	766	225	17,881
90/91	3,081	7,495	2,545	2,634	1,482	723	213	18,173
91/92	2,868	7,603	2,772	2,478	1,786	742	227	18,476
92/93	2,531	7,675	2,972	2,401	2,023	793	180	18,575
93/94	2,340	7,608	3,173	2,431	2,263	822	175	18,812
94/95	1,965	7,439	3,438	2,450	2,478	933	169	18,872

(Source: Kenndaten des österreichischen Schulwesens; 1995; BMUK)

Teachers in vocational education

Teachers are subject specialists. Their training entitles them to teach their subjects at both technical and vocational schools (which are frequently housed under the same roof). The nature of teacher training courses and admission requirements depend on the subjects to be taught.

3.2 Trainers Trainers train apprentices in all types of enterprises (practice-oriented instruction). Before being allowed to provide training, prospective trainers have to hold a qualification in their occupational field, have gained several years of work experience and completed certain qualifying courses (at a WIFI or BFI). These courses end with a final examination (see Chapter 6.2). Enterprises providing apprenticeship training must have at least one in-house master craftsman.

3.3 Teachers' union In Austria the Teachers' Union is part of a large public-sector union, the "Gewerkschaft Öffentlicher Dienst". Sections XIV and XII are concerned with the teaching profession. Section XIV provides services for teachers in technical and vocational intermediate and upper secondary education. Section XII caters for teachers in compulsory vocational education.

	Sektion XIV (for teachers in BHS and BMS)	Sektion XII (for teachers in BPS)
members	8,900	2,900

Duties of the Teachers' Union:

1. Representation of professional, economic, social, cultural and hygiene interests.
2. Legal protection.
3. Information on functions and general matters.
4. Public assistance.
5. Negotiations with the government on professional rights.
6. Drafting of position statements on planned legislation.

The influence of the Teachers' Union is declining. In general, however, unions are partners in negotiations with employers and ministries.

4 Regulations governing teachers and trainers

The regulations governing teachers and trainers (and also inspectors and directors) are drawn up by different levels of government. For example, the selection and appointment of teachers for BMS/BHS is a task for each federal state education council, the "Landeschulrat". Each federal state has its own "Landeschulrat".

By contrast, decisions on virtually all aspects of the organization and structure of teacher training (institutions, course duration, course structure, examination regulations, certificates) are taken by central government. All teacher training institutions in Austria are therefore fairly similar in structure. A further characteristic of teacher training in Austria is that its organization is structured in line with the

different categories of school and types of teacher profile required there. Decisions on teachers' employment conditions, teachers' salaries and many areas of school funding are made at national level. Only in the field of administration do local education authorities in the nine federal states hold a fair degree of decision-making authority.

a) Service requirements of a full-time post

The service requirements of a full time post depend on the subject taught (generally 18 to 23 lessons per week).

b) Full-time service or part-time service combined with an enterprise post

Trainers are required to hold a post in an enterprise and therefore combine their training function with an enterprise function. Teachers (especially those in vocational and technical education) can combine their teaching function with an enterprise function. Part-time-service is possible for teachers but not usual.

c) Duties entailed by a full-time post

A full-time post includes the following: class instruction, preparation of lessons, correction of work assignments, implementation of examinations, marking of examination papers. Bearing the cost of in-service training (except at the Institutes of Pedagogy) is a further obligation.

d) Remuneration during the summer holidays

Salaries are paid regularly throughout the entire year and therefore also during the summer and other holidays (Christmas, Easter, etc.). Overtime pay is not paid during holidays.

e) Additional school duties

Teachers are under an obligation to supervise pupils and to be present during office hours (to inform parents).

f) Performance evaluation

Inspectors and directors carry out evaluations of teacher performance. They visit classes to observe teachers at work several times a year. Teachers found to be in breach of their duties (lessons not in line with the curriculum, inadequate preparation, etc.), are revisited by the inspector or director shortly after the original inspection. If the follow-up inspection also has a clearly negative outcome, the teacher concerned will be removed from school service.

g) Salaries

Salaries depend on the age and qualifications of the teacher concerned. Students training for compulsory vocational education retain their legal position during their training year at the BPA.

*Salary table (monthly gross income) in Austrian Shillings (ATS)
(as at 01.01.1995)
100 ECU = circa 1,355 ATS*

Scheme 1 - contract teachers								
Grade	I pa	I 1	I 2a2	I 2a1	I 2b3	I 2b2	I 2b1	I 3
1	24,546	22,082	19,995	18,622	18,815	18,133	16,886	15,003
2	24,546	22,832	20,629	19,211	19,109	18,426	17,225	15,288
3	24,546	23,587	21,259	19,798	19,403	18,721	17,583	15,568
4	26,713	24,431	21,892	20,388	19,697	19,016	17,941	15,852
5	28,889	26,252	22,522	20,976	19,993	19,313	18,314	16,135
...								
9	37,580	33,838	28,714	26,086	24,709	24,030	22,173	18,722
10	39,765	35,801	30,505	27,518	25,890	25,209	23,139	19,469
...								
15	50,727	45,140	39,539	34,749	32,708	32,030	29,424	23,486
...								
19	62,490	52,986	46,268	40,077	37,908	37,237	34,338	27,594

*Salary table (monthly gross income) in Austrian Shillings (ATS)
(as at 01.01.1995)*

Scheme L - teachers								
Grade	L 3	L 2b 1	L 2b 2	L 2b 3	L 2a 1	L 2a 2	L 1	L PA
1	14,559	16,258	17,376	17,994	17,820	19,143	-	23,484
2	14,818	16,578	17,645	18,275	18,396	19,751	21,549	23,484
3	15,073	16,894	17,910	18,556	18,964	20,366	22,332	23,484
4	15,330	17,222	18,192	18,838	19,543	20,973	23,111	25,571
5	15,587	17,569	18,469	19,118	20,112	21,583	24,239	27,659
...								
9	17,957	21,246	22,961	23,610	25,021	27,511	31,839	36,011
10	18,665	22,167	24,087	24,734	26,395	29,233	33,738	38,104
...								
15	22,495	28,182	30,586	31,233	33,275	37,844	43,242	48,540
...								
17 + DAZ	25,945.5	32,258.5	36,142	36,784	37,655	43,373.5	-	-
18	-	-	-	-	-	-	49,687	56,874
18 +DAZ	-	-	-	-	-	-	53,642.5	61,039.5

h) Fluctuations in trainee numbers

BPS: Trainees are required to have a contract with an enterprise holding a training entitlement and to attend BPS (vocational

education within the dual system). Demand regulates the number of trainees.

BMS/BHS: Pupils at BMS and BHS have no contractual relationship with enterprises and their education is school-based.

i) Teacher retirement age

The retirement age for teachers is between 60 and 65 years. Their gross retirement pension is normally equivalent to 80% of their last salary.

j) Regulations on in-service training and sabbaticals

No provision is made for a sabbatical year for teachers in Austria. Teachers normally have the possibility of attending up to one week of in-service training during the school year. They are under no obligation to undergo in-service training. Trainers can attend further education courses at WIFIs and BFIs.

k) Career possibilities

Only few career possibilities exist for teachers and trainers (e.g. a teacher can become a school director).

5 Training paths leading to qualification as a teacher / trainer

As in many other European countries, teacher training in Austria is seemingly not totally free of a certain "rucksack" mentality, i.e. the main focus of attention is still on initial training while in-service training and further education are not yet given the importance they deserve. (For an explanation of the usage of the terms "in-service training" and "further education", see below.) This view is corroborated by a clearly perceived imbalance in the resources and funds available for initial training on the one hand and all forms of subsequent training on the other.

Teacher training for the vocational education sector is *highly differentiated*.

Teachers aiming for posts in compulsory vocational education (Berufsbildende Pflichtschulen) and certain practical areas of the technical and vocational segment of intermediate and upper secondary education are trained at training colleges specializing in technical and vocational education (Berufspädagogische Akademien). Admission to these colleges presupposes the following: either the master craftsman qualification plus at least six years of work experience in the occupational field concerned, or a school-leaving certificate attesting to at least 13 years of schooling / matriculation examination (Matura) plus at least two years of

occupational experience. If these conditions are met, the applicant first attends special introductory courses at an in-service institute for vocational teachers (Berufspädagogisches Institut) (exception: prospective teachers of word processing and domestic science). Then the prospective teacher proceeds to a teacher training college specializing in technical and vocational education. The full course of training normally lasts three years and ends with a formal examination.

Teachers aiming for posts in the technical and vocational segment of intermediate and upper secondary education are trained at universities or at teacher training colleges specializing in technical and vocational education. Institutes for the teaching of business studies (Institute für Wirtschaftspädagogik) play an important role here, offering a course lasting at least nine semesters and ultimately leading to a master's degree. Employment as a fully-fledged teacher is then possible after only two years of experience in a profession relevant to the subjects to be taught.

Nonetheless, the past twenty years have seen the emergence of a comprehensive system of in-service training institutions, and each federal state now has what is required for organizing in-service training, namely an Institute of Pedagogy (Pädagogisches Institut). These institutes have four different departments corresponding to different types of education. Other institutions also provide in-service training, among them the colleges of education, which are playing an increasingly important role in further education and in preparing teachers for new teaching tasks (e.g. multicultural education). A further example is the Institute for Interdisciplinary Research and Distance Education (IFF).

The main task of the institutes of pedagogy is to organize in-service training. The term "in-service" is used here to denote training intended to support the teacher's professional development but not leading to any formal certificate. Institutes of pedagogy are also required to organize further education for teachers. The term "further education" is basically used here to denote courses leading to a certificate, e.g. a teaching diploma in an additional subject or a certificate for special duties (e.g. counselling, multicultural education). Furthermore, institutes of pedagogy also play a role in the one-year practical induction period undergone by teachers in AHS (academic secondary education) and in some forms of initial teacher training for vocational education. Finally, institutes of pedagogy may conduct relevant research and development projects.

Although the law defines participating in in-service training as a must for teachers, such training is normally undergone on a voluntary basis. When major innovations are introduced in schools (e.g. new software), in-service training may be made compulsory. Teachers attend about one third of their in-service training during the school holidays and the other two thirds during regular work

time. Many schools now have a highly positive attitude towards in-service training, and the overall impression is that participation rates are high., particularly among teachers in primary and lower secondary education.

The range of in-service training courses available is extremely varied in terms of format. Some courses are held during the school holidays. Subject-specific working groups are usually organized for two afternoon sessions per year. There are compact one-week courses of block instruction but also courses spread over a longer period. A further fact worth mentioning is that increasing importance is being attached to school-based in-service training.

The topics addressed are likewise extremely varied. Didactics is a particular favourite, but other issues such as school management, computer studies, classroom management and multicultural education are becoming increasingly popular. Particular emphasis is being placed on frequent in-service training for teaching staff actively involved in initial teacher training, e.g. in teaching practice, classroom experience sessions and the induction period for trainee teachers.

5.1 Teachers in the technical and vocational segment of intermediate and upper secondary education (BMS and BHS)

The training of teachers of **general subjects** (e.g. German, English, mathematics) in vocational and technical intermediate and upper secondary education is the same as that for teachers in academic secondary education. It takes place at universities or colleges of fine arts. Courses leading to the teaching qualification are defined as diploma studies and last nine semesters (four-and-a-half years). Students are required to pass two diploma examinations and submit a diploma thesis in order to graduate with an academic degree ("Magister"). The courses entail an academic training, generally in two subjects, training in pedagogy during the last five semesters, and a "Schulpraktikum" involving a four-week introductory period and eight weeks of teaching practice.

The "Magister" qualification does not automatically entitle holders to a permanent teaching post. Prior to applying for a permanent post, graduates are required to complete both a year of teaching in a school ("Unterrichtspraktikum") and to undergo additional courses.

Teachers of **business and management studies** also undergo a university training for a minimum of four-and-a-half years (nine semesters). The course includes academic and pedagogic studies (education science plus pedagogy and methodology in the last five semesters), and one semester of teaching practice. It leads to a "Magister" degree and a teaching diploma. Two further years of relevant professional experience are required before a teaching contract can be awarded.

Teachers of **engineering and law** must hold a university degree (Magister) in the area of specialization and have four years of

professional experience. They then undergo six weeks of training at an in-service teacher training college (institute of pedagogy) during the first two years of their teaching contract. The training covers educational science, pedagogy and methodology, their specialist subject and education legislation. The course leads to a teaching certificate.

Teachers of **practical subjects** (e.g. word processing) must hold a matriculation certificate and have one or two years of professional experience. There follow three years of full-time study at a technical and vocational teacher training college (Berufspädagogische Akademie), covering education science, pedagogy and methodology, their specialist subject and education legislation; the course leads to a teaching diploma.

Domestic science teachers must hold a matriculation certificate and undergo a three-year course at a technical and vocational teacher training college leading to a teaching diploma.

Teachers in BMS and BHS who teach the **theory of technical subjects** (e.g. electrical engineering, electronics, machine construction etc.) obtain their qualifications at technical universities where they are given no specific teacher training. They acquire their understanding of teaching by attending seminars and lectures on the various teaching methods. As such attendance is mainly voluntary and less rigid than in other forms of teacher training, there is no final examination. Although the Austrian education system generally prescribes a training in methodology for teaching in schools, in this case it is not always deemed necessary. The reason is historical: "Dipl. Ingenieure" have traditionally been able to command well paid jobs in industry and extra study would not have been an encouragement to entering the teaching profession. Attempts have been made for 20 years to change this situation, but most can be regarded as having been alibi actions.

Seminars, lectures and practical training for teachers of technical theory in BMS and BHS

Pflichtgegenstände (obligatory studies)	V= Vorlesung (lecture) S= Seminar (seminar) Ü= Übung (training)lessons	total number of
Schulrecht (school law)	V/S	40
Allgemeine Didaktik (General Didactics)	V/S	50
Fachdidaktik met schulpraktischen Übungen (professional Training and School Practise)	S/Ü	60
Schulerziehung (Education in School)	V/S	46
Lehrverhalten (Teaching Behaviour)	Ü	16
Unterrichtstechnologie (Technology and Teaching)	S/Ü	6
Mediendidaktik (Didactics and Media Research)	S/Ü	6
Sprecherziehung und Sprachpflege (Rhetoric and Elocution)	S	16
Sum Total		240

5.2 Teachers in the technical and vocational segment of compulsory education (BPS)

Teachers of general subjects, business and management, technical theory etc. must have either the matriculation certificate plus two years of professional experience or a master craftsman qualification plus at least six years of work experience.

Applicants fulfilling these requirements attend a special introductory course at an in-service institute for teachers in vocational education (Berufspädagogisches Institut), followed by a course at a technical and vocational teacher training college. The training lasts three years and ends with a formal examination. Whereas the courses at in-service institutes for teachers in vocational education are attended parallel to carrying out regular teaching duties; teachers are released from teaching duties to attend the course at a teacher training college.

Table 6: Statistics 1994/95

Part-time compulsory vocational school	
Pupils	133,414
teachers	4,711
schools	206

(Source: Austrian School Statistics 1994/95; BMUK, in cooperation with the Austrian Central Statistical Office)

5.3 Trainers

Trainers are required to hold a qualification in their specialism and have several years of work experience. They then have to attend a special training course which ends with an examination (further details are provided in Chapter 6.2).

6 Initial training programmes for teachers and trainers

For many years Austrian professors from teacher training institutions and ministry officials responsible for teacher training have actively participated in the educational programmes of international organizations such as the Council of Europe or OECD. It cannot be denied, however, that teacher training noticeably lacked an "international dimension" well into the 1980s.

Although developments and trends in teacher training in other German-speaking and in English-speaking countries were observed, a language barrier did make itself felt which narrowed down perspectives to a certain extent.

Over the past few years clear signals have emerged indicating an end to this national or even regional introversion in the field of teacher training. These moves can also be seen in the context of Austria's more pronounced internationalization in general and the quest to accede to the European Communities in particular: Developing a European consciousness, a concept contained in the curricula for

many years, is today being given greater emphasis both in schools and in the training of teachers.

Long-standing international contacts are being actively fostered, and foreign language learning programmes are being made available to teachers on a larger scale. The study of comparative education, though part of the teacher training curriculum for many years, has now become more prominent. More intensive efforts are being made to develop multicultural education. The initial and in-service training for teachers of history and social studies, geography and economics now gives higher priority to the various aspects of European integration. And a variety of exchange programmes have recently been supported by the ministries and local education authorities.

Given this ongoing process of internationalization, the programmes of the European Communities concerning teachers (e.g. ERASMUS) have taken on a special importance and have been given particular support at national level. In the very first year that participation in the ERASMUS programme was possible, almost all initial teacher training institutions submitted projects to promote student mobility. Some Austrian institutions have already served as programme coordinating agencies.

Another recent focus of attention has been cooperation with initial and in-service teacher training institutions in countries of eastern and southeastern Europe. Many previously rather casual and informal contacts are now acquiring a clearer profile and are being given greater priority and support.

Austria's geographical position at the heart of Europe and long-standing cultural ties, together with the quality of teacher training in Austria and the growing realization of the importance of pan-European integration, suggest that Austrian teacher training could develop into a driving force in the process of European integration.

As teacher training in Austria is regulated by different institutions, there is a correspondingly wide variety of curricula for the various types of education. This section examines some of their programmes.

6.1 Examples of initial teacher training programmes **Teacher training at Institutes of Business Education (Institute für Wirtschaftspädagogik) - Excerpt from the curriculum**

Educational goals

The programme, which combines industrial management training with a teaching qualification, aims to prepare students for a teaching post in the vocational segment of intermediate and upper secondary education or for employment in industrial management in all areas

of trade and industry and any other fields requiring a combination of industrial management skills and teaching qualifications, e.g.: teaching commercial subjects at technical colleges and adult education colleges, operations management, further education or human resource development. The programme develops an understanding of the professional applications of economic science and the functions of economic research, and empowers the student to use research sources and methods and to reason and act in an independent and discerning manner in the face of constant advances in scientific research.

Graduates are expected to display self-reliance and a sense of responsibility in coping with their future tasks as teachers of business and commercial studies, taking due account of the scientific developments which constantly affect schools, teaching, education, training and industrial processes.

Study schedule and duration

The course on the teaching of business and commerce is structured in two stages, both of which lead to a formal academic examination.

The first stage lasts four terms and the second stage five terms.

The first stage of study

lessons per week and semester (one lesson = 45 minutes)

Compulsory subjects

The first stage of studies includes the following compulsory subjects:

N.B. "Proseminars" are seminars with a strong practical content.

- a) Basic principles of economic science, including data processing
18 lessons
 - Lectures: industrial management (modules 1 - 3) 6 lessons
 - Training/proseminars: industrial management (modules 1 - 3) 6 lessons
 - Lectures: electronic data processing (EDP) (module 4) 2 lessons
 - Training, proseminar or practical training: EDP (module 4) 2 lessons
 - Proseminar: didactics of industrial management 2 lessons

- b) Basic principles of political economy in relation to recent social and economic history 12 lessons
 - Lectures 10 lessons
 - Training/proseminars 2 lessons

- | | |
|--|------------|
| c) Basic principles of education science and business pedagogy | 12 lessons |
| • Lectures: psychology of development | 2 lessons |
| • Proseminar: teaching and learning | 2 lessons |
| • Introductory course: business pedagogy | 2 lessons |
| • Lectures: business pedagogy | 2 lessons |
| • Practical studies in vocational schools | 2 lessons |
| • Proseminar: preparation and self-monitoring of school practice | 2 lessons |
| d) Basic principles of applied mathematics and statistics for social and business sciences | 8 lessons |
| • Lectures: statistics | 4 lessons |
| • Lectures: mathematics | 2 lessons |
| • Training/proseminar: statistics or mathematics | 2 lessons |
| e) Basic principles of private law | 8 lessons |
| • Lectures: civil law | 3 lessons |
| • Lectures: commercial and securities law | 3 lessons |
| • Training/proseminar: civil law or commercial and securities law | 2 lessons |
| f) Introductory course on social and business sciences | 2 lessons |

Optional subjects

The student may choose one of the following subjects during the first stage of his/her studies:

- | | |
|---|------------|
| • Basic principles and methods of sociology | 8 lessons |
| • Lecture: introduction to sociology | 2 lessons |
| • Lecture: methods of empirical social research | 2 lessons |
| • Lecture: social models and their application in an industrial society | 2 lessons |
| • Training/proseminar: sociology | 2 lessons |
| • One foreign language (English, French, Italian, Spanish, Russian) | 8 lessons |
| • Lectures | 4 lessons |
| • Training/proseminars or practice sessions | 4 lessons |
| • Basic principles of the qualitative and quantitative methods of empirical social research | 10 lessons |
| • Lectures | 6 lessons |
| • Training/proseminar | 4 lessons |

- Social and economic history 8 lessons
- Lectures 6 lessons
- Training/proseminar 2 lessons

Elective subjects

Students are advised to select elective subjects from the non-chosen optional subjects and optional subjects from the 2nd stage of the course.

Second stage of study

Compulsory and optional subjects

The second stage of study includes the following compulsory and optional subjects:

- a) Basic principles of industrial management 16 lessons
 - Lectures: industrial management 8 lessons
 - Proseminar: industrial management 2 lessons
 - Proseminar or case-study proseminar: industrial management 2 lessons
 - Seminar: industrial management 2 lessons
 - Seminar: educational aspects of industrial management II 2 lessons
- b) Education science 8 lessons
 - Lectures: educational diagnostics 2 lessons
 - Lectures: education science 2 lessons
 - Proseminar: school and society 1 lesson
 - Proseminar or seminar: science of education consolidation (optional) 3 lessons
- c) The teaching of economics and the didactics of industrial management science 15 lessons
 - Lectures: economics education 2 lessons
 - Seminar: economics education 2 lessons
 - Proseminar: methodology workshop 1 lesson
 - Proseminar: communication and conflict 2 lessons
 - Lecture/training: the teaching of economic science subjects 6 lessons
 - Considerations on the teaching of economic science 2 lessons
- d) A special elective course in industrial management for regular students 8 lessons

- Lectures 6 lessons
 - Proseminar or seminar 2 lessons
- e) One of the following subjects for regular students: 8 lessons
- Management training
- Lectures 6 lessons
 - Training, proseminar or seminar 2 lessons
- Didactics of political economy: this option includes the following:
- Didactics of political economy (lecture/training) 4 lessons
 - Didactics of political economy (proseminar) 2 lessons
 - Teaching practice in political economy at a vocational school 2 lessons
- or the optional subjects:
- Basic aspects of civil rights
 - Financial law
 - Labour law and basic aspects of social rights
 - Modern history
 - A second special course in industrial management
- Lectures 6 lessons
 - Training, proseminar or seminar 2 lessons
- f) A second subject chosen from e) or one of the following: 8 lessons
- A further foreign language
 - Basic principles of political science
 - Organization
 - Scheduling
 - Tourism
 - Commercial law and securities
 - Banking law
 - Insurance law
 - International management
 - Interdisciplinary consolidation
 - Modern history
 - Resource management
 - Production and manufacturing technology
- Lectures 6 lessons
 - Training/proseminar or seminar 2 lessons

- g) Basic principles of the theory of macroeconomics and political economy 8 lessons
- Lectures 6 lessons
 - Training/proseminar or seminar 2 lessons
- h) Teaching practice 12 lessons
- i) Courses run in parallel to teaching practice (proseminar) 2 lessons

Elective subjects

Elective subjects are selected from:

- optional subjects not chosen during the first stage of the course,
- optional subjects not chosen from the second stage of the course,
- students who select the optional subject "didactics of political economy" are advised to combine this with the optional or elective subject "Basic principles and methods of sociology".

Graduation

- University graduates are awarded the title "Magister" (Mag. rer. soc. oec.).
 - Applications for the award must be submitted to the university faculty together with the student's examination record.
- The academic award is recorded and made public.

Curriculum for teacher training at BPA

No detailed information on the total number of teaching practice classes was available by date of submission (December 1996).

I. Curriculum: Teacher training for compulsory vocational education (BPS)

Teachers of general education subjects, business and management etc

Teachers of specialized theoretical subjects

Teachers of vocational subjects

SUBJECTS	V = Vorlesung (lecture) S = Seminar (seminar) Ü = Übung (training)	total sum of lessons
1. PFLICHTGEGENSTÄNDE (obligatory studies)		
A) Humanwissenschaften: (Human Sciences)		
Religionspädagogik (Religious Education)	V + S	2 + 2
Erziehungswissenschaft (Educational Science)	V + S	2 + 2
Unterrichtswissenschaft (Teacher Training)	V + S	2 + 2
Pädagogische Psychologie (Educational Psychology)	V + S	2 + 2
Pädagogische Soziologie mit Betriebssoziologie (The Sociology of Teaching and Management)	V + S	2 + 2
Aktuelle Humanwissenschaften mit berufspädagogischer Forschung (Current Affairs and Vocational Studies)	S/Ü	5
Schulrecht (School Law and Organization)	V + S	1 + 1
Biologische Grundlagen der Erziehung mit Gesundheitslehre, Arbeits- und Schulhygiene (Biological Principles of Education, Health, Occupation and School Hygiene)	V	2
B) Didaktik, Fachdidaktik und schulpraktische Ausbildung (Didactics, Professional Training and School Practice)		
Didaktik und Mediendidaktik (Didactics and Media Research)	S	5
Unterrichtstechnologie (Technology and Teaching)	S/Ü	1
Fachdidaktik mit schulpraktischen Übungen (Professional Training and School Practice)	S/Ü	13
C) Fachwissenschaften (Specialized Studies)		
Fachliche Bildung (Specialized Education)	S	8
Politische Bildung (Political Education)	S	2
Volkswirtschaft (Economic Studies)	S	2
Betriebswirtschaft (Management Studies)	S	2
Angewandte Informatik (Applied Computer Studies)	S/Ü	4
D) Ergänzende Studienveranstaltungen (Additional Studies)		
Schulverwaltung (School Administration)	S	1
Sprachpflege und Rhetorik (Elocution and Rhetoric)	S	1
E) Schulpraktikum (School Practice)		

I. Curriculum: Teacher training for compulsory vocational education

II. WAHLPFLICHTGEGENSTÄNDE (optional subjects)		
Group 1: Autonomer Studienbereich (Autonomous Studies)	S/Ü	2
Group 2: Angewandte Humanwissenschaften (Applied Human Sciences)	S/Ü	
Group 3: Angewandte Berufspädagogik (Applied Vocational Education)	S/Ü	8
Group 4: Sprachen (Languages)	S/Ü	
Group 5: Fachtheoretische Grundbildung (Basic Theories of Specialized Education)	S/Ü	
TOTAL SUM of I + II (without School Practice)		78
III. FREIGEGENSTÄNDE (optional studies /free choice subjects)		
Heimerziehung (Domestic Studies)	V/S	2 + 1
Erwachsenenbildung (Adult Education)	V/S	1 + 1
Deutsch und Kommunikation (German + Communication)	S/Ü	9
Lebende Fremdsprachen (Modern Languages)	S/Ü	12
Leibeserziehung (Physical Education)	S/Ü	12
Politische Bildung (Political Education)	S/Ü	6
Werbetechnik (Commercial Practice)	S/Ü	6
Europapraktikum (European Studies)	S/Ü	4
IV. UNVERBINDLICHE ÜBUNGEN (informal studies)		
Leibesübungen (Physical Training)	Ü	4

II. Curriculum: Training for teachers of word processing

SUBJECTS	V = Vorlesung (lecture) S = Seminar (seminar) Ü = Übung (training)	total sum of lessons
I. PFLICHTGEGENSTÄNDE (obligatory subjects)		
A) Humanwissenschaften: (Human Sciences)		
Religionspädagogik (Religious Education)	V + S	4 + 4
Erziehungswissenschaft (Educational Science)	V + S	3 + 3
Unterrichtswissenschaft (Teacher Training)	V + S	3 + 3
Pädagogische Psychologie (Educational Psychology)	V + S	3 + 3
Pädagogische Soziologie mit Betriebssoziologie (The Sociology of Teaching and Management)	V + S	3 + 3
Aktuelle Humanwissenschaften mit berufspädagogischer Forschung (Current Affairs and Vocational Studies)	S/Ü	5
Schulrecht (School Law and Organization)	V + S	3 + 1
Biologische Grundlagen der Erziehung mit Gesundheitslehre, Arbeits- und Schulhygiene (Biological Principles of Education, Health, Occupation and School Hygiene)	V	2
B) Didaktik, Fachdidaktik und schulpraktische Ausbildung (Didactics, Professional Training and School Practice)		
Didaktik und Mediendidaktik (Didactics and Media Research)	S	6
Unterrichtstechnologie (Technology and Teaching)	S/Ü	3
Fachdidaktik mit schulpraktischen Übungen (Professional Training and School Practice)	S/Ü	19
C) Fachwissenschaften (Specialized Studies)		
Textverarbeitung + CTV = Computerunterstützte Textverarbeitung (Wordprocessing incl. Wordprocessing with PC / Software)	S/Ü	14
Desktop Publishing, Typography and Layout	S/Ü	4
Korrespondenz (Correspondence)	S/Ü	5
Betriebswirtschaft (Management Studies)	S	7
Betriebswirtschaftliche Fallstudien und Projektmanagement (Case Studies of Management and Management of Projects)	S/Ü	4
Angewandte Informatik und Wirtschaftsinformatik (Applied Computer Studies and Computer Studies of Management)	S/Ü	12
Büroorganisation (Organization of Bureau)	S	4
Kommunikations- und Präsentationstechnik (Know How of Communication and Presentation)	S/Ü	4
Lebende Fremdsprache mit Textverarbeitung (Foreign Language with wordprocessing)	S/Ü	2
D) Ergänzende Studienveranstaltungen (Additional Studies)		
Politische Bildung (Political Education)	S	2
Volkswirtschaft (Economic Studies)	S	2
Sprachpflege und Rhetorik (Elocution and Rhetoric)	S	3
E) Praktikum (Practice)		
Schulpraktikum (School Practice)		
Berufspraktikum (Vocational Experience)		

II. Curriculum: Training for teachers of word processing

SUBJECTS	V = Vorlesung (lecture) S = Seminar (seminar) Ü = Übung (training)	total sum of lessons
II. WAHLPFLICHTGEGENSTÄNDE (optional subjects)		
Group 1: Autonomer Studienbereich (Autonomous Studies)	S/Ü	2
Group 2: Angewandte Humanwissenschaften (Applied Human Sciences)	S/Ü	
Group 3: Angewandte Berufspädagogik (Applied Vocational Education)	S/Ü	8
Group 4: Sprachen (Languages)	S/Ü	
Group 5: Spezielle Fachgebiete (Specialized Studies)	S/Ü	
TOTAL SUM (without practice)		144
III. FREIGEGENSTÄNDE (free choice subjects)		
Erwachsenenbildung (Adult Education)	V/S	1 + 1
Europapraktikum (European Studies)	S/Ü	2
IV. UNVERBINDLICHE ÜBUNGEN (informal studies)		
Leibesübungen (Physical Training)		8

III. Curriculum: Training for teachers of domestic science

SUBJECTS	V = Vorlesung (lecture) S = Seminar (seminar) Ü = Übung (training)	total sum of lessons
I. PFLICHTGEGENSTÄNDE (obligatory subjects)		
A) Humanwissenschaften: (Human Sciences)		
Religionspädagogik (Religious Education)	V + S	4 + 4
Erziehungswissenschaft (Educational Science)	V + S	3 + 3
Unterrichtswissenschaft (Teacher Training)	V + S	3 + 3
Pädagogische Psychologie (Educational Psychology)	V + S	3 + 3
Pädagogische Soziologie mit Betriebssoziologie (The Sociology of Teaching and Management)	V + S	3 + 3
Aktuelle Humanwissenschaften mit berufspädagogischer Forschung (Current Affairs and Vocational Studies)	S/Ü	5
Schulrecht (School Law and Organization)	V + S	3 + 1
B) Didaktik, Fachdidaktik und schulpraktische Ausbildung (Didactics, Professional Training and School Practice)		
Didaktik und Mediendidaktik (Didactics and Media Research)	S	6
Unterrichtstechnologie (Technology and Teaching)	S/Ü	3
Fachdidaktik mit schulpraktischen Übungen (Professional Training and School Practice)	S/Ü	22
C) Fachwissenschaften (Specialized Studies)		
Biologische Grundlagen der Erziehung: Anatomie, Physiologie, Gerontologie (Biological Principles of Education: Studies of Anatomy, Physiology, Gerontology)	V	2
Hygiene einschließlich Arbeits- und Schulhygiene (Hygiene incl. Occupation and School Hygiene)	V/S	2 + 1
Gesundheitslehre und Gesundheitspflege (Studies of Health and Health Care)	S	2
Ernährungswissenschaft (Science of dietetics)	V	5
Lebensmittelchemie und -technologie (Chemistry and Technology of food)	V	3
Diätetik (Dietetics)	V/S	3 + 3
Management der Gemeinschaftsverpflegung (Management of catering groups)	Ü	7
Küchen- und Ernährungswirtschaft (Studies of Kitchen, Food Trade and Food Production)	Ü	12
Servicemanagement (Management of Service)	S/Ü	4
Getränk Kunde (Studies of Beverage)	S/Ü	1
Humanökologie (Humanecology)	V/S	6 + 2
Arbeitswissenschaft (Science of Occupation)	V/S	3 + 3
Betriebsmanagement (Management)	S	5
Angewandte Informatik (Applied Computer Studies)	S/Ü	4
Tourismus (Tourism)	V	2
D) Ergänzende Studienveranstaltungen (Additional Subjects)		
Politische Bildung (Political Education)	S	2
Sprachpflege und Rhetorik (Elocution and Rhetoric)	S	3
E) Praktikum (Practice)		
Schulpraktikum (School Practice)		
Berufspraktikum (Vocational Experience)		

III. Curriculum: Training for teachers of domestic science

SUBJECTS	V = Vorlesung (lecture) S = Seminar (seminar) Ü = Übung (training)	total sum of lessons
II. WAHLPFLICHTGEGENSTÄNDE (optional subjects)		
Group 1: Autonomer Studienbereich (Autonomous Studies)	S/Ü	2
Group 2: Angewandte Humanwissenschaften (Applied Human Sciences)	S/Ü	8
Group 3: Angewandte Berufspädagogik (Applied Vocational Education)	S/Ü	
Group 4: Sprachen (Languages)	S/Ü	
Group 5: Fachtheoretische Grundbildung (Fundamental Specialized Studies)	S/Ü	
TOTAL SUM (without practice)		157
III. FREIGEGENSTÄNDE (free choice subjects)		
<u>Erwachsenenbildung (Adult Education)</u>	V/S	1 + 1
<u>Konsumentenerziehung (Consumer Education)</u>	V/S	2 + 2
<u>Europapraktikum (European Studies)</u>	S/Ü	4
Leibeserziehung (Physical Training)	S/Ü	12
IV. UNVERBINDLICHE ÜBUNGEN (informal studies)		
Leibesübungen (Physical Training)	Ü	8

IV. Curriculum: Teacher training for vocational intermediate and upper secondary education (BMS/BHS)
(Teachers for workshop training)

SUBJECTS	V = Vorlesung (lecture) S = Seminar (seminar) Ü = Übung (training)	total sum of lessons
I. PFLICHTGEGENSTÄNDE (obligatory studies)		
A) Humanwissenschaften: (Human Sciences)		
Religionspädagogik (Religious Education)	V + S	2 + 2
Erziehungswissenschaft (Educational Science)	V + S	2 + 2
Unterrichtswissenschaft (Teacher Training)	V + S	2 + 2
Pädagogische Psychologie (Educational Psychology)	V + S	2 + 2
Pädagogische Soziologie mit Betriebssoziologie (The Sociology of Teaching and Management)	V + S	2 + 2
Aktuelle Humanwissenschaften mit berufspädagogischer Forschung (Current Affairs and Vocational Studies)	S/Ü	5
Schulrecht (School Law and Organization)	V + S	1 + 1
Biologische Grundlagen der Erziehung mit Gesundheitslehre, Arbeits- und Schulhygiene (Biological Principles of Education, Health, Occupation and School Hygiene)	V	2
B) Didaktik, Fachdidaktik und schulpraktische Ausbildung (Didactics, Professional Training and School Practice)		
Didaktik und Mediendidaktik (Didactics and Media Research)	S	5
Unterrichtstechnologie (Technology and Teaching)	S/Ü	1
Fachdidaktik mit schulpraktischen Übungen (Professional Training and School Practice)	S/Ü	13
C) Fachwissenschaften (Specialized Studies)		
Fachliche Bildung (Specialized Education)	S	8
Werkstättenbetriebslehre (Studies of Workshops)	S	2
Angewandte Informatik (Applied Computer Studies)	S/Ü	4
D) Ergänzende Studienveranstaltungen (Additional Studies)		
Schulverwaltung (School Administration)	S	1
Politische Bildung (Political Education)	S	2
Betriebswirtschaft (Management Studies)	S	2
Sprachpflege und Rhetorik (Elocution and Rhetoric)	S	1
E) Schulpraktikum (School Practice)		

IV. Curriculum: Teacher training for BMS/BHS (Teachers for workshop training)

SUBJECTS	V = Vorlesung (lecture) S = Seminar (seminar) Ü = Übung (training)	total sum of lessons
II. WAHLPFLICHTGEGENSTÄNDE (optional subjects)		
Group 1: Autonomer Studienbereich (Autonomous Studies)	S/Ü	2
Group 2: Angewandte Humanwissenschaften (Applied Human Sciences)	S/Ü	8
Group 3: Angewandte Berufspädagogik (Applied Vocational Education)	S/Ü	
Group 4: Sprachen (Languages)	S/Ü	
Group 5: Fachtheoretische Grundbildung (Basic Theories of Specialized Education)	S/Ü	
TOTAL SUM (without School Practice)		78
III. FREIGEGENSTÄNDE (optional studies /free choice subjects)		
Erwachsenenbildung (Adult Education)	V/S	1 + 1
Lebende Fremdsprache (Foreign Language)	S/Ü	6
Europapraktikum (European Studies)	S/Ü	4
IV. UNVERBINDLICHE ÜBUNGEN (informal studies)		
Leibesübungen (Physical Training)	Ü	4

6.2 Initial training programmes for trainers

Enterprises which provide apprenticeship training need trainers holding the master craftman qualification plus a special qualification in pedagogy. Prospective trainers also need to have gained several years of work experience since qualifying in their particular occupational field. The training in pedagogy ends with an examination in the following subjects:

pedagogy and psychology in training
training methodology
methodical planning and implementation of training and apprentice
performance assessment
legal foundations of training.

The certificate of aptitude for training can be obtained either in connection with the master craftman qualification (the examining bodies here are the chambers of crafts / "Handwerkskammer") or through a separate examination (the examining body here is the competent trade board / "Gewerbebehörde" at federal state level).

Courses preparing for the examination are offered by the "Wirtschaftsförderungsinstitute" (WIFIs) and "Berufsförderungsinstitute" (BFIs).

7 Continuing training of teachers and trainers

7.1 Trainers WIFIs and BFIs both offer special continuing training courses for trainers. Although these institutions have roughly the same mission, the WIFIs are organized by the chambers of commerce, are larger and have more influence than the BFIs. Courses are arranged in response to commercial and technical needs. The teaching materials are developed in-house by the training staff and special in-house departments.

Large enterprises run their own continuing training programmes.

7.2 Teachers The continuing training of teachers is regulated by the in-service teacher training institutes (Pädagogische Institute). Courses are offered in the following fields:

- pedagogy and psychology
- methodology
- subject-specific courses
- issues of topical educational interest, e.g. multicultural education, integration of pupils with special needs, etc.

7.3 Teacher participation in continuing training

item	Teacher participation in continuing training at			
	in-service teacher	enterprises	university	other institutions
men	75.9	30.6	14.0	22.2
woman	83.5	15.0	11.6	27.8

(Findings from an interview survey of 2,800 teachers, 1993)

	Yes	No
Teachers participating in continuing training (%)		
men	83.3	16.7
women	87.9	12.1
Length of service		
up to 5 years	81.8	18.2
6 - 10 years	89.0	11.0
11 - 15 years	86.3	13.8
16 - 25 years	86.8	13.2
over 25 years	75.7	24.3

(Findings from an interview survey of 2,800 teachers, 1993)

Source: "Lernen Lehrer?", Heinz Faßmann, report commissioned by BMUK, 1994

7.4 Excerpts from the course programmes of the Institutes of Pedagogy **Excerpt of courses for the federal state of Tyrol, school year 1995/96**
 (A course may extend over a few hours or several days.)

1	General subjects, pedagogy, psychology	<ul style="list-style-type: none"> ** Pedagogic management ** NLP in schools ** The culture of making mistakes ** Motivation for teachers and pupils ** Mind-mapping for teachers ** Presentation techniques ** Organization, quality and development in schools
2	Environment	<ul style="list-style-type: none"> ** Recycling ** Tourism: an environmental factor?
3	Sport	<ul style="list-style-type: none"> ** Snowboarding ** Mountain biking
4	Computer science	<ul style="list-style-type: none"> ** Winword ** Excel ** MS-Access ** Presentation using Power Point ** Basic computer programming ** Windows and DOS
5	Commerce	<ul style="list-style-type: none"> ** Telecommunications ** In-company communication ** Tourism and insurance
6	Geography	<ul style="list-style-type: none"> ** Agrarian economy in southern Tyrol
7	Mathematics and physics	<ul style="list-style-type: none"> ** Computer algebra ** Systems simulation ** Computers in mathematics
	etc.	etc.

Excerpt of courses available in Austria in school year 1996/97

Outsiders - Conflicts in schools

intercultural conflicts in class

Conflict-Management and development of teams

windows 95: Telecommunication

french: bande dessinée, dessin de presse et apprentissage de langues

"another brick in the wall": English for construction workers

international european seminar 1997

cad-cam-cnc for joiners

teacher training in England

quality-management

experiments: simple and quick

edm: engineering data management

controlling and annual closing of accounts

Austria in a global market: english opens doors

marketing and international business

hotelmanagement

wordprocessing-teachers in training firms

service in tourism

dietetics

computernetwork in schools

working in the presence of guests

foreign languages and business

building all-round english - competence in vocational education

training firms with computers

working in the kitchen

regional cooking

supervision in schools

Öko-up-date

working with internet

8 Useful addresses

Bundeskanzleramt
A-1014 Wien, Ballhausplatz 2 Tel.: 531 15-0
Fax: 535 03 38

Bundesministerium für Unterricht und Kunst
A-1014 Wien, Minoritenplatz 5

Bundesministerium für Wissenschaft und Forschung
A-1014 Wien, Minoritenplatz 5

Büro für Europäische Bildungskooperation
A-1010 Wien, Reichsratsstraße 17/5

Gewerkschaft Öffentlicher Dienst
A- 1010 Wien, Teinfaltstr. 7

Landesschulräte (state education councils)

Landesschulrat für Vorarlberg
Bahnhofstraße 12, 6900 Bregenz Tel.: (05574) 51 10

Landesschulrat für Kärnten
10.-Oktober-Str. 24, 9010 Klagenfurt Tel.: (0463) 58 120

Landesschulrat für Niederösterreich
Wipplingerstraße 28, 1013 Wien Tel.: (0222) 53 41 40/201

Landesschulrat für Burgenland
Kernausteig 3, 7000 Eisenstadt Tel.: (02682) 63 772

Landesschulrat für Salzburg
Mozartplatz 10, 5010 Salzburg Tel.: (0662) 80 420

Landesschulrat für Steiermark
Körblergasse 23, 8015 Graz Tel.: (0316) 32 15 71

Landesschulrat für Oberösterreich
Sonnensteingasse 20, 4040 Linz Tel.: (0732) 70 71

Landesschulrat für Tirol
Innrain 1, 6020 Innsbruck Tel.: (0512) 52 033

Stadtschulrat für Wien
Dr.-Karl-Renner-Ring 1, 1010 Wien Tel.: (0222) 523 46 16

"Arbeiterkammern" (employees' chambers)

Burgenland
Wienerstr. 7, 7000 Eisenstadt

Klagenfurt
Bahnhofplatz 44, 9020 Klagenfurt

Niederösterreich
Windmühlgasse 28, 1061 Wien

Oberösterreich
Volksgartenstr. 40, 4020 Linz

Salzburg
Marxus-Sittikus-Str. 10, 5020 Salzburg

Steiermark
Hans-Ressel-Gasse 8, 8010 Graz

Vorarlberg
Widnau 4, 6800 Feldkirch

Wien
Prinz-Eugen-Str. 20-22, 1041 Wien

9 Institutions and courses

Berufspädagogische Akademien

These institutes train teachers for service in vocational education and training.

Berufspädagogische Akademie des Bundes in Linz
A-4020 Linz, Kaplanhofstraße 40

Berufspädagogische Akademie des Bundes in Graz
A-8010 Graz, Theodor-Körner-Straße 38

Berufspädagogische Akademie des Bundes in Innsbruck
A-6020 Innsbruck, Pastrostraße 7

Berufspädagogische Akademie des Bundes in Wien
A-1100 Wien, Grenzackerstraße 18

Land- und Forstwirtschaftliche Berufspädagogische Akademie
(agriculture and forestry)
A-1130 Wien, Angermayergasse 1

Pädagogische Institute (institutes of pedagogy)

These institutes offer only in-service teacher training.

Pädagogisches Institut
Wolfgarten, 7001 Eisenstadt

Pädagogisches Institut
Kaplanhofstraße 40, 4020 Linz

Pädagogisches Institut
Schloß Hofen, 6911 Lochau

Pädagogisches Institut
Kaufmannstraße 8, Postfach 533, 9022 Klagenfurt

Pädagogisches Institut
Erzabt-Klotz-Straße 11, 5020 Salzburg

Pädagogisches Institut
Dechant-Pfeifer-Straße 3, 2020 Hollabrunn

Pädagogisches Institut
Theodor-Körner-Straße 38, 8010 Graz

Pädagogisches Institut
Grenzackerstraße 18, 1100 Wien

Pädagogisches Institut
Haymongasse 6a, 6020 Innsbruck

Universities

Graz
Universitätsplatz 3, 8010 Graz

Innsbruck
Innrain 52, 6020 Innsbruck

Klagenfurt
Universitätsstr. 67, 9020 Klagenfurt

Linz
Altenburgstr. 69, 4040 Linz

Salzburg
Kapitelgasse 4, 5020 Salzburg

Wien
Dr.-Karl-Luegerring 1, 1010 Wien

Montanistische Universität Leoben
Franz-Josef-Str. 18, 8700 Leoben

Technische Universität Wien
Karlsplatz 13, 1040 Wien

Technische Universität Graz
Rechbauerstr. 12, 8010 Graz

Universität für Bodenkultur Wien
Nußdorferlende 11, 1190 Wien

Universität für Veterinärmedizin Wien
Linke Bahngasse 11, 1130 Wien

Wirtschaftsuniversität Wien
Augasse 2-6, 1090 Wien

Akademie der bildenden Kunst
Schillerplatz 3, 1010 Wien

Hochschule für angewandte Kunst
Oskar-Kokoschka-Platz 2, 1010 Wien

WIFI (Wirtschaftsförderungsinstitute)

WIFI Burgenland 7001 Eisenstadt, Gölbeszeile 1
Tel.: (02682) 695

WIFI Kärnten 9021 Klagenfurt, Bahnhofstr. 40
Tel.: (0463) 58 68-0

WIFI Nieder-
österreich 3100 St. Pölten, Mariazeller Str. 97
Tel.: (02742) 890-0

WIFI Ober-
österreich 4024 Linz, Wiener Str. 150
Tel.: (0732) 33 32-0

WIFI Österreich 1045 Wien, Wiedner Hauptstr. 63
Tel.: (0222) 501 05-0

WIFI Salzburg 5027 Salzburg, Julius-Raab-Platz 2
Tel.: (0662) 88 88-0

WIFI Steiermark 8021 Graz, Körblergasse 111-113
Tel.: (0316) 601-0

WIFI Tirol	6020 Innsbruck, Egger-Lienz-straße 116 Tel.: (0512) 53500
WIFI Vorarlberg	6850 Dornbirn, Bahnhofstr. 24 Tel.: (05572) 38 94
WIFI Wien	1180 Wien, Währinger Gürtel 97 Tel.: (0222) 47 677-0

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"Österreichischer Schulatlas", Verlag Ed. Hölzel, Wien 1994

"Studienpläne der BPA", BPA Innsbruck, Studienjahr 1996/97

"Lehrplan des Lehrganges an Pädagogischen Instituten für die Ausbildung der Neulehrer für die fachlich-theoretischen Unterrichtsgegenstände an mittleren und höheren technischen und gewerblichen Lehranstalten", BGBl 251; Nov. 1992

11 Acronyms and abbreviations

AHS / O	Accademic secondary school - higher level
AHS / U	Academic secondary school - lower level
ATS	Austrian Shillings
BFI	Institute for further education
BHS	Technical / Vocational School / higher level
BMS	Technical / Vocational School / middle level
BMUK	Federal Ministry of Education and Art
BPA	Technical + Vocational Teacher-Training College
BPS	Vocational School / compulsory
DAZ	„Dienstalterszulage“ (a special extra pay for a long teacher function, nearly before retirement)
Dipl.-Ing.	„Diplom Ingenieur“ (degree)
EDV	Computer Studies
HAK	Academy of commerce
HS	General secondary school
KG	Kindergarten
HTL	Higher technical school
IFF	Institute for Interdisciplinary Research and Distance Education
Mag.	Magister
OR	separate upper-level type of accademic secondary school
PA	Teacher Training College
PL	Polytechnical course
S	seminar
SoS	Special school
St	Grade
Ü	training
UNI	University
V	lecture
VS	Primary school
VSE	Pre-school education
WIFI	Institute for further education

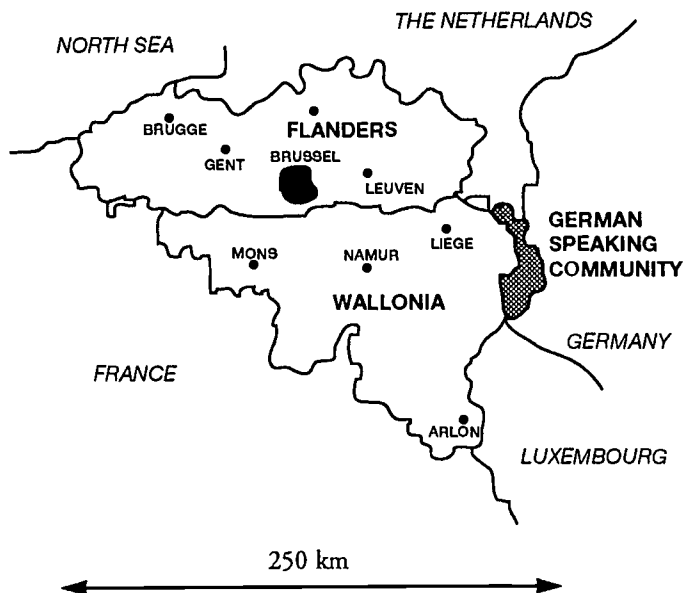
Belgium

1 Introduction In 1830 the Constituent Assembly pronounced Belgium to be a unitarian state. Amendments to the Constitution in 1970, 1980, 1988 and 1993, however, have since changed this unitarian structure drastically.

The country is now divided on a federal basis into three different areas based on the language spoken (Dutch, French or German), and furthermore, as specified in article 3 of the Constitution, into three different regions (the Flemish region, the Walloon region and the Capital Region of Brussels).

Belgium covers an area of 30,528 square kilometres and has a population of 10,131,000:

- the Flemish region with 5,866,000 inhabitants;
- the Walloon and the smaller German-speaking region together with 3,313,000 inhabitants;
- the Capital Region of Brussels with 952,000 inhabitants.



Economic activity in Belgium is currently highly diversified. The main industrial sectors, in descending order of importance, are the chemical and petrochemical industry, the metallurgical industry, the building industry, the food industry, electrical power, electrical and electronic equipment, textiles and leather, furniture, and tourism.

Following the 1988 amendment to the Constitution, competence for education matters was transferred from the federal state to the three communities - a shift which did not help simplify the Belgian educational landscape. The present divided allocation of power has been the cause of several disputes between the educational structures in Flanders and the Walloon region. Because of its geographical situation, the smaller German-speaking community gears its educational structure to that of the Walloon community.

Article 127 of the New Constitution reduced the power of the federal state in education matters to three fields only:

- fixing the beginning and end of the school year,
- determining the minimum conditions for obtaining recognized qualifications,
- issuing rules concerning the pension rights of teaching staff.

In the following description a distinction will be made, where possible, between the Flemish and the Walloon education systems. The total school population, including all levels from elementary to higher secondary, was 1,925,571 in 1995.

Of these, 438,076 pupils were in secondary education in the Dutch-speaking area and 347,745 in secondary education in the French-speaking area (statistics 1994/1995).

All higher education in Belgium, including most teacher training, is currently (1996) undergoing a process of substantial reorganization. In Flanders and the Walloon provinces, all teacher training institutes (the former 'normaalscholen') are now departments of autonomous institutes of non-university higher education (Autonome Hogeschool). At the time of the structural reform, many institutions were reorganized out of existence or had to merge with other institutions.

The National Gazette of 12 June 1996 published a decree which redefines and also reorganizes teacher training and in-service training.

The on-going reform of education in Belgium will also affect secondary education, a sector which, as can be seen from the following, is still suffering from the effects of structural shortcomings of the past.

This survey, and particularly the information on the regular education sector, is based on the education structures and curricula as they stood on 1 September 1996.

In order to aid comprehension, it is specifically pointed out here that, unlike in other countries, a distinction is made in Belgian regular secondary education between technical education and vocational education.

Emphasis in secondary technical education is placed on the theory aspect, and practical instruction is restricted to six periods per week. Emphasis in secondary vocational education is placed on occupational practice and a work placement in industry.

Elementary education	Secondary education	Higher education	Continuing education
nursery school 1-2-3 primary school 1-2-3-4-5-6	type II 1-2-3 lower secondary higher secondary type I and unified system 1-2 1-2 1-2 1st 2nd 3rd grade grade grade	short term education 1-2-3 long-term education 1-2 3-4 1st cycle 2nd cycle university education 1-2 3-4 5-6-7 1st 2nd 3rd cycle cycle cycle	part-time adult education part-time artistic education training offered by the Flemish and the Walloon Employment Agency training for the self-employed offered by the Flemish and Walloon Institute for the Self-Employed
special nursery school	special secondary education (I)		
3-4-5-6-7-8-9-10-11	12-13 14-15 16-17	18-19 20-21 22-23-24	adults

Flemish and Walloon education in Belgium

(1) special secondary education is provided for pupils aged 13 to 21

2 Initial vocational education and training

Regular education, subsidized by the Communities, takes various forms:

2.1 education systems and sectors

- In Flanders there is the Flemish Community Education (Gemeenschapsonderwijs), which is now autonomous but used to be state-run (Ministry of National Education, subsequently Ministry of Education). In the French-speaking area this type of regular education is still organized directly by the Ministry of Education and Research (Ministère de l'Éducation, de la Recherche et de la Formation).
- Education organized by private bodies through subsidized private schools (mostly Roman Catholic schools).
- Education organized by the provincial authorities.
- Education organized by the municipal authorities.

Municipal and provincial education together form the subsidized public education sector (Officieel Gesubsidieerd Onderwijs).

In Flanders about 75% of all pupils are educated in subsidized private schools, mostly of the Roman Catholic faith. This percentage, however, is not consistent with the total size of the Roman Catholic community.

The remaining pupils are to be found in Community Education (17%) or schools run by provincial or municipal authorities (8%).

In the Walloon region the pupils are spread more evenly over the different education sectors.

In Flanders 90,435 pupils are in secondary technical education (31%) and 75,605 pupils are in secondary vocational education (26%).

In the Walloon region 43,655 pupils are in secondary technical education (12.5%) and 56,654 pupils are in secondary vocational education (16%) (statistics for school year 1994/1995).

The four above-mentioned sectors also provide adult education at both secondary and higher education level (FL:

Volwassenenonderwijs, W: Enseignement de Promotion Sociale).

Adult education has a limited curriculum and the classes are held in the evenings or on Saturdays.

All these four sectors, which are recognized and subsidized by the Flemish Ministry of Education or the Walloon Ministry of Education and Research, have also established centres for part-time education (FL: Centra voor Deeltijds Onderwijs. W: Centres d'Education et de Formation en Alternance C.E.F.A.).

In addition to the above sectors, a number of other educational structures are organized, subsidized or recognized by other public authorities or the communities:

- the training and continuing education courses run by the Flemish Employment Services and Vocational Training Agency (Vlaamse Dienst voor Arbeidsbemiddeling - VDAB) and by the Walloon Bureau of Employment (Formation et Emploi - FOREM);
- the training courses for self-employed persons and employers; these courses are coordinated by the Flemish and Walloon Institutes for Entrepreneurship Training (V.I.Z.O. and I.F.P.C.M.);
- the Flemish Centre for Crafts and Restoration (V.C.A.R.), an initiative of the King Boudewijn Foundation working in association with the Flemish Construction Confederation and the Scientific and Technical Centre for the Building Industry, does not organize any training as such but has a coordinating function with regard to the restoration of monuments and meets urgent needs by offering short courses, seminars and workshops in the restoration sector. A similar initiative exists in the French-speaking area: the Fondation pour l'Art, l'Architecture et l'Artisanat Mosans is to renovate the ancient 'Paix -Dieu' abbey and turn it into a centre for restoration and construction training.
- the vocational training courses organized by the Ministry of Agriculture;
- the Royal Military Academy (higher education);
- the School of Civil Aviation (higher education);
- the training courses for welfare workers (care services for the elderly and families in need) organized by the Ministry of Health.

Technical and vocational courses are held almost exclusively in the regular education sector and by the V.D.A.B. and entrepreneurship training bodies. The relevant education provision is discussed in detail elsewhere in this study.

2.2 Education and training structures

Regular education

The secondary education provided by the Ministry of Education used to have the same structure throughout the country. In 1971, however, a new type of secondary education was introduced (legislation of 19 July 1971), and was made compulsory for what was then state education but which later became community education in both the Flemish and the Walloon areas.

The main aim of the reform was to prevent pupils having to select their priority subjects at an early age and to guide them instead towards one of the various types of education (general, technical or vocational). Furthermore, the education provision was to be geared to the potentials and needs of the individual pupil.

As this reform was not made compulsory in all sectors, the old system continued to be used by the private education sector (mostly Catholic) in both the Flemish and the Walloon areas.

Two different types of educational system thus emerged:

Type I: reformed secondary education (Vernieuwd Secundair Onderwijs (FL) and Enseignement Renové (W));

Type II: the traditional system.

Pupils were not allowed to transfer from one system to the other.

All education in the Flemish Community was made to comply with a unified type (eenheidstype) by a decree issued by the Flemish Council on 31 July 1990.

In the French and German-speaking areas, both types of education continue to exist side by side.

Type I, apart from some minor details, is very similar to the Flemish unified type.

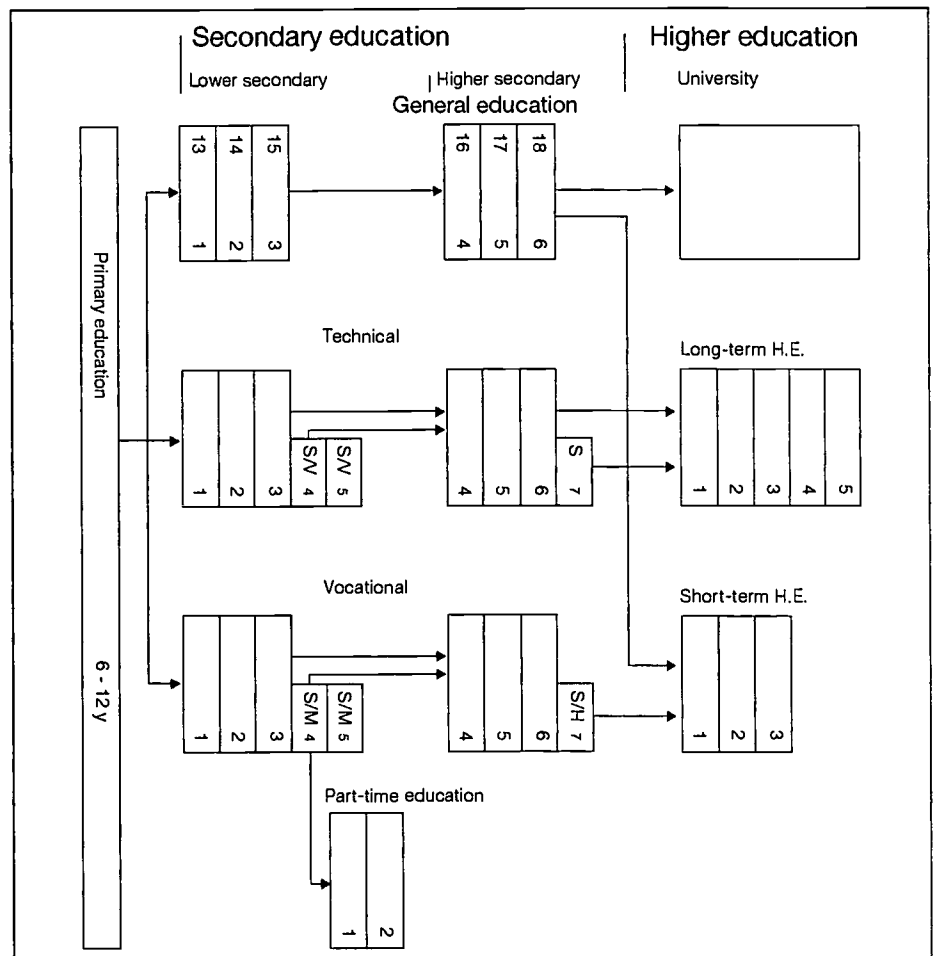
The structures of both types are described elsewhere in this study.

- Pupils are awarded a certificate of lower secondary technical education after completing their third year in Type II or their first year of the second cycle in Type I.
- Pupils receive a certificate of lower secondary vocational education after completing the same number of years as in technical education.
- Pupils receive a certificate of higher technical or vocational education after their sixth year of the third cycle.
- In types I and II the fourth year is followed by a specialization year.
- The sixth year in technical or vocational education is sometimes followed by a seventh specialization year.
- The seventh specialization year of vocational education can also be organized as an assimilation year (homologatiejaar). During this year pupils are offered a wide range of general, technical and theory subjects that were not available in their previous courses. The certificate of the seventh specialization year allows pupils to proceed to short-term higher education.

The following options are available in the technical and vocational sectors of Flemish and Walloon education:

- building and architectural drawing
- woodworking and wood technology
- mechanical engineering, electromechanical engineering, welding - construction
- electrical and electronic engineering
- vehicle engineering, vehicle bodywork
- sanitation installations, central heating engineering
- painting and decorating
- stone and marble masonry
- beauty care, hairdressing
- food technology
- hotel management, butchery, bakery
- clothing, textiles
- graphic art
- goldsmithing, jewellery-making, clock-making
- precision engineering
- agriculture, horticulture
- Rhine and inland navigation, offshore fishing engineering
- dental technology.

Education of the french community type II

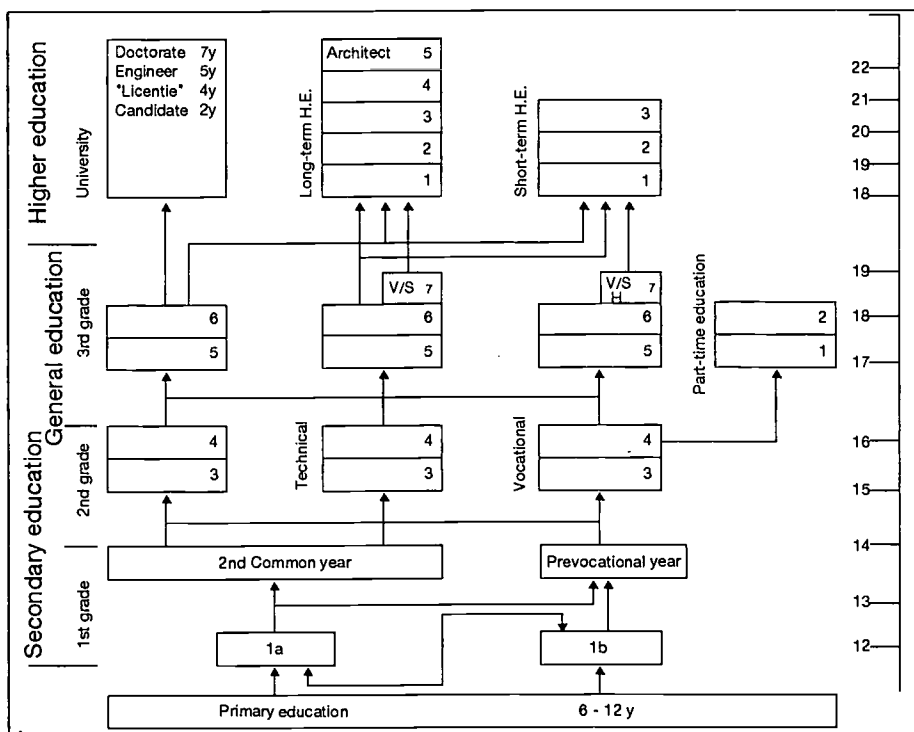


S/H: Specialisation or Accreditation

Higher education includes:

- university education which aims to preserve, disseminate and develop science (there is a clear link here with research);
- long-term higher education (4 or 5 years), which includes courses leading to industrial engineering qualifications that are more specifically geared to careers in management and industry than the university-based courses of study;
- short-term higher education (3 years), which includes courses leading to qualification as a graduate technician in a wide range of specialities; where they concern teacher training, the 3-year courses lead to qualification as a nursery school teacher, a primary school teacher or as a certified teacher in higher secondary education (geaggregerde).

Education of the Flemish community "Unified Type"



Higher education is examined later in this report in connection with teaching qualifications and the training of technical teachers.

Part-time education

Compulsory education in Belgium is regulated by the law of 29 June 1996. Parents are under a legal obligation to ensure that their children undergo a full-time education. Compulsory education extends over a period of 12 years, starting after the summer holidays of the year in which the pupil reaches six years of age and ending when the pupil has reached the age of 18.

Pupils who are 16 years of age are allowed to leave full-time education and move on to part-time vocational education.

In Flanders since 1990 and in the French-speaking area since 1991, part-time education has been regulated by special legislation which aims to raise the number of years spent in full-time education. Education is required to be full-time throughout all primary education and at least the first two years of secondary education.

Flanders and Wallonia have both set up part-time education centres (FL: Centra voor Deeltijds Onderwijs, W: Centres d'Education et de Formation en Alternance - C.E.F.A.). These centres are affiliated to schools providing full-time secondary education.

Some of their courses are of a general, academic nature; others offer vocational education to supplement the pupil-trainee's part-time vocational training in industry. In the latter case the pupil, together with the coordinator of the centre, concludes an agreement with the firm of his/her choice. The agreement can be an apprenticeship contract or a part-time work agreement. In most cases the agreement will be for a two-year period.

On completion of each school year the pupil receives a certificate listing the vocational knowledge and skills acquired.

On completion of the second year of study and after passing the qualifying examination the pupil receives a certificate which is equivalent to the certificate of higher secondary vocational education.

Adult education (FL: Volwassenenonderwijs W: Enseignement de Promotion Sociale)

This type of education has a curriculum with a reduced range of general subjects; the courses are held in the evenings (from 6 p.m. to approx. 9.30 p.m., 14 hours per week) and/or on Saturdays.

Persons wanting to be admitted to this type of education must have successfully completed full-time compulsory education. This rule explains why most of the courses are at higher or higher secondary level.

Qualifications based on this limited curriculum are regarded as equivalent to those based on a full curriculum because they also take account of practical work experience.

The courses available extend from commercial and language training to a wide range of technical and vocational subjects.

Adult education, initially intended as a chance of career

advancement for employees, is today the most important tool in lifelong continuing training. Higher education based on a limited curriculum is also available for prospective teachers and practical instructors wishing to obtain a certificate of teaching competence.

The objectives of this type of education are:

- to support the social advancement of the individual by upgrading professional knowledge and sociocultural competence;
- to meet the needs of companies, administrations and other entities in socioeconomic and cultural life.

Training organized by the flemish employment services and vocational training agency and the walloon bureau of employment (FL: Vlaamse Dienst voor Arbeidsbemiddeling - V.D.A.B. W: Office de l'Emploi +Formation et Emploi - F.O.R.E.M.)

As specified in their statutes, VDAB and FOREM aim to upgrade the occupational skills of persons seeking employment.

In today's economic situation with high unemployment among the poorly skilled, obtaining a basic technical education and occupational skills is the only way of gaining access to the job market.

VDAB and FOREM have set up centres in most towns and cities to monitor the employment situation and provide orientation and basic training services. The training offered is also available to persons in employment who want to train further in order to maintain their chances on the labour market.

Given these two objectives, the training is organized on a customized and project-oriented basis rather than as a permanent schedule. It responds to innovations in technology and the constant evolution in applied electronics, and emphasis is placed on modular training formats, training in the high-tech sector, and cooperation with industry.

In addition to the training centres referred to above, training places have been set up within companies to help employers raise skill levels in-house. The management of both VDAB and FOREM decide whether to authorize individual applications for training on the basis of a programme submitted by the industry concerned. Although the duration of training can differ considerably; the average provision for job-seekers is 15 weeks of full-time training.

Training organized by the flemish institute for entrepreneurship training and the walloon institute for continuing education of the middle classes (FL: Vlaams Instituut voor het Zelfstandig Ondernemen - V.I.Z.O. W: Institut Francophone de Formation Permanente des Classes Moyennes - I.F.P.C.M.)

VIZO is an umbrella institution of the Flemish government responsible for subsidizing, coordinating, promoting and developing training programmes for independent entrepreneurs and their employees.

VIZO coordinates 16 centres for the training of entrepreneurs and small and medium enterprises (Kleine en Middelgrote Middenstands - ondernemingen - K.M.O.) which operate at 22 sites in the Flemish-speaking area and in Brussels.

The training is implemented at the centres, which are variously known as CMOs (Centra voor Middenstandsopleiding), Training Centres of the Training Institute for the Retail Trade, etc. In addition to organizing initial training (cf. part-time education), training for employers and continuing training, these centres support training activities run by third parties (trade and inter-trade organizations) by assuming a receptive function (the CMOs) or a cooperation function (training undergone part-time in a centre, part-time in a firm).

The courses run for 32 weeks a year, 8 hours a week. Apprentices train with their employer for 32 hours per week and additionally attend courses in social affairs (8 hours per week) and occupation-specific theory at a centre, thus acquiring the general and technical foundation needed for proceeding to entrepreneurship training and working in an SME.

- General education 10% = 4 hours/week, 120 hours/year
- Technical theory 10% = 4 hours/week, 120 hours/year
- Occupational practice 80% = 32 hours/week, 960 hours/year.

The training takes three years at the most in apprenticeship, followed by two years in entrepreneurship training. The eligibility requirements for apprenticeship are described under 2.3.2 below.

To be eligible for the entrepreneurship training, the applicant is required:

- to hold a certificate of completion of an apprenticeship, or
- to hold a certificate of lower secondary education in a field compatible with the chosen profession, and
- to be at least 18 years of age.

The courses are offered in a flexible way, and a predetermined minimum number of trainees have to have enrolled before a course can be started.

In addition to the conventional training offered, a kind of 'continuing training' is organized by independent entrepreneurs and their assistants in the form of lectures, workshops and seminars on a whole range of specialized subjects. These events can take

from one hour to - in the case of a lecture series - about 60 hours.

I.F.P.C.M. is also an organization with a training mission. The institution is run jointly by the French Community, the Walloon region and the Community Commission ('Gemeenschapscommissie') of the Capital Region of Brussels.

Like its Flemish sister organization, I.F.P.C.M. runs training centres which offer apprenticeship training, entrepreneurship training and continuing training. Its centres are spread over the French-speaking area.

The apprenticeship training courses comprise training in industry for 28 hours per week in the first year and 32 hours per week in the second and third years, though the number of hours may vary depending on the equipment available at the centre concerned. This practical training is supplemented by theory courses held at the centres: a total of 360 hours in the first year and of 256 hours in the second and third years.

A Royal Decree of 31 August 1984 brought the training courses at apprenticeship level and part-time education into conformity with one another.

The entrepreneurship training and continuing training offered are comparable to their equivalents in Flanders.

3 Teachers and trainers

3.1 structure of teaching and training staff in technical training and apprenticeship

The profession of 'trainer' has no legal definition in Belgium. The corresponding posts in regular secondary education are occupied by instructors, supervisors of technical training and teachers. VDAB, FOREM and the centres associated with VIZO employ teachers; trainers, supervisors and practical training monitors. The 'training' can be considered as a practical training, either at a school or at a centre, or as an apprenticeship in industry.

Technical teachers and instructors in the Community and private secondary schools subsidized by the Flemish and Walloon ministries of education all have the same career.

All staff, provided they possess the necessary qualifications (see below), are appointed by the administration of the school or institutional network concerned.

All personnel are recruited on a temporary basis and admitted to a 'stage' (teaching practice) when a teaching post becomes vacant. The 'stage' usually extends over one school year (40 weeks, 36 hours per week), but can be prolonged by one year. On completing this period of teaching practice the staff member is given a permanent appointment.

Teaching posts at institutes of non-university higher vocational education (hogescholen) are classified as follows:

- group 1: tutor in practical training, chief tutor in practical training, tutor and chief tutor;
- group 2: assistant, doctor-assistant and practical training supervisor;
- group 3: lecturer, principal lecturer, professor and associate professor.

The posts in the first group are found in short-term higher education only, those in the second group in long-term higher education only. Those in the third group are found in both short-term and long-term education.

Teachers and trainers employed by VDAB, FOREM and the centres operating under VIZO and I.F.P.C.M. are appointed by the administrations of these institutions, sometimes on the basis of a competitive examination.

3.2 professional profile of teachers and trainers

The teaching profession has undergone drastic changes in recent years as the task of education has become wider, more complex and more difficult.

- Belgium is turning more and more to education for help in solving its major social problems.
- The school population has been changing drastically in both qualitative and quantitative terms.

In quantitative terms because of the democratization of education in Belgium and the extension of compulsory education to the age of 18.

In qualitative terms because of the growing heterogeneity of the pupil population as regards ability, motivation, social background and, as far as immigrants are concerned, language proficiency and previous curriculum coverage.

- Knowledge has increased in all fields of learning and is subject to rapid evolution and erosion.
- The task of teaching staff has changed and become more complex in many respects: professional skills and pedagogy, guidance of young people, cooperation with colleagues, cooperation with local industry, communication with parents and society as a whole.

The requirements concerning teachers' professional knowledge call for a balance to be struck between generalism and specialization. All teachers are expected to be versatile (as educationists and methodologists) as well as to be specialists in their own field (second group) or fields (first group). Generally speaking, the younger the pupils are, the more versatile the teacher should be and the older the pupils, the greater the need for specialization.

3.3 teaching qualifications *Secondary education*

Group 1. Teachers of this category are trained to teach in the first and second grades of technical secondary education (type I and the unified type) or in lower secondary technical education (type II). In beauty care, hairdressing and food technology courses, these teachers also teach in the third grade of technical secondary education or in higher secondary education. They also teach in the third grade of vocational secondary education.

Group 2. Teachers of this category are trained to teach in the second and third grades of technical secondary education (type I and the unified type) or in higher secondary technical education (type II).

A teaching certificate comprises the basic diploma but may be supplemented by a certificate of teaching competence and/or relevant experience.

A certificate of teaching competence may be:

- a degree certifying the holder for teaching in higher secondary education;
- a degree certifying the holder for teaching in lower secondary education;
- a certificate of secondary technical teacher training for adult education (Middelbare Technische Normaalleergangen).

The first group is composed of certified lower secondary education teachers, in this case certified lower secondary technical and vocational teachers. These teachers are required to have completed higher secondary education followed by a three-year training in short-term higher education.

The teaching qualifications in the Flemish and Walloon areas pertain to:

- electrical engineering + technical education
- woodworking - construction + technical education
- mechanical engineering + technical education
- beauty care
- clothing + technical education
- agriculture and horticulture + technical education
- domestic science + technical education
- technical education, domestic science and dressmaking

The second group is composed primarily of graduates of short-term higher education (hoger onderwijs van het korte type - H.O.K.T.), who underwent a three-year training in a particular discipline.

The options in these technical fields of study are: construction, woodworking, topography, electrical engineering, electronic engineering, electromechanical engineering, maintenance

engineering, measuring and control technology, mechanical engineering, motor vehicle engineering, business automation, graphics, audiovisual technology, hotel management, textiles, air conditioning engineering, agriculture and biotechnology.

In order to be a full teaching qualification, the subject-specific qualification has to be supplemented by a certificate of teaching competence (GPB). This can be obtained through adult education courses (see chapter 6).

Graduates of higher secondary education also qualify for a teaching function in technical and vocational higher education. However, their HSTO certificate is not sufficient. As in the case of HOKT graduates, they too need an additional certificate of teaching competence.

A further requirement is two years of relevant work experience in industry. To be regarded as relevant, the experience has to be in the same discipline as the higher education course followed (see also chapter 5).

Minimum qualifications *Technical Secondary Education*

	1st grade	2nd grade	3rd grade
TV	HOKT+GPB GLSO HSTO+GPB+3 years NE	HOKT+GPB GLSO HSTO+GPB+3 years NE	HOKT+GPB HSTO+GPB+3 years NE
BP	HOKT+GPB GLSO HSTO+GPB+3 years NE	HOKT+GPB GLSO HSTO+GPB+3 years NE	HOKT+GPB HSTO+GPB+3 years NE

Vocational Secondary Education

	1st grade	2nd grade	3rd grade
TV and BP	HOKT+GPB GLSO HSTO+GPB+3 years NE	HOKT+GPB GLSO HSTO+GPB+3 years NE	HOKT+GPB GLSO HSTO+GPB+3 years NE

The above table lists the minimum qualifications required for the various sectors of education.

Higher-level degrees such as those awarded for long-term higher education are also eligible as qualifying certificates.

- Abbreviations:**
- HOKT: higher non-university short-term education in the discipline to be taught
 - GLSO: certified teacher in lower secondary education - a qualification at HOKT level
 - HSTO: certificate of higher secondary education in the discipline to be taught

- GPB: certificate of teaching competence - can be obtained after a higher technical education (see the various types of adult education)
- NE: experience in industry relevant to the subject to be taught
- TV: technical subjects
- BP: occupational practice

Number of teachers in secondary education

The following are statistics as of January 1995 relating to general education + technical education + vocational education. No statistics are available for teachers in technical and vocational education only.

Flanders:	Women	26,615
	Men	26,366
	Total	52,981
Wallonia:	Women	23,305
	Men	19,791
	Total	43,096

Long-term and short-term higher education

The teaching qualifications required are the same for both types of education:

- **professor:** doctor, civil engineer or engineer-architect
- **lecturer:** same qualifications as professors
- for **instructors** in practical training in short-term education, the minimum requirement is an HOKT degree; for tutors and chief tutors the minimum requirement is an HOKT degree in the specialism to be taught.

3.4 Teacher unions Belgium has no union specifically for teachers in technical or vocational education. A teacher may, however, be member of a trade union, sector education. Trade unions concern themselves with the legal position of teachers and may serve as policy advisors. They are not involved in consultations on curricula and teaching methodology.

The main trade unions of which teachers are members are:

- the F.C.S.O.D. - Federation of Christian Unions, sector public services (Catholic leanings);
- the A.C.O.D. - Union of the Public Service, sector education (Socialist leanings);
- the V.S.O.A. - Organization of Liberal Trade Unions, sector public service, sub-sector education (Liberal leanings).

4. Regulations governing teachers and trainers

The status of teachers and trainers differs depending on where they hold their appointment: in education subsidized or organized by the communities or in other education sectors such as those involving VDAB, FOREM, etc. The following requirements, however, have to be met by every teacher or trainer:

- citizenship of one of the Member States of the European Community, except in cases where an exemption is granted by the Flemish or Walloon Executive Body;
- be of irreproachable conduct;
- be in possession of civil and political rights;
- have completed military service (as compulsory military service has now been abolished in Belgium, this requirement has lapsed);
- not having exceeded the age limit of 50 years;
- submission, on taking up one's duties, of a medical certificate stating that the appointee's health condition will not endanger the health of either the pupils or the staff;
- compliance with the provisions and regulations of the law concerning linguistic skills (in a nutshell: appointments in education in all Belgian Communities are subject to the applicant having studied in the language of the Community concerned; a language examination may be imposed).

As stated in 3.1.2 above, all staff are recruited on a temporary basis and recruits are admitted to the 'stage' (teaching practice) only if the position to which he/she is assigned is vacant. The teaching practice usually extends over one school year (40 weeks) but can be prolonged by one year. The appointment is made permanent on completion of the teaching practice.

- 4.1 Duties**
- Staff members are required to protect the interests of the sector, of the institution they are employed by, and of the pupils.
 - Staff members are required to discharge the duties assigned to them, personally and taking into consideration the obligations imposed on them by the public authorities, the school management or official orders.
 - Staff members are required to avoid everything that can harm the trust of the public or damage the honour or dignity of the profession.
 - In education organized and subsidized by the communities or provincial or municipal authorities, all teachers are required to observe strict ideological and professional neutrality. In private subsidized education with a professed ideological leaning (mostly Catholic), all staff members are required to respect this ideology and contribute to the teaching project incorporating it.
 - Staff members, because of their position, are not allowed to accept, directly or indirectly, any gifts, presents, rewards or any other profit.

4.2 Minimum service requirements for a full-time post in technical and vocational education

	TV	BP	TV	BP
1st grade	22 h/w	22 h/w	22 h/w	22h/w
2nd grade	21 h/w	30 h/w	21 h/w	30 h/w
3rd grade	20 h/w	30 h/w	20 h/w	30 h/w

The above minimum service requirements refer only to contact hours (lessons) and do not include other duties such as preparation of lessons, marking written or graphic assignments, or the supervision of pupils before and after school hours and during breaks.

These minimum service requirements can, if necessary (e.g. due to a shortage of teachers), be augmented by two hours per week without affecting the teacher's salary.

In secondary education the school year starts on 1 September and ends on 30 June.

In higher education the academic year starts on the first Monday in October and ends in the course of the last week of July.

The service requirements for teaching staff in higher education are determined by the administration of the institution concerned.

The minimum requirement is a teaching load of 16 h/week plus a guidance load of 8 h/week.

The minimum service requirement for a teacher in short-term education (lecturer, lector) is 19 h/week.

4.3 Salaries The salary of a teacher is determined:

- in secondary education by the level at which he/she teaches (lower or higher), on condition he/she holds the necessary teaching qualifications;
- in higher education (short-term or long-term) by his/her classification as professor, principal lecturer, lecturer, etc.;
- by seniority (a salary increase every two years);
- by whether the teaching post held is full-time or part-time;
- by the cumulation regulation: each staff member in secondary education can carry out an additional job in self-employment, provided this job commitment does not exceed one third of the minimum service requirements for a full-time teaching post. In practice this is determined by a net additional earnings ceiling in addition to the regular salary. Additional jobs are basically prohibited for persons employed in higher education.

Salaries are the same for teachers in general, technical and vocational education, amounting monthly to the figures below (salaries 1996, net after tax, ECU = 39,45 BEF):

Lower secondary education: starting salary: 48,355 BEF,
salary after 27 years of service: 71,000 BEF.

Higher secondary education: starting salary: 55,659 BEF,
salary after 25 years of service: 84,500 BEF.

Normal retirement age for teachers: minimum 60 and maximum 65 years.

The pension entitlement (after 35 years of active service) is about 75% of the average salary earned over the last five years in active service.

4.4 Evaluation of standards

Regular education (FL)

Each educational network has one or more education advisors for each segment of education. These report to the head of the respective educational guidance centre.

The tasks of the educational guidance centres cover all aspects of subject-oriented teacher guidance and continuing training for teachers. Each centre is responsible for drawing up curricula, ensuring that all teachers in all schools within its network teach to the standard laid down in the curricula, and arranging for the necessary continuing training for the teaching staff.

After evaluating a teacher, the advisor draws up a guidance report which is submitted to the school management. The head of the school then asks the teacher concerned to sign the document, and the teacher now has the opportunity of adding an "explanatory report" which is appended to the evaluation dossier. This dossier serves as the basis for the final evaluation by the school management.

A corps of community inspectors specializing in the various segments of education exist to inspect (FL: *doorlichting*) all schools irrespective of the network to which they belong. A team of inspectors visits the school to check whether it complies with the legal regulations and the required teaching standards. This investigation is concerned with evaluating the school with a view to its continued subsidization, not with the performance of any individual staff member.

Regular education (W)

In the Walloon provinces, it is still the Community Inspectorate which is responsible for both guidance and inspection. The inspectors examine and evaluate all temporary and permanent teaching staff. All teachers are additionally evaluated by the school management.

In the subsidized education sector, departments are investigated with a view to their continued recognition and subsidization. The inspection therefore checks whether predetermined attainment targets and developmental goals have been met and other more general requirements complied with.

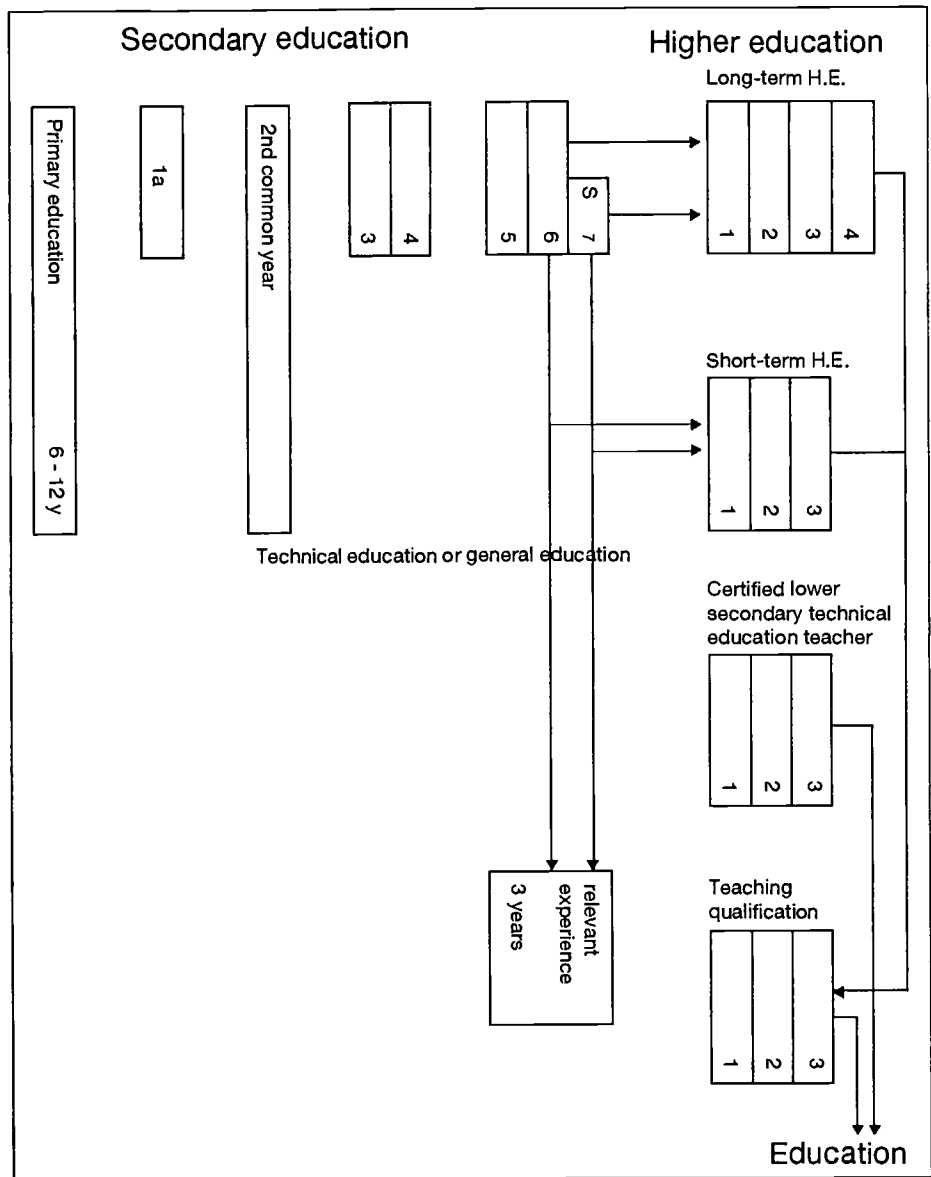
Other education systems (FL + W)

Here, the evaluation of teaching staff is less clearly structured, being carried out by the management of the respective centre.

5 Training paths leading to qualification as a teacher / trainer

Training paths leading to the occupation of teacher and trainer.

5.1 Diagram of training paths



Intending teachers / trainers are required to have a general or technical secondary education background and have completed the sixth year of general education or the sixth or seventh specialization year of technical education.

Three paths are now open:

- Long-term technical higher education followed by a one-year training in adult education to obtain the certificate of teaching competence. Students thus qualified are eligible for a teaching post in higher secondary education.

- b) Short-term higher education followed by a three-year teacher training course. Successful students qualify as certified teachers in lower secondary education.
- c) For persons who left school after the sixth or seventh year of technical secondary education the option is to gain relevant experience in industry followed by a two-year training in adult education and the GPB qualification.

See also chapter 3.3 on teaching qualifications.

5.2 Courses in short-term and long-term higher education leading, in association with the gpb qualification, to teaching posts in lower and higher secondary technical and vocational education	Long-term higher education in Flanders (no. of departments):	
	Architecture	3
	Interior design	3
	Agriculture and biotechnology	2
	Audio-visual technology	3
	Construction	6
	Electrical engineering	12
	Electronic engineering	12
	Product development	2
	Mechanical engineering	4
	Textiles	1
	Short-term higher education in Flanders:	
	Architectural assistant	1
	Landscape architecture	2
Agriculture and biotechnology	5	
Hotel management	3	
Applied computer science	11	
Audio-visual technology	3	
Construction and real estate	4	
Electrical engineering	2	
Electronic engineering	9	
Electromechanical engineering	12	
Graphics	2	
Woodworking technology	1	
Mechanical engineering	4	
Textiles	1	
Long-term higher education in Wallonia:		
Architecture	5	
Electrical and electronic engineering	6	
Mechanical engineering	2	
Nuclear power engineering	2	
Construction	2	
Electromechanical engineering	4	
Agriculture and horticulture	3	
Textiles	1	
Industrial engineering	2	

Short-term higher education in Wallonia:	
Landscape architecture	2
Agriculture and biotechnology	6
Engineering assistant	1
Industrial computer science	3
Applied electronics	5
Electromechanical engineering	5
Construction	1
Computer science technology	2
Graphics	1
Engine systems technology	1
Mechanical engineering	1
Technical drawing and construction	1
Control engineering	3

6 Initial training programmes for intending teachers and trainers

6.1 Training at teacher training colleges offering technical courses in flanders

Teacher training colleges (formerly colleges preparing students for posts in primary education but more recently for posts in lower secondary education) are classified as part of short-term higher education. The training is offered at autonomous institutes of non-university higher education (Autonome Hogescholen).

20 of the 29 Hogescholen have a short-cycle teacher training department, and 12 of them offer technical courses.

In academic year 1994/1995, 11,900 of the total of 62,933 students in full-time short-term higher education were enrolled on a teacher training course (2,044 in community education, 9,753 in private subsidized education and 103 in municipal and provincial education).

The reorganization of higher education which merged institutes into larger entities also led to a reorganization of teacher training. In 1993 the Flemish Education Council (VLOR) initiated studies which resulted in two documents: 'Teacher training in a new perspective' (October 1993) and 'Teacher training: a new challenge, a new opportunity' (November 1994).

In February 1995, after regular consultation between representatives of the public authorities and their umbrella organizations, trade unions, student unions, university teacher training departments, and education inspectors and supervisors, a policy document was produced which announced a thorough redefinition of the teaching profession affecting both initial and continuing training.

The reorganization was formalized in a decree published on 16 April 1996.

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Concerning initial and continuing teacher training, the proposals are:

- a thorough initial training, without any extension of the study duration,
- systematic and career-long continuing training.

The initial training is to give the intending teacher a sound intellectual competence from the outset and a positive attitude towards continuing training and lifelong learning. It is also to serve as a basis for subsequent career development both vertically and horizontally.

The initial training is to foster a sense of having a common mission among teachers of all subjects in primary and secondary education. The advantages here are:

- all teachers, irrespective of where they are employed, will use a common language which will facilitate and promote all forms of cooperation;
- teacher availability can be better planned and organized;
- teachers will be able to function as educationists, educators and as members of an educational organization.

This sense of a common mission is achieved by organizing the entire training on a modular basis which provides for a sound intellectual foundation plus expertise in the chosen discipline. The curricula for teacher training courses are determined by institutional committees composed of representatives of teacher and trainer organizations on the basis of the skill requirements expected of newly trained teachers. The training is therefore not completely identical everywhere.

The following example is the 1996/1997 basic teacher training programme in electrical engineering at the 'Hogeschool Antwerpen'.

Subjects	Contact hours (ch) per week	CH per year	Home study	Total hours of study
1st year				
Dutch	2	52	52	104
Education theory	3.5	91	91	182
Media and computers	1	26	26	52
Teaching methods	2.5	65	65	130
Technical education				
- Computer science	1.5	39	39	78
Technical drawing	1.5	39	39	78
Technical education				
- Wood/construction				
Mechanical engineering	1.5	39	39	78
Technical education				
- Textiles				
- Food	1.5	39	39	78
Electrical engineering	2.5	65	78	143
Mechanical engineering	2.5	65	78	143
Practical training: electricity	3.5	91	52	143
Practical training: mechanics	3.5	91	52	143
Teaching practice			220	220
Total	27	702	870	1,572

Subjects	Contact hours (ch) per week	CH per year	Home study	Total hours of study
2nd year				
Dutch	2	44	44	88
Education theory	4	88	88	176
Media and computers	1	22	22	44
Teaching methods	2	44	44	88
Technical education				
- Computer science	2	44	44	88
Technical drawing	2	44	44	88
Technical education				
- Wood/construction				
- Textiles				
- Food	2	44	44	88
Electrical engineering	2	44	68	112
Electrometrics and lab	2	44	68	112
Practical training: electricity	8	176	88	264
Teaching practice			440	440
Total	27	594	994	1,588

Subjects	Contact hours (ch) per week	CH per year	Home study	Total hours of study
3rd year				
Dutch	1	16	16	32
Education theory	4	64	64	128
Media and computers	1	16	16	32
Teaching methods	2	32	32	64
Technical education				
- Computer science	2	32	32	64
Technical drawing	2	32	32	64
Technical education				
- Wood/construction				
- Textiles				
- Food	2	32	32	64
Electrical engineering	3	32	68	100
Electrometrics and lab	2	32	68	100
Practical training: electricity	8	128	64	192
Teaching practice			770	770
Total	27	416	1,194	1,610

Analysis of this and other basic training programmes shows that:

- the subjects Dutch, pedagogy, media and computer science, teaching methods, technical education, mechanical engineering and technical drawing are common to all basic technical training programmes, amounting to 45% of total studies in the first year, 49% in the second year and 47% in the third year;
- four other subjects are offered to make the training more polyvalent (in this case wood/construction, mechanical engineering, textiles and food), amounting to 39 hours of study in the first year, 44 hours in the second year and 32 hours in the third year;

- the specialized basic training, practical training included, amounts to 156 hours of study (32%) in the first year, 264 hours (38%) in the second year and 192 hours (28%) in the third year;
- the amount of teaching practice increases each year, from 220 to 440 and 770 hours respectively. Teaching practice is divided into teaching strategy (1st, 2nd and 3rd years) and vocational training in industry (three weeks in the 3rd year). Teaching strategy may be practised at a secondary school not affiliated to the training institute (so-called 'hospiteerscholen').

6.2 Training at teacher training colleges offering technical courses in wallonia

On 1 September 1996, teacher training in the French-speaking area followed the example set in the Flemish area by being reorganized to take place in 'Colleges of the French Community' (Haute Ecoles de la Communauté Française). These institutions together cater for all sectors of education.

The three existing institutions offering short-term training in technical options are to be merged with two higher education institutions, one in the public sector and the other in the private subsidized sector.

The teacher training provides a full grounding in education and technology and, as in Flanders, it leads to certification as a teacher in lower secondary education.

The training lasts three years (36 weeks/year) and includes a common core curriculum, technical training in the chosen discipline and teaching practice.

The following example is the teacher training programme in electromechanical engineering and wood/construction at the Haute Ecole de la Communauté Française, Institut Supérieur Pédagogique Mons-Tournai-Morlanwez.

Organization of the academic year			
	1	2	3
Study weeks within the institution	28	28	15
Total weeks of teaching practice	2	3	(15)
- in schools	1	1	(11)
- in industry	1	1	4
- optional		1	
Weeks set aside for:			
- complementary activities	2	2	3
- examinations	4	3	3
Total	36	36	36

	1	2	3
Scientific education, common core curriculum for both disciplines	2	1	-
TECHNICAL TRAINING			
Common to both disciplines			
- applied computer science	2	1	-
- drawing	1	2	-
Electromechanical engineering			
- mechanical engineering	2	2	1
- electrical engineering	2	2	-
- technology	3	2	1
- technical drawing	1	2	1
Wood, Construction			
- technical drawing	1	3	1
- technology	4	3	2
- electrotechnology	2	1	1
- mechanics-resistance	2	1	-
Lab and practical training			
- electromechanical engineering	6	5	4
- Wood-construction	6	5	4
COMMON CORE CURRICULUM ALL COURSES			
French	2	1	1
Computer science	1	1	-
Psychopedagogy	3	3	2
Teaching methods	1	4	-
New Technologies	-	-	1

During academic year 1994/1995, a total of 4,844 students were undergoing higher short-term teacher training; 502 of these had enrolled for technical options.

6.3 Teacher training in adult education (fl) and education for social promotion (W)

Target group

The training track leading to the certificate of teaching competence (GPB) caters for persons who want to acquire the proficiency in pedagogy and didactics required for the teaching profession. This proficiency is one of the conditions stipulated in the regulation governing qualifying certificates.

GPB training is geared to students who already have the necessary technical knowledge and skills concerning the subject they intend to teach.

Professional profile

The professional profile to be developed focuses on three essential attributes:

- communication skills
- teaching skills
- organizational skills.

Structure of training

The training structure is very similar in the Walloon and the Flemish areas of Belgium.

The training is delivered within the framework of higher technical education with a short-term full-time or adult education format. The only difference is whether the training is delivered in the traditional form involving a three-year course or in modular form with the student determining the duration of the training according to his/her needs (maximum four years). The traditional system and the modular system are both on offer in both areas of the country.

With the modular system, a student is awarded the GPB when he/she has obtained the cumulative certificates pertaining to the three modules. Students have to score at least 60% of the total score in order to obtain these certificates.

With the traditional system, the first year (36 weeks) is a general training year and the second and third years are dedicated to education science and teaching methods.

The training is held in the evenings and/or on Saturdays.

Eligibility conditions

To be admitted to GPB training of the modular type, the applicant is required to hold a certificate of higher secondary education, of higher technical education or of higher education.

An applicant who does not meet these eligibility conditions (e.g. holder of a lower secondary education certificate) may be admitted provided he/she has reached the age of 21, undertakes to attend two additional modules and passes an entrance examination in general subjects.

With the traditional training format, a student holding only a certificate of lower secondary education is eligible for the training and will qualify if he/she successfully completes the three-year course.

Holders of an HOKT qualification are required to attend only the final year of the course.

The following example is the curriculum for the GPB course at an adult training institute in the Flemish Community schools sector in Ghent.

<i>Curriculum for students without a certificate of higher secondary education</i>		
Mod A	1. language competence 2. current affairs 3. pedagogy 4. communication skills 5. multimedia technology	6h/week/semester 4h/week/semester 2h/week/semester 3h/week/semester 3h/week/semester
Mod. B	6. education theory 7. psychology 8. general teaching methods 9. teaching methodology and exercises 10. teaching practice	2h/week/semester 4h/week/semester 3h/week/semester 6h/week/semester 6h/week/semester
Mod. D	14. ethics of education 15. organization of education 16. education regulations	1h/week/semester 1h/week/semester 2h/week/semester 43h/week/semester
<i>Curriculum for students holding a certificate of higher secondary education</i>		
Mod. A	3. general conduct 4. communication skills 5. multimedia technology	2h/week/semester 3h/week/semester 3h/week/semester
Mod. B	6-10 see first table above	21h/week/semester
Mod. D	14-16 see first table above	4h/week/semester 33h/week/semester
<i>Curriculum for students holding a higher education qualification</i>		
Mod. A	3-5 see second table above 11. education theory 12. psychology 13. general teaching methods 9. teaching methodology and exercises 10. teaching practice	8h/week/semester 1h/week/semester 2h/week/semester 2h/week/semester 6h/week/semester 6h/week/semester
Mod. D	1-16 see first table above	4h/week/semester 29h/week/semester

6.4 Training of trainers organized by the Flemish and Walloon employment services

Intending trainers are admitted to this training only after a lengthy period of relevant experience in industry. Because of the specialized nature of the training and the target group concerned, the training is best implemented by a third party. Another very important consideration is that the personal expertise of the intending trainer must be reflected in the training practice. The ideal arrangement is a tripartite-consortium: VDAB or FOREM as organizer, a training provider as the implementing agency and an industrial group or individual company in a supportive function. Both VDAB and FOREM have set up their own training and study centres in this field (FL: Centrum voor Pedagogische Opleiding en Studie - C.P.O.S. W: Centre pour la Formation Pédagogique et Etude - C.F.P.E.).

These centres offer an eleven-day training course to prepare future trainers for their training duties. Trainers may split their worktime between training duties and their regular employment in industry.

6.5 Training of trainers at the flemish and wallon institutes for entrepreneurship training (fl: vlaams instituut voor zelfstandig ondernemen - v.I.Z.O. W: institut francophone de formation permanente des classes moyennes - I.F.P.C.M.)

The training offered at the centres coordinated by VIZO and IFPCM has a strong leaning towards the practicalities of working life. Wherever possible, the trainers are otherwise employed full-time in industry, and the classes are scheduled to enable intending trainers to continue working full-time in their regular jobs.

Intending trainers have to fulfil the following requirements:

- an appropriate educational qualification (GLSO, GPB, higher education degree);
- work experience and/or specific preparatory training.

If one of these conditions is not met, the prospective trainer must undertake to attend a 120-hour skill update course in advance. This course leads to a VIZO certificate, which is valid only internally and is not a substitute for the certificate of teaching competence (GPB).

Training programme:

- continuing training in SMEs, with emphasis on the specific requirements of such training and its organization;
- education theory and techniques for curriculum content analysis;
- applied methodology;
- evaluation techniques;
- applied teaching methods, conceptualization and implementation of training facilities.

7 Continuing training of teachers and trainers

7.1 Continuing training in the regular technical and vocational education sector in flanders

The decree of 16 April 1996 now regulates continuing training for teachers and trainers. Continuing training in the secondary education sector had previously been regulated by the law of 5 July 1989.

The Autonomous Council for Community Education has been allocated a budget for financing the continuing training of teaching staff.

Nine centres for in-service training, one coordinating centre and one centre for non-university higher education have been set up to cater for each province and sector of education.

The priorities defined for continuing training in the legislation hardly refer to secondary technical and vocational training as such, highlighting instead school management, primary education, teaching skill requirements in schools with a high percentage of ethnic pupils, etc.

Traditionally, ad hoc, short-term continuing training has been organized by individual commercial companies, trusts and organizations set up by professional bodies. An important role in this respect has been played by the Vocational Training Fund of the Building Industry, the Technical Centre for the Timber Industry and Fabrimétal. These organizations ran some five technical training courses (2 to 4 days each) for teachers per year .

A few years ago the Ministry of Education introduced the possibility for vocational trainers of obtaining leave from their teaching duties in order to attend a continuing education course in industry. The initiative failed, however, because headmasters and principals were unwilling to replace their trusted teaching staff by young, inexperienced temporary staff.

From financial year 1996 on, continuing training is to be subsidized by the Flemish Community. The funding will be used for the following:

- continuing training initiated by the Flemish Government,
- continuing training initiated by the Autonomous Council for Flemish Community Education (ARGO) and other subsidized education authorities,
- continuing training initiated by schools and other institutions.

From school year 1996/1997 on, the Flemish Community annual budget for continuing training will be allocated as follows (in million BEF, 1 ECU = 39,45 BEF):

Year	Education institutions		Sectors	State	Continuing training
	basic	secondary			
1996	44	0	16	16	16
1997	114	16	42	42	36
1998	124	56	47	47	26
1999	134	96	54	54	12
2000	144	136	60	60	0
2001	154	176	60	60	0
2002	164	216	60	60	0
2003	170	240	60	60	0

The above table shows that:

- funding for continuing training in secondary education, including technical and vocational secondary education, will be made available from 1997/1998 on;
- the allocation will increase from 16 million BEF to 240 million BEF in 2003;
- the continuing training provisions of the 1989 legislation will no longer be applicable.

Continuing training initiated by the school

Schools are to use the above-mentioned funds for continuing training purposes only. The beneficiaries of the training will be teachers of general and technical subjects and also practical instructors, to be selected by the school principal or by an internal negotiating committee.

The training may be of a pedagogic or technical nature, being held at a teacher training institution or in industry as appropriate. Its duration will depend on the number of staff members participating. The amount of the subsidy is to be determined by the number of establishment teaching posts at the school concerned.

Continuing training initiated by sectoral coordination organizations

Sectoral coordination organizations can use the above-mentioned funds to organize continuing training programmes for teachers from different schools. The training may be in pedagogy or in a specific curriculum subject.

Continuing training initiated by the Flemish Government

The Flemish Government determines policy priorities for continuing training initiatives for its teaching staff. These initiatives are needed to support the education reorganization process and to meet needs which remain unmet by the market. The Government itself determines how its policy priorities are identified.

**7.2 Continuing training
in the regular technical
and vocational
education sector in
wallonia**

Continuing training for teachers and trainers in the French Community has had to respond to a succession of educational reforms: the extension of compulsory education, the promotion of intercultural teaching, the integration into teaching of computers and new technologies, innovations in curriculum content, etc.

As in Flanders, industry has traditionally organized some continuing training events. The principal initiators here have been the Vocational Training Fund of the Building Industry, Fabrimétal, and the Technical Centre for the Timber Industry. Continuing training in technical fields was and still is also on offer from a number of individual companies.

Such training was organized on a very flexible basis and was never compulsory. As a result, not all teachers participated regularly in continuing training events.

Today, a distinction can be made between two specific types of continuing training. The first type is the more recent.

First type of continuing training

In a decree of 16 July 1993, the Council of the French Community laid down compulsory themes to be addressed by continuing training for teaching staff in secondary education and provided the funding required to implement such training. The themes were set for specific school years, and the following are listed as examples:

School years 1994/1995 and 1995/1996:

- a) correct application of evaluation techniques in the course of the school year (continuous assessment) and at the end (final evaluation) of the first grade of secondary education;
- b) correct application of all evaluation techniques, continuous assessment and final evaluation, in all grades and all types of secondary education;
- c) training for teachers of technical subjects to promote multidisciplinary expertise, i.e. a thorough basic knowledge of subjects related to their specialism;
- d) training for teachers in technical and vocational education on the application of evaluation techniques and continuing training in their field;
- e) communication skills and training in the settlement of disputes;
- f) special training courses for school management teams.

Second type of continuing training

Beyond the purview of the above-mentioned decree, all sectors are at liberty to organize their own continuing training initiatives for their teaching staff.

The subsidized schools are required to finance these activities themselves.

The education sector run by the French Community has its own separate budget for continuing training. Since 1951, continuing training activities have been organized by inspectors from the education inspectorate.

Training days are counted as normal teaching days.

This second type of training can be seen as a continuation of the training as described in 7.2 above.

Overall developments in the continuing training sector have now induced all education sectors to set up - usually specialized - training centres:

- the 'Centre d'Autoformation et de Formation Continué' in Tihange, which offers a very wide range of information on education matters;
- the 'Centre Technique et Pédagogique' in Frameries, which publishes treatises on education and organizes continuing training courses;
- the 'Centre Pédagogique de la Roseraie' in Péruwelz, which specializes in computer science;
- the 'Centre des Méthodes de l'Enseignement' in the province of Liège;

the 'Service des méthodes et de la formation continue' in Brussels.

In the private subsidized education sector a 'Comité Central FPE' coordinates continuing training for secondary education in consultation with the episcopacy, higher education, and industry.

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- 7.3 Continuing training for teachers in adult education (fl) and education for social promotion (W)** No continuing training is organized for teachers who do not have teaching duties in full-time education. The other teachers employed in this education sector already work full-time in industry, in the administration, etc. and are thus confronted daily with and kept abreast of new developments in working life.
- 7.4 Continuing training organized by vdab (fl) and forem (W)** Each trainer has to attend an annual three-day practical training in industry pertinent to his/her teaching subject. The centres for training trainers are authorized to organize their own short-term seminars.
- 7.5 Continuing training organized by the flemish and wallon institutes for entrepreneurship training (FL: VIZO, W: IFPCM)** Periodic continuing training courses are organized for teachers in vocational education and entrepreneurship training as follows:
- teachers with an annual teaching load of at least 480 hours are required to undergo at least 24 hours of continuing training every three years;
 - teachers with an annual teaching load of at least 240 hours are required to undergo at least 12 hours of continuing training every three years;
 - other teachers can undergo this continuing training on a voluntary basis, provided that their numerical presence does not necessitate additional training courses.

The training is organized by VIZO and IFPCM in cooperation with one or more training centres and is delivered in three-hour modules. Its coverage is integrated, extending to both pedagogic and subject-specific matters. The training staff are required to have the necessary educational or professional qualifications. Participants are awarded a certificate of attendance at the end of the course.

- 7.6 Sabbaticals** No provision is made for sabbaticals in any of Belgium's education sectors or systems.

8 Useful addresses

- 8.1 For the flemish community** Ministry of the Flemish Community
Education Department
Rijksadministratief Centrum
B - 1010 Brussel
(Ministerie van de Vlaamse Gemeenschap
Departement Onderwijs)
- Ministry of the Flemish Community
Education Department
Information and Documentation Division
Koningsstraat 71
B - 1000 Brussel

Education Secretariat for Cities and Towns of the Flemish Community
Ravensteingalerij 3, bus 7
B - 1000 Brussel
(Onderwijssecretariaat voor Steden en Gemeenten van de Vlaamse Gemeenschap)
Tel.: +32 2 502.09.05 Fax: +32 2 502.12.64

Flemish Education Council
Leuvenseplein 4
B - 1000 Brussel
(Vlaamse Onderwijsraad)
Tel.: +32 2 219.42.99 Fax: +32 2 219.81.18

Flemish Institute for Entrepreneurship Training
Orion - gebouw Bischoffsheimlaan 23
B - 1000 Brussel
(Vlaams Instituut voor Zelfstandig Ondernemen)
Tel.: +32 2 218.60.93 Fax: +32 2 217.46.12

Flemish Employment Services and Vocational Training Agency
Keizerslaan 11
B - 1000 Brussel
(Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding V.D.A.B.)
Tel.: +32 2 506.15.11

8.2 For the walloon community

Ministry of Education and Research
General Directorate
Rue de la Science 43
B - 1040 Bruxelles
(Ministère de l'Éducation, de la Recherche et de la Formation - Direction Générale de l'Organisation des études)
Tel.: +32 2 238.86.11 Fax: +32 2 238.86.97

Ministry of Education and Research
Directorate for Secondary Education
Boulevard Pachéco 19 Bte 0
B - 1010 Bruxelles
(Ministère de l'Éducation, de la Recherche et de la Formation - Direction de l'Enseignement secondaire)
Tel. +32 2 238.86.11 Fax: +32 2 238.86.97

Ministry of Education and Research
Directorate for Social Promotion
Rue de la Science 43
B - 1040 Bruxelles
(Ministère de l'Éducation, de la Recherche et de la Formation - Direction de la Promotion Sociale)
Tel.: +32 2 238.86.11 Fax: +32 2 238.86.97

(Ministerie van de Vlaamse Gemeenschap
Departement Onderwijs. Afdeling Informatie en Documentatie)
Tel.: +32 2 219.18.00 Fax: +32 2 219.77.73

Ministry of the Flemish Community
Education Department - Secondary Education Administration
RAC - Arcadengebouw
B - 1010 Brussel
(Ministerie van de Vlaamse Gemeenschap- Administratie Secundair
Onderwijs)
Tel.: +32 2 210.52.93 Fax: +32 2 210.53.55

Ministry of the Flemish Community
Education Department
Higher Education and Scientific Research Administration
Koningsstraat 136
B - 1000 Brussel
(Ministerie van de Vlaamse Gemeenschap - Departement Onderwijs
Administratie Hoger Onderwijs en Wetenschappelijk Onderzoek)
Tel.: +32 2 211.42.87 Fax: +32 2 211.42.50

Ministry of the Flemish Community
Education Department
Continuing Education Administration
Koningsstraat 67
B - 1000 Brussel
(Ministerie van de Vlaamse Gemeenschap - Departement Onderwijs
Administratie Permanente Vorming)
Tel.: + 32 2 211.42.11 Fax: +32 2 211.43.81

Autonomous Council for Community Education
Communication and Documentation Service
Belliardstraat 12
B - 1040 Brussel
(Autonome Raad voor het Gemeenschapsonderwijs -
Dienst Communicatie en Documentatie)
Tel.: +32 2 502.36.82 Fax: +32 2 513.29.51
Catholic Education Secretariat
Guimardstraat 1
B - 1040 Brussel
(Secretariaat van het Katholiek Onderwijs)
Tel.: +32 2 507.06.11 Fax: +32 2 513.36.45

Flemish Provincial Education Unit
Albertinaplein 2, bus 4b
B - 1000 Brussel
(Cel voor het Vlaams Provinciaal Onderwijs)
Tel.: +32 2 514.19.00 Fax: +32 2 512.66.36

Catholic Education Secretariat
Rue Guimard 1 B - 1040 Bruxelles
(Secretariat de l'Enseignement Catholique)
Tel.: +32 2 507.06.11 Fax: +32 2 513.36.45

Walloon Institute for Entrepreneurship Training
Rue Marie-Thérèse 1
B - 1040 Bruxelles
(Institut Francophone de Formation Permanente des Classes
Moyennes)
Tel.: +32 2 219.37.88

Employment Service and Vocational Training Agency - Vocational
Training and Employment
Rue du Viaduc 133
B - 1050 Bruxelles
(Formation et Emploi - FOREM)
Tel.: +32 2 647.71.40 Fax: +32 2 640.64.58

Also: Boulevard Tirou 104
B - 6000 Charleroi
Tel.: +32 71 20.61.11

**8.3 Professional
associations or trusts
which organize
continuing training for
practical instructors in
technical and
vocational education**

Fonds voor Vakopleiding in de Bouwnijverheid (FVB)
Fonds pour la Formation dans la construction (FFC)
Koningsstraat 245, rue Royale 245
B - 1000 Brussel / Bruxelles
Tel.: +32 2 219.43.77

Opleidingscentrum Hout - Technisch Centrum voor de Hout-
nijverheid
Centre de Formation du Bois
Alsembergsesteenweg 830, chaussée d'Alsemberg 830
B - 1180 Brussel / Bruxelles
Tel.: +32 2 332.23.63

Fabrimetal - Fabrimétal
Lakenweverstraat 31, rue des Drapiers 31
B - 1050 Brussel / Bruxelles
Tel.: +32 2 219.43.77

**8.4 Trade unions -
sectoral education**

F.C.S.O.D. - sector Education
Wetstraat 121, Rue de la Loi 121
B - 1040 Brussel

A.C.O.D. - sector Education
Fontainasplein 9 -11, place Fontainas 9 - 11
B - 1000 Brussel

V.S.O.A. - sector Education
Lang Levenstraat 27 - 29, rue Longue Vie
B - 1050 Brussel

9 Institutions and courses

- 9.1 Flemish area** Institutes of non-university higher education with a teacher training department for lower secondary technical and vocational education
- Vlaamse Autonome Hogeschool Antwerpen
Van Meterenkaai 4
B - 2000 Antwerpen
Affiliated school: Leopoldstraat 42 B - 2800 Mechelen
Tel.: +32 3 220.02.90 (Antw.), +32 15 41.22.11 (Mech.)
Fax: +32 3 220.02.99
Study courses:
Electrical engineering + technical education
Mechanical engineering + technical education
Wood - Construction + technical education
- Hogeschool van de Provincie Antwerpen
Italiëlei 122
B - 200 Antwerpen
Tel.: +32 3 205.16.50 Fax: +32 3 205.16.51
Study courses:
Agriculture and horticulture + technical education
- Karel de Grote Hogeschool - Katholieke Hogeschool Antwerpen
Generaal Lemanstraat 27
B - 2018 Antwerpen
Tel.: + 32 3 241.03.00 Fax: +32 3 241.03.01
Study courses:
Industry + technical education
- Erasmushogeschool Brussel
Nijverheidskaai 170
B - 1070 Brussel
Tel.: +32 2 523.37.37 Fax: +32 2 523.37.57
Study courses:
Beauty care
- Katholieke Hogeschool voor Lerarenopleiding en Bedrijfs-
management
Oost-Vlaanderen
Visitatiestraat 3
B - 9040 Gent
Tel.: +32 9 228.05.47 Fax: +32 9 228.49.10
Study courses:
Beauty care

Hogeschool Gent
J. Kluyskensstraat 2
B - 9000 Gent
Tel.: +32 9 266.08.00 Fax: +32 9 266.08.01

Katholieke Hogeschool Limburg
Kunstlaan 20
B - 3500 Hasselt
Tel.: +32 11 23.07.70 Fax: +32 11 23.07.89
Study courses:
Dressmaking + technical education

Autonome Hogeschool West-Vlaanderen
Renaat de Ruderlaan 6
B - 8500 Kortrijk
Tel.: +32 56 22.26.91 Fax: +32 56 21.40.43

9.2 Walloon area Institut d'Enseignement supérieur pédagogique et économique

Mons -
Tournai - Morlanwez
boulevard Albert - Elisabeth 2
B - 7000 Mons
Tel.: +32 65 33.76.66 Fax: +32 65 34.99.15
Study courses:
Electromechanical engineering
Wood - Construction

Institut Reine Astrid (IRAM)
avenue Reine Astrid 9
B - 7000 Mons
Tel.: +32 65 35.39.79 Fax: +32 65 35.50.16
Study courses:
Technical education

Institut Sainte Claire
rue Sécheval 32
B - Verviers
Tel.: +32 87 33.51.11 Fax: +32 87.35.09.04
Study courses:
Dressmaking

Institut d'enseignement supérieur pédagogique de la Communauté
Française (ESPÉNA)
rue des Dames Blanches 3b
B - 5000 Namur
Tel.: +32 81 22.31.09 Fax: +32 81 22.14.96
Study courses:
Dressmaking

10 Sources and references

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'Het Onderwijs in Nederlandstalig België', published by the former Ministry of National Education, D/1983/3356/1

'HOBU', published by the Department of Education (FL), Higher Non-University Education Administration

'Onderwijs voor Sociale Promotie', published by the Continuing Training Administration, Adult Education Department (FL) 1996

'Education in Flanders', published by the Ministry of the Flemish Community, Foreign Policy Administration

'Pedagogische leergangen in het hoger onderwijs van het korte type', published by the Institute for Adult Training in Flemish Community Education, IVV - VO Gent, Schoonmeersstraat 52 B - 9000 Gent

'Le Système Educatif de la Communauté Française de Belgique', published by the Ministère de l'Éducation, de la Recherche et de la Formation (MERF), Secrétariat général; Bruxelles 1994

'Aperçu des diplômes de l'Enseignement supérieur', published by MERF, Direction générale de l'Enseignement supérieur, Service Infosup, 1996

Documentation published by VDAB, FOREM, VIZO

11 Acronyms

Acronym	Dutch or french expression	English approximation
BP	Beroepspraktijk	Occupational practice
CEFA	Centres d'Éducation et de Formation en Alternance	Centre for part-time education and training
CMO	Centrum voor Middenstandsopleiding Vlaanderen	Centre for entrepreneurship training Flanders
CPOS/ CFPE	Centrum voor Pedagogische Opleiding en studie	Centre for Training and Studies in Pedagogy
FL	Vlaanderen - Vlaamse Gemeenschap	Flanders - Flemish Community
FOREM	Formation et Emploi	Training and employment (training centre of ONEM)

GLSO	Geaggregeerde voor het lager secundair onderwijs	certified teacher in lower secondary education
GPB	Getuigschrift van pedagogische bekwaamheid	certificate of teaching competence
HO	Hoger Onderwijs	higher education
HOKT	Hoger Onderwijs van het Korte Type	short-term non-university higher education
HOLT	Hoger Onderwijs van het Lange Type	long-term non-university higher education
HSTO	Hoger Secundair Technisch Onderwijs	higher secondary technical education
HSBO	Hoger secundair beroepsonderwijs	higher secondary vocational education
IFPCM	Institut de Formation Permanente des Classes Moyennes	Institute for Continuing Training of the Middle Classes
KMO	Kleine en Middelgrote ondernemingen	small and medium enterprises
MERF	Ministère de l'Education, de la Recherche et de la Formation	Ministry of Education, Research and Training
MOD	Leerstofmodule	learning module
NE	Nuttige ervaring in de nijverheid	relevant experience in industry
ONEM	Office National de l'Emploi	National Employment Office
TV	Technische vakken	technical subjects
VCAR	Vlaams Centrum voor Ambacht en Restauratie	Flemish Centre for Crafts and Restoration
VDAB	Vlaamse Dienst voor Arbeidsbemiddeling.	Flemish Employment Services and Vocational Training Agency
VIZO	Vlaams Instituut voor het Zelfstandig Ondernemen	Flemish Institute for Entrepreneurship Training
VLOR	Vlaamse onderwijs raad	Flemish Education Council
W	Communauté Française - Wallonie	Wallonia - French Community of Belgium

Hellas

1. Introduction Modern Hellas is situated on the southernmost Balkan peninsula and covers an area of about 132,000 km². It shares land borders to the north with Albania, the former Yugoslavian Republic of Macedonia and Bulgaria, and to the northeast with Turkey. Its shores are washed in the west by the Ionian Sea, in the south by the Mediterranean Sea and in the east by the Aegean Sea. It has a population, according to the 1991 census, of 10,350,000. The country is divided into thirteen administrative regions, as shown in Figure 1. The education statistics presented in this paper are classified on the basis of these regions.

Hellas belongs to the category of nations which enjoy a free-market economy and are developing at a medium pace. The agricultural sector is still overly predominant (24% of employment). Enterprises with more than 500 employees employ only 40% of all salaried workers, the remaining 60% being employed in small and medium enterprises. In 1991 the GNP was dominated by the tertiary sector (58%), while the secondary sector contributed 29% and the primary sector only 13%. Tourism, merchant shipping and banking are the predominant economic activities.

1.1 Basic characteristics of the current education system

Education is the constitutionally designated responsibility of the state and is provided free of charge at all levels, from pre-school to university. A relatively small private (proprietary) education sector exists, but it is only the state-run universities and institutes of technology which provide tertiary education and award academic degrees. The Hellenic education system is generally centralized in terms of both organization and administration. With regard to educational principles and practices, Hellas has a national curriculum, uniform school timetables and approved textbooks which are also compulsory for private-sector education.

Before examining the current education and training scene in detail, there follows a brief outline of the significant reforms and structural changes which have shaped Hellenic education in the post-war period.

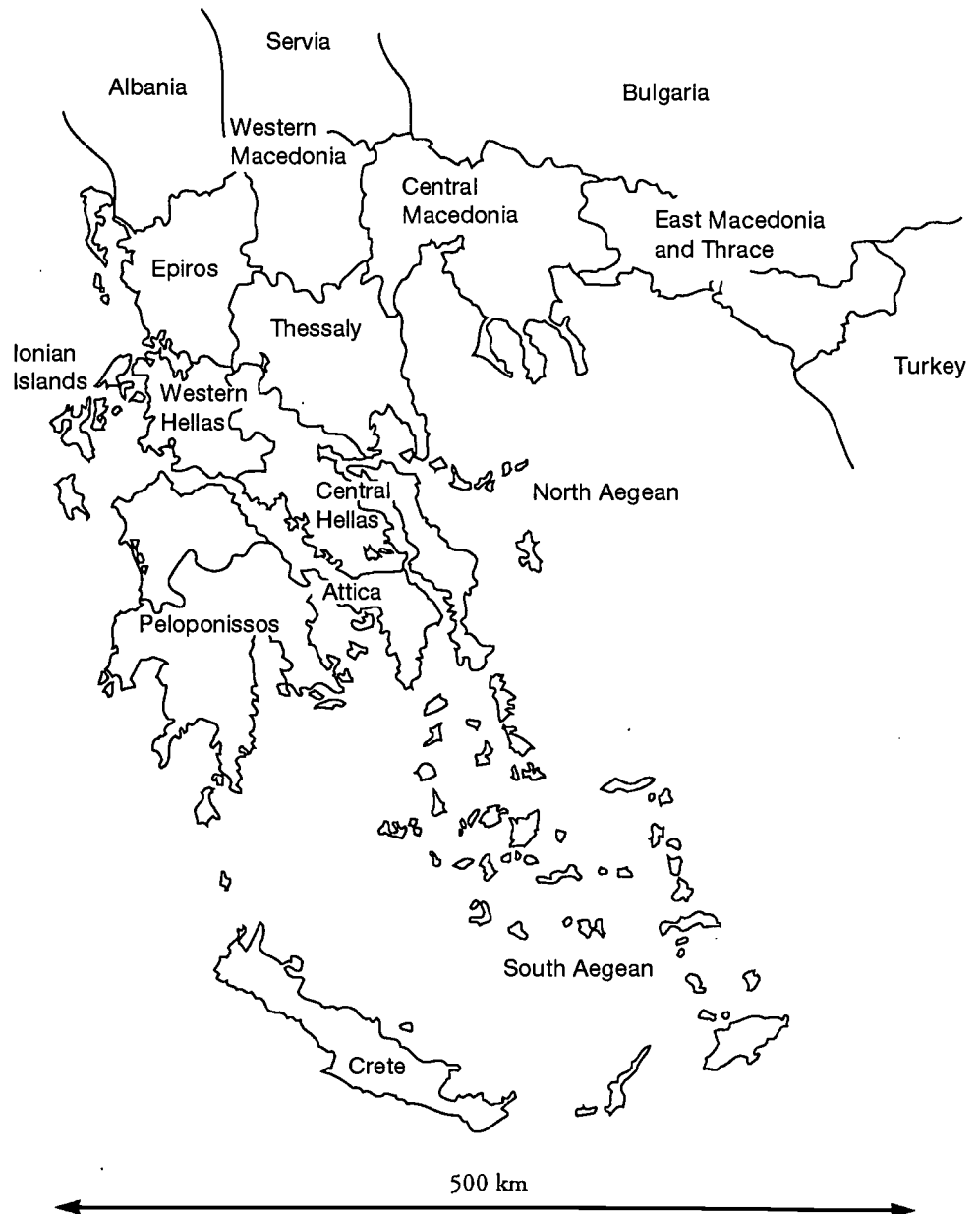
In the 1950s, the education system was essentially a six-year period of compulsory primary education, six years of heavily humanities-centred education at a secondary school or "gymnasium", and tertiary education provided by universities and a very few other tertiary education institutions, such as the academies of teacher training and physical education.

Towards the end of the 1950s, when the pressure for modernization and planned economic development intensified, a comprehensive report on the state of education was drawn up. The outcome was a series of legal reforms aiming to expand the technical and vocational sector of education.

1.2 Developments during the second half of the 20th century

Secondary education was split into two three-year cycles. The first three grades constituted the lower cycle and were mainly devoted to general subjects and the humanities. The upper cycle was diversified and its programme was divided into different tracks catered for by different types of "gymnasium". The two major tracks were the "practical" track (science and mathematics) and the "classical" track (literature), both of which were academic streams essentially preparing pupils for university entrance. A parallel system of technical-vocational schools was set up with the same structure involving a lower and an upper cycle.

Figure 1: Administrative Map of Hellas



The - short-lived - educational reforms of 1964 further developed the above concepts and extended the reform agenda to fundamental and comprehensive changes in the education system intended to promote educational equity and economic growth. Free education was extended to the tertiary level, entrance examinations governing access to secondary education were abolished, and basic changes were made to the examination system for university entrance, with a unified national examination system replacing separate examinations for each faculty. The preceding two cycles of general secondary education were each given their own type of school: the non-selective lower secondary "gymnasium" - which still exists today - and the upper secondary "lyceum". The new "lyceum" offered both practical and classical streams and had thus overcome the previous division in upper secondary education.

One of the most significant changes of this period (since it concerned one of the most acute and hotly debated issues of the century), was that the "demotic" language (the popular form of the Greek language), officially replaced the purist form, Katharevousa, as the medium of instruction. Another aspect of this curricular reform was that classical Greek literature was to be taught through modern translation in lower secondary education and that systematic study of the classical Greek language would begin at the lyceum.

The advent of the military junta in 1967 put an end to nearly all these measures, the language issue being the first on the agenda. The junta also passed legislation setting up a new tertiary level of technical-vocational education which was intended, on the one hand, to supply vitally needed highly qualified technicians, and on the other, to serve as a shield against the continuously rising demand for university entrance. Five centres of advanced technical study (KATEEs) had been established by 1974.

The year 1974 marked the return to democratic government. The educational legislation enacted thereafter essentially restored most of the reforms of the 1964 period. General secondary and vocational secondary education was reorganized with a view to promoting parity between these two streams in terms of their public esteem. Specific measures included:

- the prolongation of compulsory education from six to nine years;
- the establishment of the lower secondary "gymnasium" as a comprehensive general education institution catering for grades 7 to 9; this meant that:
 - a) lower secondary vocational schools were abolished, and
 - b) selective examinations between primary and lower secondary education were abolished;
- the reorganization of post-compulsory secondary education (grades 10 to 12) into two equivalent streams, the general lyceum and the technical-vocational lyceum: graduates of a general lyceum education had previously been able to sit entrance

- examinations for all types of higher education while graduates of a technical-vocational lyceum had been denied access to universities;
- the reintroduction of the demotic language as an instruction medium at all levels and of classical literature taught through modern translation in the lower secondary curriculum.

From 1981 on, when the socialist government first came to power, reforms focused more on internal changes to make the education system more democratic than on any major structural issues. The main changes to the system in the 1980s were:

- automatic advancement through primary education;
- abandonment of examinations at the interface between lower secondary and upper secondary education;
- postponement of stream selection to the final year of the general lyceum (grade 12), at which point pupils were offered a choice of four disciplines instead of only two;
- a new type of comprehensive or integrated lyceum was established at upper secondary level in 1984: the experimental unified polyvalent lyceum (EPL) was to bridge the gap between general and technical education; even today EPLs cater for only a relatively small percentage of the pupil population despite strong social demand and pressure for their expansion;
- various measures to increase participation in school decision-making processes, e.g. the establishment of pupil councils and the assignment of wider powers to teachers' councils, but although the relevant legislation, Law 1566/85, introduced broad scope for decentralized decision-making, only few of its provisions were ever implemented owing to a lack of implementation decrees.

During this period, priority was given to reforming higher education. The KATEEs, which were experiencing serious problems due to their rapid expansion, were reorganized to become today's institutes of technology (TEIs). Additionally, a comprehensive Framework Law enacted in 1982 (1268/82) sought to reform the long-unchanged university sector by expanding the basis for decision-making within universities and introducing new higher education formats. Another reform undertaken during this period was the establishment of faculties of education (for pre-school and primary education) within universities and the concomitant, gradual phase-out of the former teacher training academies.

During the first half of the 1990s, the conservative government introduced a new system of post-secondary vocational training with a strong capacity for flexibility and cooperation with the social partners. Subject to accreditation, this system incorporates most of the previously unregulated private-sector "centres of free studies". Together with public and private vocational training institutes (IEKs), the system offers relatively short-term training courses catering for the thousands of general lyceum graduates who do not proceed to tertiary education.

Yet despite shifts in emphasis between equity and efficiency, throughout the entire period of this historical overview policy-makers have been constantly confronted with the dilemma of how to respond to a strong demand for higher education.

The 1990s, however, have since brought to the forefront another major concern for policy-makers which has become a critical and constantly debated issue: the quality of education at all levels. As the 1990s progressed there were fewer attempts by successive governments at reform and counterreform, with a consensus taking shape on the need to define the current problems besetting education (though priorities and proposed solutions differ). These problems include: under-resourced schools within a general context of public-sector budgetary constraints; overburdened and often outdated curricula combined with a teaching methodology which calls for memorization rather than critical reasoning; the large number of teachers often waiting 10 years for placements; a general lyceum which no longer functions as an independent and self-contained unit within the overall system but has become a preparatory school, like a waiting room, for university entrance; the mushrooming of private cramming schools and private lessons preparing candidates for the entrance exams to tertiary education; and an increasing number of students delaying their graduation, not to mention the high level of unemployment among those who do graduate. These issues and problems represent a demanding agenda for today's policy-makers.

1.3 Training culture Since its establishment the modern Hellenic state has been dominated by the classical Greek heritage. This has always been reflected by a strong demand for academic study and a correspondingly weak demand for vocational education and training. Many attempts to vocationalize part of the education system (especially the compulsory cycle) have failed owing to a kind of academic social inertia. As a result, most vocational training needs have traditionally been met by means of on-the-job training schemes. Such schemes have been offered extensively by the Merchant Marine, which has always been the strongest sector in the economy.

Traditionally, links between education and the economy as a whole have been only tenuous. Given an anti-vocational training culture, individual freedom to choose one's career has frustrated all manpower planning efforts - which would in any case have been ineffective because they were not institutionalized. Institutionalized training is defined here as that which is governed by norms on which the social partners reach consensus (in this case a consensus required by law). Hellenic education remains characterized by a strong demand for general education (as opposed to vocational education) and, subsequently, for university education. Despite the fact that general education graduates are often unemployed while those with vocational skills are in demand on the labour market, career choices among young people are still based primarily on the social status of an occupation and to a lesser extent on economic realities.

1.4 Interface between the education system and the economy

From the givens of a per capital GNI of \$ 6,536 (in 1990 dollars) and a steady shift in employment opportunities from the primary sector to the secondary and tertiary sectors, it is clear that the education and training undergone by the large majority of young people is out of step with the requirements of the job market. Most job vacancies call for applicants with specialized skills at middle management level. The magnitude of the mismatch here can be deduced from the following approximate pupil flow numbers. Of every ten youngsters who opt for post-compulsory education, seven enrol for general education (i.e. at general lyceums), and three enrol for vocational education (i.e. at technical-vocational lyceums, technical-vocational schools, apprenticeship schools, merchant marine officers schools, etc.). Of the seven pupils who obtain the leaving certificate after a general lyceum education, only two are successful in entering higher education. In a nutshell this means that 50% of secondary education graduates have no marketable skills.

The social impact of such a high demand for general education manifests itself in a high level of unemployment among educated 18-23 year-olds. Structural unemployment also appears to be high. In addition there is significant frictional unemployment due to the large numbers of young people moving from rural to urban areas.

2 Review of the current national system of initial and continuing vocational education and training

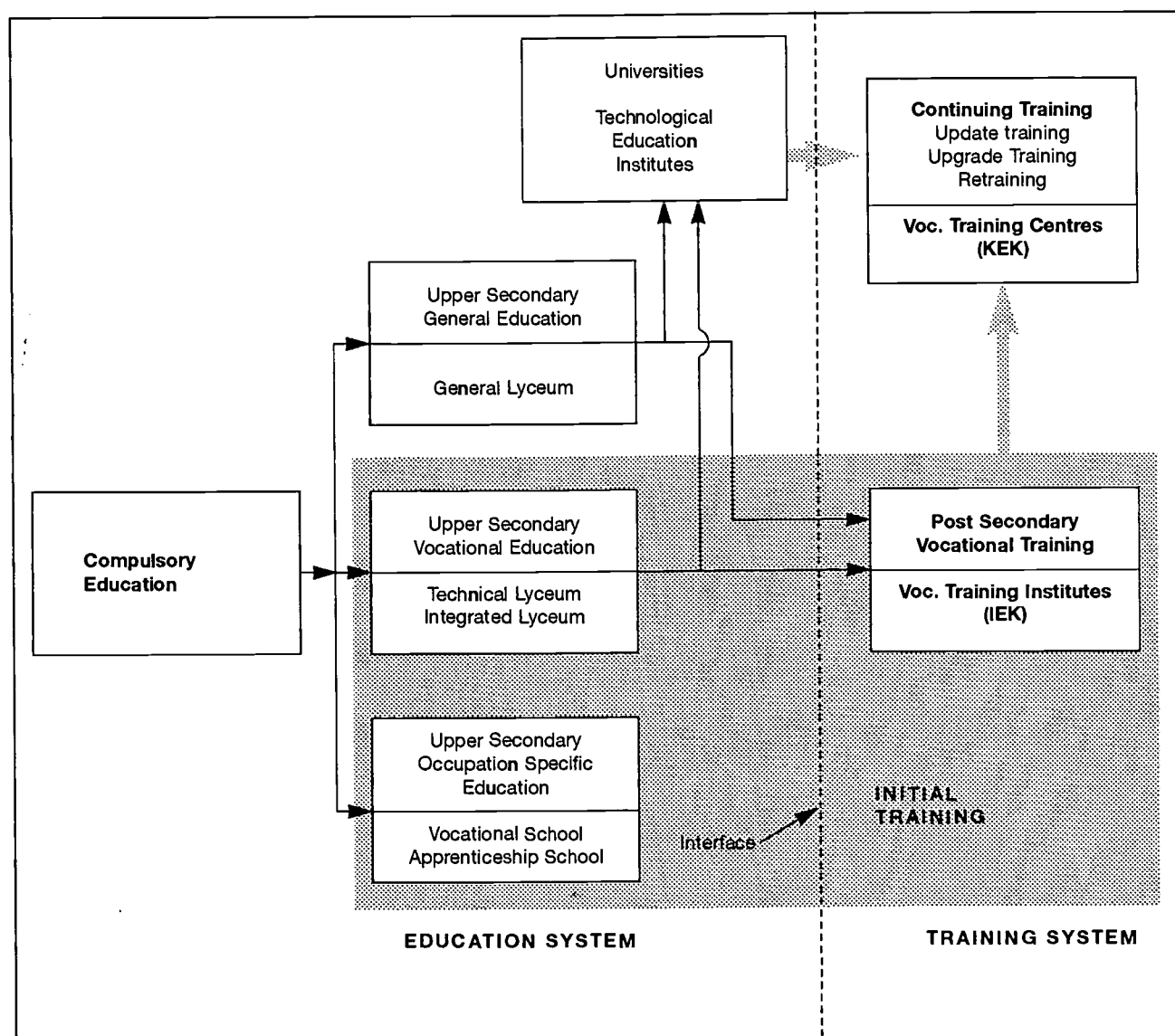
2.1 The initial vocational education and training context

The major part of initial vocational education and training provision is delivered within the formal education system. Compulsory education extends over nine years: six years of primary education (pre-school education is optional) and three years of lower secondary education (gymnasium). On completion of the compulsory cycle - which has no vocational component whatsoever - youngsters can leave the system to seek employment as unskilled workers. Recent census data show that approximately 12% of pupils drop out of school before completing compulsory education and without having obtained any vocational qualifications. Alternatively, they can remain in the education system by enrolling for upper secondary education. The options here are essentially two: enrolment at a lyceum or at a technical-vocational school. Those who opt for the former, with a three-year course, are usually aiming to proceed to tertiary education. Those who opt for the latter, with a two-year course, usually plan to seek employment at technician or craftsman level after graduation. The technical-vocational schools operated by OAED (Manpower Employment Organization) offer three-year apprenticeship programs.

There are three basic types of lyceum: the general lyceum, the technical-vocational lyceum, and the comprehensive polyvalent (integrated) lyceum. The last type, a recent addition to the upper secondary education landscape, has concluded an experimental phase and is currently under expansion. It represents an attempt to

merge the other two lyceum types into a unified comprehensive school. Graduates from all three lyceum types can proceed to tertiary education provided they pass the national entrance exams which are held once a year. A predetermined quota of graduates from technical-vocational lyceums and integrated lyceums are allowed to bypass this examination and enrol direct in tertiary non-university technical institutes (TEIs). Their selection is based strictly on the grade-point average they attained during the two final lyceum grades. From school year 1997/98 on, the selection will be based on a competitive examination open only to such graduates. Alternatively, graduates from all lyceum types can leave the formal educational system and seek employment or enrol with a private institute outside the formal system, most of which offer fast-track, occupation-specific vocational training programs.

Figure 2: Interfaces between the education and training systems



Formal training since the 1992 reform

New framework legislation (Law 2009/92) was passed in 1992. It established a "national vocational education and training system" (ESEEK) providing for supervision of all formal vocational education and training activities which lead to national certificates. Figure 2 illustrates the articulated structure of the new education and training system. The system falls within the supervisory powers of the Ministry of Education which exercises these powers through a national public organization, the Organization for Vocational Education and Training (OEEK). It should be noted that the Ministry of Labour holds supervisory powers for all non-formal initial and continuing training activities which are partly financed by the European Social Fund.

As can be seen from Figure 2, initial training is provided partly within the education system (pre-vocational education and basic training) and partly within the training system (specialization). Additionally, initial training (both basic and specialized) is available to youngsters who have completed a general upper secondary education.

The rationale behind this split is that the education system is expected to provide a fundamental, basic vocational education allowing for occupational adaptability, whereas the training system is expected to provide a specialized, occupation-specific training, i.e. to develop specific and specialized marketable skills. For example, a student might train to become an electronics technician within the education system and then enrol in the training system to obtain a specialized qualification in the maintenance of ship automation systems.

a) School-based training

School-based training takes the form, firstly, of pre-vocational education and basic training delivered in vocational schools supervised by the Ministry of Education (technical-vocational lyceums, integrated lyceums and technical-vocational schools), or by the Ministry of the Merchant Marine (marine lyceums). Secondly, school-based training takes the form of specialized training which is provided at post-secondary vocational training institutes (IEKs). These institutes constitute the backbone of occupation-specific vocational training in Hellas because their tripartite management structures ensure that their training programs - from planning and operation to certification - are closely geared to the needs of the regional labour market.

b) Company-based training

Company-based training within the formal training sector is provided on an in-company or inter-company basis within the national education and training system and leads to a nationally

recognized qualification. Although in-company apprenticeship cycles could be classified under this category, these are generally regarded as belonging to alternance training (see below). Formal company-based training covers skill update, qualification upgrade and retraining measures and in some instances basic training schemes for semi-skilled workers.

c) Alternance training

The alternance training scheme in Hellas is an apprenticeship scheme. Apprenticeship schools are supervised by the Manpower Employment Organization (OAED), the National Tourism Organization (schools specializing in the hotel industry) and the Ministry of Health and Welfare (schools of nursing). Courses at apprenticeship schools are always three-year initial training programs leading to a nationally recognized certificate. Recent legislation also allows for shorter and fast-track alternance training programs which also lead to recognized certificates.

Initial training statistics

Initial vocational education and training within the formal education system is offered at upper secondary level in three types of establishment: the integrated lyceum (3 to 4 years), the technical lyceum (3 years) and the technical school (2 years). These schools operate parallel to the general lyceums (3 years), which mainly prepare students for higher education.

The integrated lyceum is a relatively new school concept which joined the formal education system in 1985 after an experimental phase. Its expansion in terms of school numbers has been rather slow because of the stringent requirements associated with the establishment of such lyceums.

Table 1 provides regional statistics on integrated lyceums.

Region	Integrated Lyceums	No. of Teachers	No. of Pupils	Pupil/teacher ratio	% of pupils in public schools
1 Eastern Macedonia & Thrace	4	224	2,727	12.2	100%
2 Central Macedonia	4	297	3,539	11.9	100%
3 Western Macedonia	1	42	577	13.7	100%
4 Epiros	1	72	766	10.6	100%
5 Thessaly	3	203	2,540	12.5	100%
6 Ionian Islands	1	23	266	11.6	100%
7 Western Hellas	2	185	2,001	10.8	100%
8 Attica	6	430	5,889	13.7	100%
9 Peloponesos	1	48	573	11.9	100%
10 Crete	2	139	1,470	10.6	100%
Total	25*	1.663	20.348	12.2	100%

Source: KEPE (Karmas, 1994). During last year this number doubled, which manifests the wish of the government to support the generalization of this school. However, there are no statistical data as yet for the newly established schools.

The following range of vocational specializations are offered by integrated lyceums:

Administrative services - secretarial skills
 Information technology
 Medical laboratory technology
 Social welfare
 Economics
 Applied art
 Civil engineering
 Mechanical engineering
 Electrical engineering
 Electronic engineering
 Chemical technology
 Agriculture

The technical-vocational lyceum (TEL) is the school type which attracts the majority of youngsters completing compulsory education who, with a leaving certificate from the gymnasium, wish to continue their studies but are not keen on a general lyceum education. As the initial vocational education programs at a TEL are not occupation-specific, pupils who so wish can opt for a program in their last year of studies which, provided they subsequently pass a highly competitive national examination, qualifies them for admission to university. Table 2 provides statistics on the TEL sector of upper secondary education.

Table 2: Secondary education: technical-vocational lyceums 1990/91

Region	Technical-vocational lyceums	No. of Teachers	No. of Pupils	Pupil/teacher ratio	% pupils in public schools
1 East Macedonia &Thrace	16	1,172	4,993	4.3	100 %
2 Central Macedonia	46	1,284	18,840	14.7	84.1 %
3 Western Macedonia	11	254	3,617	14.2	100 %
4 Epiros	10	176	2,991	17.0	100 %
5 Thessaly	20	457	6,060	13.3	100 %
6 Ionian Islands	8	113	1,249	11.1	100 %
7 Western Hellas	21	520	5,645	10.9	92.8 %
8 Central Hellas	17	370	4,473	12.1	100 %
9 Attica	83	2,204	29,862	13.5	84.0 %
10 Peloponesos	16	304	4,000	13.2	100 %
11 North Aegean	10	149	1,747	11.7	100 %
12 South Aegean	13	175	2,362	13.5	97.8 %
13 Crete	14	375	4,961	13.2	100 %
Total	285	7,553	90,800	12.0	90.9 %

Source: KEPE (Karmas, 1994)

The following range of vocational specializations are offered at technical-vocational lyceums:

- Mechanical engineering
- Civil engineering
- Chemical-metallurgical technology
- Applied art
- Information technology
- Economics and administration
- Agriculture and animal husbandry
- Social services
- Merchant marine
- Electrical-electronic engineering

Technical-vocational schools (TES) operate in parallel to the technical-vocational lyceum and attract compulsory education graduates who want an occupation-specific training. The training program at technical-vocational schools generally lasts two years and may be school-based (schools run by the Ministry of Education), company-based (schools run by the Ministry of Health or the National Tourism Organization) or in alternance format (schools run by the Ministry of Employment). A small number of technical-vocational schools offer evening programs catering for persons who have a regular daytime job. Table 3 provides statistics on the TES sector of upper secondary vocational education.

Table 3: Secondary education: technical-vocational schools 1990/91

Region	Technical-vocational lyceums	No. of Teachers	No. of Pupils	Pupil/teacher ratio	% pupils in public schools
1 East Macedonia & Thrace	15	154	1,988	12.9	100 %
2 Central Macedonia	34	559	6,524	11.7	87.9 %
3 Western Macedonia	9	101	1,652	16.4	100 %
4 Epiros	8	82	1,076	13.1	100 %
5 Thessaly	13	163	2,350	14.4	95.6 %
6 Ionian Islands	7	56	442	7.9	100 %
7 Western Hellas	12	151	2,048	13.6	85.1 %
8 Central Hellas	11	109	1,382	12.7	100 %
9 Attica	80	1,309	18,820	14.4	72.7 %
10 Peloponesos	15	110	1,591	14.5	96.2 %
11 North Aegean	7	40	504	12.6	100 %
12 South Aegean	8	62	797	12.9	100 %
13 Crete	13	149	1,760	11.8	96.4 %
Total	232	3,045	40,934	13.4	84.2 %

Source: KEPE (Karmas, 1994)

The following vocational specializations are offered at technical-vocational schools:

Mechanical technician
 Electrical technician
 Electronics technician
 Civil engineering technician
 Agricultural technician
 Office and sales clerk
 Jewelry and watchmaker
 Textile technician
 Nursing
 Sewing

An initial vocational training is also available to youngsters who have completed an upper secondary general education (graduates of a general lyceum). This post-secondary vocational training is available at vocational training institutes (IEKs). Table 4 provides statistics on post-secondary, non-tertiary initial vocational training.

Table 4: Post-secondary, non-tertiary initial vocational training at IEKs, 1994

Post-secondary, non-tertiary initial vocational training at IEKs, 1994		
	Public	Proprietary
Vocational training institutes (IEKs)	59 (78*)	73 (90*)
Trainees	13,000 (17,455*)	13,592 (19,308*)
Vocational courses	62 (88*)	37
Trainers	6,500	--

Source: OEEK - Statistics office (* = 1997 data)

The more recent data suggests that there is a strong demand for post-secondary vocational training, especially among graduates of a general lyceum education. Also indicative of the scale of this demand is the fact that for each pupil accepted, two other applicants are rejected.

The specialisms offered at IEKs (public and proprietary) relate to the following fields:

Computer applications, commerce, finance, marketing, tourism services, agricultural products processing, agricultural technology, electronic technical services, mechanical and refrigeration technical services, specialized nursing and medical technology, communications technology and design, electronic journalism, advertising, social and child care services, etc.

2.2 The continuing training context

Continuing training in the Hellenic Republic is non-formal (i.e. outside the education system) and is loosely supervised by the Ministry of Labour and the Ministry of Education. Framework Law 1836/1989 on the promotion of employment and vocational training created a national network of local and regional committees which, under the supervision of the tripartite National Council for Vocational Training and Employment, aim to gear all vocational training activities to the needs of local and regional labour markets. More recently, under the provisions of the same legislation, the Ministry of Labour established an accrediting agency which uses well publicized specifications to appraise private, proprietary and public continuing training establishments; training centres thus accredited are known as vocational training centres (KEKs). No training establishment can receive European Union or national public funds for continuing training activities unless it has been accredited as a KEK by the Ministry of Labour. The accreditation criteria are defined extensively in ministerial decision 115372/94.

Establishments applying for accreditation are classified into two main categories:

- a) KEKs with the capacity to deliver continuing training programs throughout the country ("national range"), and
- b) KEKs with regional training capacity ("regional range").

KEKs are further classified by field of training into:

- a) "thematic" KEKs offering training in:
 - administration - information technology,
 - manufacturing technology;
- b) "sectoral" KEKs offering training relevant to various economic sectors.

The most fundamental general criteria applied in relation to accreditation are the following:

- a) the national, regional or local relevance of the thematic or sectoral focus,
- b) specifications concerning training facilities and equipment,
- c) the qualifications of the teaching and administrative staff,
- d) the availability of contracts with local enterprises on providing practical or on-the-job training,
- e) previous experience in delivering vocational training.

A large number of KEKs have already been accredited by the Ministry of Labour. The main accreditations have concerned the following categories of establishment:

- a) university schools (mainly of engineering and information technology),
- b) tertiary non-university institutes of technology (TEIs),

- c) chambers (e.g. the Technical Chamber of Hellas),
- d) scientific associations (e.g. the Hellenic Management Association),
- e) establishments run by organizations of the social partners,
- f) proprietary vocational training establishments,
- g) local and regional government agencies,
- h) public and private enterprises,
- i) inter-enterprise training organizations,
- j) training foundations.

In addition to the continuing vocational training network operating under the auspices of the Ministry of Labour, provision is made in Framework Law 2009/92 for the national vocational education and training system (ESEEK) to deliver formal (i.e. nationally certified) continuing vocational training. To date however (December 1996), the Organization for Vocational Education and Training (OEEK) has not launched any continuing training programs.

3 Teachers and trainers

3.1 Teachers and trainers in the formal education system

Teachers and trainers in upper secondary vocational education are classified by the level of their previous education and/or training. Basically there are three main categories: university graduates, non-university higher education graduates, and secondary education graduates. University graduates usually teach the theory of vocational subjects, graduates of non-university higher education teach both theory and practical subjects, and secondary education graduates work mainly as laboratory or workshop assistants and trainers.

All teachers in secondary education are recruited and appointed to tenured posts on the basis of waiting lists compiled and managed by the Ministry of Education on an annual basis ("Epetirida"). The order of priority is determined by the date of deposition of the individual application.

Lists are compiled for each category of teacher by initial training level (university graduates, TEI graduates, etc.), and teaching specialism (economics, electronics, nursing, etc.).

In addition to observing chronological order, positions on these lists also take account of certain social and educational criteria. The system favours:

- a) candidates who are themselves disabled or have a disabled father,
- b) candidates from large families (four or more siblings),
- c) candidates holding a Ph.D. qualification.

It should be noted that these special criteria do not overturn the chronological order of the lists as they are applied only after the

annual cohort has been determined.

Teachers and trainers within the formal education system are classified in 21 categories depending on the level of their initial qualification and their specialism:

- (1) theologians (university degree)
- (2) Greek language and literature teachers (university degree)
- (3) mathematicians (university degree)
- (4) science teachers (physics, chemistry, biology) (university degree)
- (5) French language teachers (university degree)
- (6) English language teachers (university degree)
- (7) German language teachers (university degree)
- (8) art teachers (university degree - art school)
- (9) economists (university degree)
- (10) sociologists (university degree)
- (11) physical education teachers (university degree)
- (12) engineers (university degree)
- (13) political science - law teachers (university degree)
- (14) medical doctors, agricultural engineers, registered nurses (university degree)
- (15) home economists (university degree)
- (16) music teachers (non-university qualification)
- (17) engineering technologists (non-university advanced technology qualification)
- (18) commerce, accountants, nurses, vehicle technologists (non-university higher education qualification)
- (19) informatics teachers (university degree)
- (20) informatics teachers (non-university advanced technology qualification)
- (21) technicians (secondary education qualification).

3.2 Duties of teachers and trainers in the formal education system

The duties of teachers and trainers employed in the formal education system range from pure teaching duties to top-level education administration duties, e.g. at the level of the Prefecture Education Director, whose duties are exclusively administrative. Between these extremes there are mixed functions involving teaching (including some pupil counselling) and administrative duties, e.g. the positions of school director, deputy director, director of the school laboratory centre (SEK), SEK deputy director, SEK head of vocational field, SEK laboratory head, and finally, prefecture-school vocational guidance officers (SEPs). The posts attracting the highest status and the highest salaries are those of school advisers, whose main duty is to advise teachers on substantive and pedagogic matters. The post of school adviser represents a development of the former school inspector, an institution which was abolished in 1981 together with the entire school inspectorate system.

The teaching load for teachers working in vocational education on a full-time basis varies between 18 and 21 hours weekly, depending on

years of service completed. (One class hour amounts to 50 minutes of actual class contact; towards the end of the school day, it may become 45 minutes.) The teaching load is 21 hours per week for up to 6 years of service, 19 hours for 6 to 12 years of service, and 18 hours for more than 12 years of service. For training staff employed as laboratory/workshop instructors the teaching load varies between 18 and 22 hours per week. Master craftsmen employed in laboratories/workshops provide instruction for 26 hours per week and regular craftsmen for 28 hours per week. For teaching staff with reduced contact hours (e.g. school directors, deputy directors, head teachers, laboratory heads), the teaching load varies between 3 and 14 hours per week depending on school size and the level of their administrative responsibility.

3.3 Trainers in the formal education and training system

The training staff employed at vocational training institutes (IEKs) to provide post-secondary training (see Chapter 2) are selected from among experienced professionals who practise on a daily basis the skills which they are required to develop in their trainees. Since IEKs operate in the evenings it is possible for these professionals to work as trainers on a part-time basis. Some generic vocational subjects are taught by vocational teachers holding regular teaching posts in the education system.

3.4 Trainers in continuing vocational training

Trainers employed in continuing vocational training are classified by their basic training qualification and by subject field. For the purposes of this classification there are two subject fields: (1) administration - information technology and (2) technical specialisms. The training personnel working within these two fields cover those who provide theory instruction and those who provide practical instruction.

3.5 Teacher unions

Hellas has only two teacher unions representing teachers in initial vocational education and training: OLME and OLTE.

OLME: Hellenic Federation of Teachers in Secondary Education

This is a second-level union which represents all secondary education teachers from both the general education and the vocational education and training sector. The corresponding umbrella union is ADEDY, which caters for all civil servants, including teachers. OLME is the central representative body of 85 first-level regional teacher unions called ELMES. OLME established KEMETE to document union functions and activities. OLME cooperates with teacher unions abroad and participates in European and international projects. OLME is a member of the following international organizations: FIPESO, ETUSE and International Education.

OLTE : Federation of Teachers in Vocational-Technical Education

OLTE is a second-level union which represents all teachers of general

or vocational subjects employed at technical-vocational schools or lyceums. Some teachers in vocational education belong to both unions. OLTE has a regional structure built up on first-level unions called ELTEs.

The teachers' union movement in Hellas

The organized teachers' union movement has left an impressive political and ideological mark since its emergence in the last century, around 1870, and it is still active today, though its character and areas of interest have changed over time.

The oldest teachers' union, which has had a strong political presence and played a fundamental role in education, was the Hellenic Teachers' Association, established in Athens in 1873 to represent teachers in primary and secondary education. The teachers' union movement was particularly active between 1870 and 1924, lobbying mainly to improve education and the status of teachers.

In 1922, the Federation of Teachers in Primary Education (DOE) was established with an eleven-member management board and a five-member supervisory board (members of both boards are elected by representatives of the member associations). DOE represents 53,000 teachers in pre-school and primary education, 15% of whom are supply teachers.

The Federation of Teachers in Secondary Education (OLME) was established in 1924 to represent teachers of all subjects. It is administrated by an eleven-member management board and overseen by a five-member supervisory board (members of both boards are elected by representatives of regional teachers' associations known as ELMES). OLME is a second-level union composed of 89 first-level unions (ELMEs) and representing 65,000 teachers in secondary education, 10% of whom are supply teachers.

The remit of DOE and OLME is as follows: coordination and management of the activities of all their respective member bodies to ensure a unified effort to improve primary and secondary education; protection and promotion of the ethical, scientific, professional and financial interests of their members; and the advancement of knowledge among the Hellenes.

Both DOE and OLME are members of ADEDY (Confederation of Civil Service Associations), which is the umbrella (third-level) union for all civil servants. They are also members of the following international organizations:

- a) FIRESO (World Federation of International Organizations)
- b) ETUSE (Education Committee of European Trade Unions)
- c) International Education.

Their involvement in international organizations seeks to facilitate cooperation and communication with education organizations abroad, the monitoring of international developments in educational issues and the promotion of international relations.

In 1993 OLME established KEMETE (Research and Documentation Centre), which is administered by a nine-member board elected by the Management Board of OLME. The remit of KEMETE is to carry out research and studies on educational issues, to support the Management Board of OLME with documented positions on issues of concern, and to contribute to advancing the scientific, pedagogic and trade union aspects of in-service teacher training. Recently KEMETE cooperated with the Ministry of Education in a pilot programme on consumer education for students which was financed by Directorate-General XXIV of the EU Commission and the Ministry of Education. KEMETE may act on its own decision or on instruction by OLME in cooperating with the Ministry of Education or the social partners.

Both OLME and DOE act under authority derived from:

- a) a regular Congress, which convenes every two years;
- b) a Post-congress Assembly, which convenes between congresses; and
- c) the two organizational Assemblies convened each year, in October and February.

DOE and OLME can take action through the following channels:

- 1 through the National Education Council (ESYP), which proposes educational policy measures to the Government;
- 2 through meetings with the political leadership of the Ministry of Education and with ministerial officials from this and other competent ministries on matters concerning economic status and tenure;
- 3 through their elected representatives who serve on the Central Civil Service Councils (PYSPE, PYSDE and KYSPE, KYSDE respectively) and on appointment boards which make senior educational appointments (e.g. school principals, regional education officers, school counsellors);
- 4 through the Parliamentary Committees, before which they present their positions on draft legislation;
- 5 through their participation as social partners in the Monitoring Committee of the Second Community Framework Support Programme (EU);
- 6 through their representatives who serve on committees of the Ministry of Education mandated to study issues such as teacher transfers, teacher appointments, new institutions, etc.;
- 7 by making submissions to brief members of parliament and the political parties and by publications in newspapers, periodicals, etc. to inform teachers, students and also the general public on meetings, public debates, radio and television appearances, etc.;

8 by engaging in and taking the lead in struggles to press the economic and institutional demands of teachers, having recourse here to protests, disclosure of information, resolutions, strikes and other means.

Finally, some of the most important current demands being made by OLME and DOE are:

- 1 an increase in the budget appropriation for education from 6.5% to 15% of government spending;
- 2 promotion and improvement of free public education;
- 3 a doubling of teachers' salaries;
- 4 promotion of in-service teacher training;
- 5 new appointments to overcome the existing shortage of teachers.

4 Regulations governing teachers and trainers

4.1 The education system

The status of teachers in the formal vocational education system is regulated by Framework Law 1566/85. The same law regulates the status of teachers in primary education and secondary general education. Teachers in vocational education are appointed strictly on the basis of a national waiting list called the "hepetiris". To be entered on the list the teacher must hold the necessary qualifications, namely:

- a) a basic, nationally recognized diploma or degree in a discipline defined in article 14 of the above-mentioned law, and
- b) a certificate attesting teaching competence issued by SELETE (Teacher Training College for Technical-Vocational Education).

The appointment is announced and administrated centrally by the Ministry of Education. The next step is an initial placement with a Regional Office of Secondary Education, though in the case of the initial placement the regions of Attica and Salonika are excluded. Following a two-year probationary period the appointee becomes a tenured (permanent) civil servant and has the right to request a new placement elsewhere. Following a period of full-time service, provided there is a vacancy in the region to which the tenured teacher wants to transfer and provided he/she is high on the transfer list (based on a points accumulation system), the request for a new placement is granted. Points are earned for years of service in outlying schools, obtaining advanced degrees (masters, doctorate), for health reasons, etc. Alternatively, the Regional Office Director may post the applicant to a suitable school where a vacancy exists, and this school then becomes the teacher's new permanent placement until he/she chooses to request a further transfer.

All teachers are employed on a full-time basis for the duration of the school year, which is approximately 30 weeks. However, they receive 14 monthly salaries (monthly salary disbursed also during the summer vacation and two extra "gift" salaries - one half-salary for the

Easter vacation, one half-salary for the summer vacation and one full month's salary for the Christmas vacation). The monthly salary of an experienced teacher (with 26 years of service) is about 1,000 ECU, i.e. about 850 ECU after tax. A newly recruited teacher receives a monthly salary of 570 ECU (after tax). All teachers retire at the age of 65 years. The monthly pension of retired teachers amounts to about 80% of their final monthly salary. There is no provision for any performance-related bonus as all performance evaluations were abolished together with the national inspectorate system.

Alongside their teaching duties, teachers are allocated some administrative duties by their teachers' council. For this reason they are required to be present in school from 1 September to 30 June. During the months of July and August they are required to show up for one day, planned in advance by the school director, to help ensure that the school is manned daily during the vacation and administrative matters are attended to.

Teachers are entitled to one sabbatical leave for post-graduate studies (leading to a masters degree or a doctorate) lasting up to a maximum of three years, during which time they remain on a full salary. If selected by the Ministry for in-service training, teachers are likewise granted leave of absence on a full salary, and their teaching load is assigned to a supply teacher registered on the Ministry's waiting list of applicants for supply teaching.

4.2 The training system

Trainers employed in initial vocational training within the framework of the national vocational education and training system are not subject to any regulation. They are appointed on a semester-to-semester basis following an announcement, to be published in at least two local newspapers, of the staff needs of each IEK and the qualifications required for each post. Appointees are selected by a committee composed of the director and deputy-director of the IEK concerned and a representative of OEEK designated by that organization's president. The absence of any regulation makes for maximum flexibility in selecting the appropriate trainer for the training situation concerned. In some instances even university professors have been hired to teach part-time in the post-secondary education and training system; in others, company employees have been selected to carry out various on-the-job training functions. Each appointment is for a period of one semester and is renewable following the selection procedure described above. Despite the obvious advantages of non-regulation here, the absence of training delivery standards does represent a problem in a system with standardized certificates based on national final examinations. To overcome this problem, OEEK is preparing an indirect regulation scheme for trainers employed at IEKs whereby it intends to set up a national register of trainers specifying their qualification level and specialization. One prerequisite for registration will be the successful completion of a fast-track training in pedagogy delivered by OEEK or the pedagogy certificate issued by SELETE. Once the system is

operational, it is expected that IEKs will recruit their trainers from the register and that these register-sourced trainers will in turn be granted better conditions of employment (perhaps longer contracts, higher remuneration, etc.) than unregistered trainers.

4.3 The continuing vocational training system

As mentioned in the previous section, one of the basic criteria to be met for accreditation as a vocational training centre (KEK) is adequately qualified teaching and training personnel. Under the terms of Ministerial Decision (Ministry of Labour) 115372/11-11-94, teaching staff at KEKs are required to hold the following qualifications:

1) Teachers in the sector "administration - information technology":

Teachers of theory:

- a) a degree from a tertiary education institution (university or institute of advanced technology), plus some teaching experience and at least three years' work experience in the field being taught;
- b) knowledge of a foreign language (one of the official languages of the European Union) is desired but not an absolute requirement.

Teachers of practical skills:

- a) the officer in charge of practical training at a KEK must hold a degree from a tertiary education institute and should have had at least 5 years' teaching experience in the field being taught;
- b) teachers of practical skills must have accumulated some teaching experience and, in addition, have had at least 5 years' work experience in the field being taught; a tertiary qualification is desired but not an absolute requirement.

2) Teachers in the sector "technical specializations":

Teachers of theory:

- a) at least a bachelor degree, some teaching experience and, in addition, at least 3 years' work experience in the field being taught;
- b) knowledge of a foreign language (one of the official languages of the European Union) is desired.

Teachers of practical skills:

- a) the officer in charge of practical training for technical specializations at a KEK must hold a degree from a tertiary education institution, have some teaching experience and, in addition, at least 3 years' work experience in the field being taught. If these qualifications are not forthcoming from a recruitment campaign, the KEK may hire someone whose academic qualifications are at a lower level provided that person can offer a suitably enhanced record of work experience;

- b) teachers of practical skills in technical specializations at a KEK must have at least 8 years' work experience in a relevant field; a post-secondary qualification is desired but not an absolute requirement.

5 Training paths leading to qualification as a teacher / trainer

5.1 Teachers in vocational education

Before being registered on the national waiting list (see Chapter 4) for recruitment and placement by the Ministry of Education, teachers in vocational education have to hold the necessary qualifications, namely:

- a) a basic, nationally recognized diploma or degree in a discipline defined in article 14 of Law 1566/85, and
- b) a certificate of pedagogic competence issued by SELETE.

The disciplines defined in the above-mentioned law were presented in Chapter 4.

Three different training paths lead to qualification as a technology teacher.

Persons holding an engineering degree first attended a five-year, highly prestigious engineering course at a university, then, upon graduation (and, for males, fulfilment of their military obligation), attended the six-month pedagogy program at SELETE designed specifically for university graduates.

Persons holding a degree in engineering technology first attended a three-year course in engineering technology at a tertiary, non-university institute of technology, then, upon graduation (and, for males, fulfilment of their military obligation), attended the one-year pedagogy program at SELETE designed specifically for TEI graduates.

Persons holding a teaching diploma in engineering technology attended a four-year comprehensive (integrated) engineering technology and pedagogy course at ASETEM, a special college run by SELETE.

The training paths for other teachers in vocational education follow a two-step scheme, i.e. obtaining a qualification from a university, a TEI or a technical lyceum and then supplementing this qualification with the SELETE (PATES) training in pedagogy (of six-months or one-year duration, respectively).

The training path for teachers of general subjects in vocational education is a one-step procedure, i.e. obtaining a university qualification. Under the former legislation (1977), such teachers

were also required to attend the SELETE six-month course in pedagogy. Strong pressure from their union had this requirement suppressed by the current legislation (1985).

Applicants for the six-month or one-year pedagogy courses at PATES (SELETE) which lead to the second of the above-mentioned necessary qualifications and for which the number of places is limited, are required to compete with other candidates in the same discipline (e.g. engineers, economists, medical doctors, nurses), on the basis of:

- a) the average grade obtained in the basic diploma or degree;
- b) competence, certified or otherwise demonstrated, in a foreign language;
- c) professional experience; and
- d) the results of an interview before a review committee composed of PATES teaching staff.

5.2 Trainers in post-secondary vocational training

For trainers working in the formal training system (IEKs), most of them on a part-time basis, the training paths leading to their posts are unregulated and therefore highly diversified. As was stated in Chapter 4, these trainers range from university professors to highly skilled, non-degree-holding specialists. The only certainty in this respect is that their training backgrounds are in line with the needs of the formal training system.

5.3 Trainers in continuing vocational training

Although the training of trainers in continuing vocational training is not yet regulated, the Ministerial Decision on KEK regulation requires all trainers in continuing vocational training to have attended training courses for trainers (exempted from this requirement are graduates of SELETE and the teaching staff of universities and TEIs). These courses, however, are neither defined nor are they regulated in any way. Nevertheless, several organizations, public and private, are now requiring their trainers to have attended structured "training of trainers" courses, some of which are custom-designed while others, more general, address all trainers in continuing vocational training. The most important of these organizations are the Hellenic Productivity Centre (ELKEPA), the Hellenic Management Association (EEDE), the Manpower Employment Organization (OAED) and the National Bank of Hellas.

6 Initial training programs for teachers and trainers

6.1 Initial training programs for teachers and trainers in vocational education

The only authentic initial training programs for teachers and trainers in the vocational sector are the regulated programs delivered by SELETE (ASETEM and PATES): the integrated technology and pedagogy programs for intending technology teachers (offered in electrical, mechanical, civil and electronic engineering), and the pedagogy programs for all other prospective vocational teachers holding university or TEI degrees or diplomas in other vocational specialisms.

To illustrate the structure of these programs, the curriculum for the mechanical engineering course is presented below. As described in the previous chapter, the curriculum for this and the other technology specialisms is an integrated combination of a technology component and a pedagogy component.

The program lasts four years, each year being divided into two semesters and containing twenty-five weeks of classes. Examination sessions are scheduled additionally.

The pedagogy component of the curriculum includes the following subjects: principles and methods of didactics; job analysis and curriculum development; planning of technical vocational teaching; audiovisual media; laboratory organization and management; pupil evaluation methods; educational research; computers in education; general psychology; psychology of learning; psychology of the adolescent; work psychology; vocational guidance; organization and administration of the education system; organization and administration of schools; philosophy of education; sociology of education; teaching practice; teaching technology in general education.

Mechanical engineering curriculum

Components	1st year (hrs/week)		2nd year (hrs/week)		3rd year (hrs/week)		4th year (hrs/week)	
I Pedagogics		2	6	7	17	12	5	8
II General Subjects	4	4						
III Mathematics	7	6	6					
IV Science	8	5	4					
V Engineering science	4	4	7	12	5	3		3
VI Engineering	9	11	10	13	13	20	30	24
VII Foreign Language	3	3	2	3				

Source: SELETE (1996)

6.2 Initial training programs for trainers in the formal training system

As explained in previous chapters there is no specific initial training program for trainers working at IEKs. Their initial training is the professional training they acquired at a university or TEI, and to date no additional formal training in pedagogy is required. Some efforts have been made by OEEK to experiment with open and distance learning (ODL) schemes to equip these trainers with training skills within a short period of time, though the results have been mixed. It is obvious from this that the trainers at IEKs lack two elements of the qualifications "diamond" described in CEDEFOP's basic study on the "Training of Trainers", namely pedagogic training and the social skills required for motivating trainees.

6.3 Initial training programs for trainers in the formal continuing training system

As explained above and elsewhere, there is no specific initial training program for trainers working at IEKs. Their initial training is the professional training they acquired at a university or TEI, and to date no additional formal training in pedagogy is required.

7 Continuing training for teachers and trainers

7.1 Continuing training for teachers

Providing in-service training for teachers employed within the education system is the responsibility of the Pedagogical Institute, SELETE, OEEK and vocational education counsellors.

The Pedagogical Institute and, more specifically, its In-Service Teacher Training Section, is responsible for approving the content of all pre-service and in-service training programs for teachers in vocational education. The delivery of such programs is the responsibility of SELETE and OEEK. The in-service programs are conducted on an ad-hoc basis and amount to between 15 and 125 hours of instruction. They are not compulsory, and they are run in out-of-school time - time for which the participants are compensated. The topics covered include CAD-CAM, numerical control machining, power electronics, hydraulic automation systems, industrial measurement and automatic process control, computer programming, new technology applications, business software packages, software packages for statistics, accounting software, special aspects of flower production, irrigation systems, and greenhouse construction.

One of the functions of the vocational education counsellors is to plan, organize and deliver fast-track continuing training programs (less than 20 hours) for vocational education teachers in a given region or locality. These fast-track programs include seminars run by professionals from industry or business and visits to workplaces.

7.2 Continuing training for trainers

Continuing training for trainers working in industry and commerce is provided largely by two organizations: the Hellenic Productivity Centre (ELKEPA) and the Hellenic Management Association (EEDA). Both organizations have standardized a pre-service "training of trainers" program which is followed by occasional, ad-hoc continuing training programs. More specifically, ELKEPA offers open-access programs three times annually, each entailing between 40 and 100 hours of instruction for groups of 50 to 70 trainers. Since 1985, 640 people have undergone this type of training. Additionally, over the past decade ELKEPA has delivered customized inter-enterprise training of trainers programs entailing between 80 and 150 hours of instruction for 800 in-company trainers from 25 enterprises. ELKEPA has also run a 240-hour pilot training of trainers program for 40 participants within the framework of the European Union program to improve vocational training structures.

The Hellenic Management Association (EEDE) trained 235 in-company trainers in 1992 and 1993 using an inter-enterprise delivery scheme. The program involved 180 hours of learning, of which 80 were devoted to instruction and 100 to library research and distance learning. The certification was informal in the form of EEDE-issued certificates of attendance. EEDE has also cooperated with the Irish Management Institute in implementing three 72-hour courses for experienced trainers based on a learning-by-experience methodology. Between 1993 and 1995 EEDE ran a large number of custom-designed in-company training of trainers programs with durations ranging from 50 to 120 hours. Drawing on its experience, EEDE has also designed a standardized training of trainers program of 120 hours' duration which has been submitted to the Ministry of Labour for accreditation. The program is in modular format and makes use of a variety of learning methodologies (recitation, group discussions, role playing, case studies, game simulations, etc.) The program has also been submitted for accreditation to the Institute of Personnel and Development in Great Britain.

Finally, the Bank of Hellas (Personnel Training Subdivision), has developed and evaluated an internal training of trainers program which was tested on an experimental basis on 154 bank trainers in ten five-day seminars (Kokkos and Christophilopoulou, 1995).

8 Useful addresses: professional bodies and associations of teachers and/or trainers

Federation of Teachers in Secondary Education (OLME)
2 Kornarou Street, Athens 10563
Tel.: (301) 3230073 or 3236544

Federation of Teachers in Vocational-Technical Education (OLTE)
18 Third September Street, Athens 10432
Tel.: (301) 5238973

Association of Graduate Engineers Teaching in Secondary Education (E.D.ME.D.)
48 Solomou Street, Athens
Tel.: (301) 3802958

Association of ASETEM (SELETE) Graduates in Secondary Education
14121 Iraklion Attikis
Tel.: (301) 2845300

Panhellenic Association of Master Technicians
20 Ippolytou Street, Athens 11255
Tel.: (301) 2281527

SELETE
14121 Iraklion Attikis
Tel.: (301) 2845300

Organization for Vocational Education and Training (OEEK)
1 Ilioupoleos Av., 17236 Imittos
Tel.: (301) 9717511 or (301) 9719986
Fax: (301) 9250136

Pedagogical Institute
Vocational Education Section
392 Messoghion Street, Athens 15341
Tel.: (301) 6003806
Fax: (301) 6003805

Panhellenic Association of Private Institutes of Vocational Training
53 Stournari Street, Athens 10432
Tel.: (301) 5225565
Fax: (301) 5228966

The Hellenic Productivity Centre (ELKEPA)
125 Tatoeou and 140 Lyra Street, Athens (Kifissia) 14564
Tel.: (301) 6205466-97
Fax: (301) 6205442

The Hellenic Management Association (EEDE)
200 Ionias Street, Athens 11144
Tel.: (301) 2112000-9
Fax: (301) 2112021

9 Institutions and courses

9.1 Pre-service and in-service courses for teachers in vocational education

Pre-service courses

Hellas has only one institution for training teachers for vocational education, SELETE, which has already been discussed in previous chapters. SELETE is based in Athens and has branch establishments in Thessaloniki and Patras. Access to courses is not open but subject to a selection procedure. For the four-year integrated courses leading to qualification as a technology teacher, the selection is based on the results of national competitive examinations open to lyceum graduates. The curriculum structure of a typical course (mechanical engineering) was presented in Chapter 6. The selection procedure for the six-month or one-year courses in pedagogy was described in Chapter 5 and the curriculum for these courses was presented as the pedagogy component of the mechanical engineering curriculum in Chapter 6.

In-service courses

In-service courses for teachers in vocational education are planned on an ad-hoc basis and delivered at regional in-service training

centres (PEKs), at SELETE and at other, non-dedicated facilities, including universities. In 1993, for example, 30 teachers of economics underwent a 100-hour training course in the use of spreadsheets in accounting at Athens University of Economics.

9.2 Training of trainers courses for vocational training

Certified training of trainers courses are offered by four institutions: SELETE, the Hellenic Productivity Centre (ELKEPA), the Hellenic Management Association (EEDE) and the Organization for Vocational Education and Training (OEEK).

SELETE courses in pedagogy (evening courses)

a) The six-month course (for university graduates):

Didactics for vocational subjects	3 hrs/week
Counselling and vocational guidance	2 hrs/week
Pupil assessment and educational evaluation	3 hrs/week
Philosophy and sociology of education	4 hrs/week
Teaching methods	3 hrs/week
Principles and planning of vocational education	3 hrs/week
Educational technology	2 hrs/week
Elective subjects	2 hrs/week
Pedagogy and developmental psychology	3 hrs/week

b) The one-year course (for TEI graduates):

Educational technology	3 hrs/week
Vocational psychology	2 hrs/week
Organization and administration of education	4 hrs/week
Computers in education	4 hrs/week
Didactics for vocational subjects	4 hrs/week
Pupil assessment and educational evaluation	3 hrs/week
Teaching methods	4 hrs/week
Psychology of learning	3 hrs/week
Philosophy of education	2 hrs/week
Counselling and vocational guidance	3 hrs/week
Developmental psychology	3 hrs/week
Education research	2 hrs/week
Basic principles of law	2 hrs/week
Planning and management of school laboratories	2 hrs/week

Note: Both the above courses include teaching practice in vocational schools during the morning hours.

The ELKEPA course

This 240-hour course is structured in three parts:

Part I (144 hours): classroom instruction in theory and its practical

applications.

Part II (60 hours): activities relating to the development of a "model training program".

Part III (36 hours): teaching practice, with each participant holding (video-recorded) micro-teaching and teaching sessions followed by self-evaluation, feedback and discussions on improvement coordinated by experienced program instructors.

During the course the participants acquire the knowledge and skills needed for planning, organizing, implementing and evaluating a training program within their organization. The specific aim is that, on completion of the course, participants will be able to:

- assess, understand and help solve in-house organizational problems relevant to training;
- assess and determine in-house training needs and develop training goals and objectives;
- demonstrate their understanding of learning theory, with particular emphasis on adult learning;
- master the behavioural skills needed for interpersonal relations, counselling, etc.;
- plan the content of a training program appropriate to their area of activity;
- select appropriate teaching methodologies or training concept/system;
- use modern teaching and training technology effectively;
- prepare and conduct effective class teaching sessions;
- understand and adopt the new role of in-company trainers today;
- assess learning progress and evaluate training programs;
- develop a "model training program" for in-company training.

The thematic breakdown of the content is as follows:

- organizational problem analysis;
- introduction to learning, with emphasis on adult learning;
- interpersonal relations, counselling relations, teaching relations;
- planning program content;
- methods of instruction and training concepts;
- modern teaching and training technology;
- preparing instruction, the instruction process and teaching practice;
- educational evaluation;
- development of a "model training program".

The evaluation and certification scheme is based on the following rationale:

As learning assessment and program evaluation are essential aspects of this course, use is made of methods and techniques of

internationally applied evaluation practice with special emphasis on dynamic evaluation.

The participants are evaluated on the basis of three clusters of criteria:

- a) performance in tests on all subjects taught,
- b) quality of the "model training program",
- c) performance in teaching practice sessions.

The EEDE course

The Hellenic Management Association (EEDE) runs two "open" training of trainers programs. The first is based on several European programmes customized for the Hellenic context. It can be characterized as follows:

The program entails 120 hours of instruction plus 40 hours of study/preparation time.

Its design is participatory to ensure maximum trainee involvement. It is intended for persons with no or very limited teaching experience but who have a thorough knowledge of their subject (e.g. financial management); at least 3 to 5 years of work experience is desired.

The curriculum covers delivery techniques, an introduction to adult education methodologies, training needs analysis, techniques for applying and optimizing advanced technology in training, analysis and use of specific educational methods in training, and program evaluation techniques.

Because the basic aim of the program is to enhance the participants' skill in training, empowering, coaching and monitoring trainees, almost 50% of the program is devoted to delivery techniques. Nonetheless, the other subjects, for example training needs analysis, are also examined thoroughly.

The second program, based on the same principles but significantly more customized, is run on an ad-hoc basis for individual public or private organizations (large or medium) from any sector of the economy.

Both programs are offered at the Association's facilities in Athens and Thessaloniki.

The OEEK course

The OEEK course is an open, distance training-of-trainers course entailing about 140 hours of study. It leads to a certificate awarded by St. Patrick's College, Dublin, Ireland, which developed the training content and methodology in association with FAS (Ireland). The course consists of the following modules:

- Assessing training and development needs
 - socialization
 - disability
 - systematic training
 - job analysis
- Designing a training program
 - the learning process
 - the communication process
 - training methods
 - visual aids
 - computers in training
 - preparing a training programme
- Delivering training
 - objectives
 - planning a talk
 - the talk
 - the demonstration
 - presentation tips
 - assessment
- Supporting the learner
 - feedback
 - interpersonal behaviour
 - motivation
 - giving supportive help
 - training styles

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11 List of acronyms

ASETEM	Teacher Training College for Vocational Education
EEDE	Hellenic Management Association
ELKEPA	Hellenic Productivity Centre
EPL	Unified polyvalent (integrated) lyceum
ESEEK	National Vocational Education and Training System
IEK	Vocational training institute (post-secondary)
KATEE	Centre of advanced technical-vocational study
KEK	Vocational training centre (continuing training)
OAED	Manpower Employment Organization
OEEK	Organization for Vocational Education and Training
OLME	Hellenic Federation of Teachers in Secondary Education
OLTE	Federation of Teachers in Technical-Vocational Education
PATES	College of Technology and Pedagogy
PEK	Regional in-service training centre

SEK	School laboratory centre
SELETE	Teacher Training College for Technical-Vocational Education
SEP	School-vocational guidance
TEI	Technological Education Institute
TEL	Technical-vocational lyceum
TES	Technical-vocational school

Luxembourg

1. Introduction This chapter describes the situation of the Grand Duchy of Luxembourg in its economic and geographical context within the European Union and the recent changes in legislation which determine the general background for vocational training in Luxembourg.

With around 412,000 inhabitants and an area of 2,586 square kilometers, Luxembourg is the smallest country in the European Union. With 33% of the population being of foreign descent, Luxembourg is a multicultural and multilingual society, and these factors have strong implications for the country's education and training system: the integration of pupils of foreign origin remains one of the main preoccupations of the Luxembourg Ministry of Education and Vocational Training.

Due to its geographical situation, Luxembourg has always been a multilingual country, though this characteristic has been considerably amplified by recent immigration. The three official languages are Luxembourgian, German and French, the latter being the language mainly used in the administration. The multilingualism in Luxembourg also means that language learning accounts for a considerable part of the curriculum, even in vocational training: of the 936 hours of instruction per year in primary education, between 251 and 374 are devoted to language learning (German, French and Luxembourgian). Although the proportion of language teaching gradually declines as pupils proceed through school, it still remains a considerable element even of secondary education and vocational training.

The law of 10 August 1912 introduced compulsory schooling for ten consecutive years until the age of 15.

Luxembourg's per capita gross domestic product is the highest within the European Union (1,252,000 LUF = 32,947 ECU / 1 ECU = 38 LUF). Its economic fabric, however, has changed considerably over the past two decades, away from a predominance of steel production in a move towards the service industries: 64.2% of the gross domestic product is now generated by sales services, with banking and insurance alone contributing 16.9% (gross domestic product in 1995: 513.2 billion LUF - approximately 13.5 billion ECU).

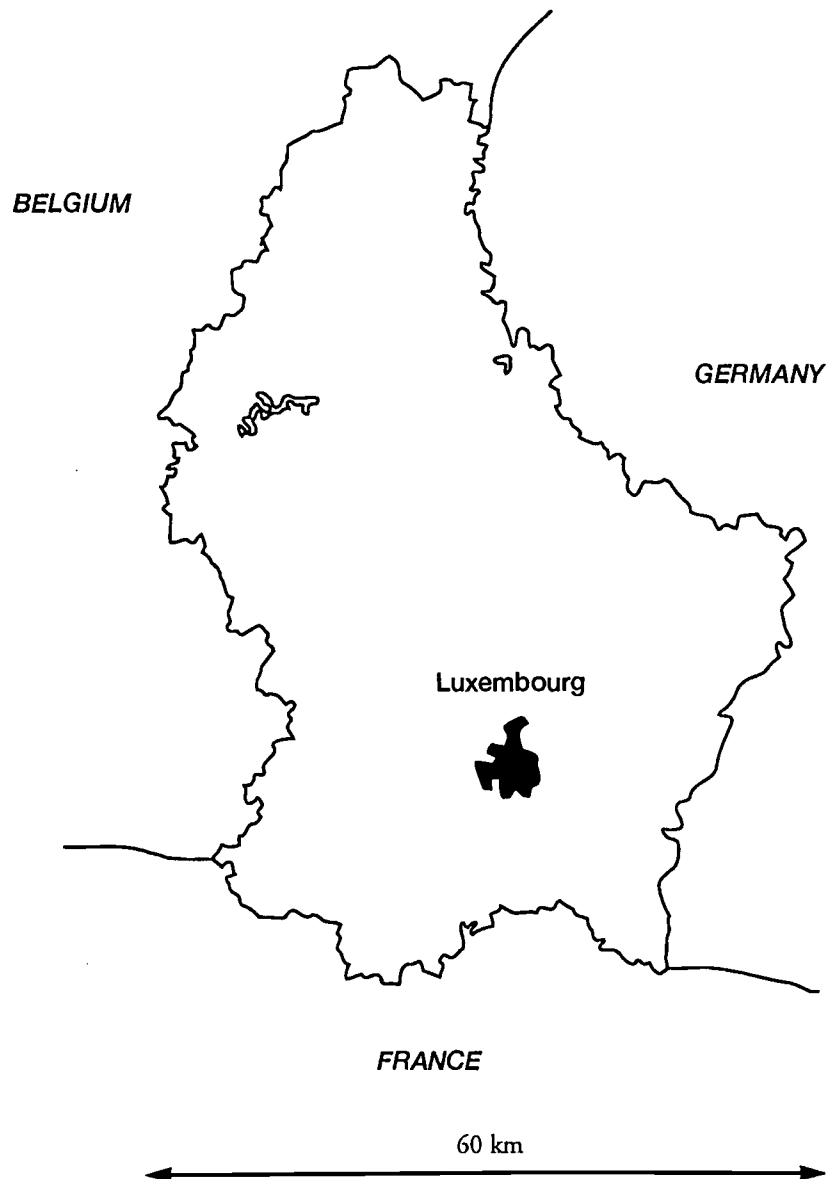
Domestic employment amounts to 213,500 jobs, of which 55,000 are occupied by non-resident trans-border commuters. With an unemployment rate of 3%, the country cannot raise a national workforce which is adequate in terms of both numbers and skill levels.

Following demographic developments, the number of pupils in post-primary education has increased steadily over the last five years: in school year 1994/1995, 8,819 pupils were in classical secondary education and 16,914 in technical secondary education.

Technical secondary education, first introduced by the law of 21 May 1979, was modified by legislation adopted on 4 September 1990. The general objectives which this legislation assigned to technical secondary education are still valid today:

- to guide more young people towards a vocational qualification,
- to ensure better pupil orientation,
- to raise the quality of vocational training.

Map of Luxembourg



These aims can only be fulfilled by means of close cooperation with the business community and the social partners. Opening up schools to the working world is seen as a tool to help technical secondary education achieve its aims.

The following considerations are of paramount importance in curriculum development:

- reducing the coverage of syllabus content,
- compensating additions to the syllabus by reductions elsewhere,
- introducing subject matter which is relevant to current developments in working life,
- emphasizing interdisciplinary methods wherever appropriate.

Replacing teaching methodologies based on lectures and frontal instruction, new learning methodologies which favour learner activity and cooperation have been introduced in order to increase pupils' inclination to learn by appealing to their sense of creativity and innovation and fostering their active participation. Similarly, modern working methods drawn from the out-of-school working world have been introduced, and increasing use is being made of information and communication technologies as a learning tool. Moreover, a new evaluation system is enhancing the value of the advice of the school council.

The aims of the above-mentioned laws have had a considerable impact on reforming the approach to methodology and learning strategy by emphasizing:

- a "pedagogy of success" which stimulates pupils' hunger for knowledge,
- greater student autonomy to give added value to independent learning and promote the assimilation of working and learning methods,
- independent and global thinking, multidimensional approaches and an understanding of complex systems.

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2 Vocational Education and Training

Initial vocational education and training in Luxembourg is an integral part of the national education and training system.

2.1 General Remarks on the Education and Training System in Luxembourg

The Ministry of National Education and Vocational Training (Ministère de l'Éducation Nationale et de la Formation Professionnelle) is responsible for the entire education system, including the elements of vocational training which are delivered in companies. This facilitates the administration and coordination of the education and training system as a whole.

Tuition at a state school, including those catering for apprenticeship training, is free of charge, i.e. the state budget covers all costs resulting from the operation, equipment and administration of the schools. Unlike in primary education however, where all school materials (coursebooks, copybooks, pens, pencils, other tools) are supplied by the local authorities, pupils in secondary education have to provide their own school materials.

Both deserving and needy pupils may qualify for study grants. Where certain elements of a vocational training take place in a company, the trainee receives an allowance paid by the employer for the duration of the training.

In all types of schools, structures and syllabuses are strictly identical for boys and girls. All schools are co-educational.

Children first attend primary education, i.e. nursery schools (age 4 and 5) and primary schools (age 6 to 12). After the sixth year of primary education, the child must choose between two different types of education: classical secondary education (enseignement secondaire), which is a seven-year course delivered in classical secondary schools (lycées classiques) aiming primarily to prepare pupils for higher education, or technical secondary education, which is a six-year or seven-year course delivered in technical secondary schools (lycées techniques) aiming primarily to train pupils for a chosen profession but also to prepare pupils for higher education.

Responsibility for the entire curriculum for classical secondary and technical secondary education (objectives, content, methodology, set books, etc.), rests with the Ministry of National Education and Vocational Training. Its decisions on these matters, however, are based on the suggestions and advice of the National Commissions for Timetables and Curricula (Commissions Nationales des Horaires et Programmes). There are two national commissions for each subject, one for classical and one for technical secondary education. Composed of practising teachers, these commissions meet at regular intervals. Each school is represented by one delegate.

The Ministry of National Education and Vocational Training is also responsible for pedagogic research and innovation. It runs a Service for the Coordination of Pedagogic and Technological Innovation and Research (S.C.R.I.P.T. = Service de Coordination de la Recherche et de l'Innovation Pédagogiques et Technologiques), which coordinates the various programmes on innovation and research in these fields, their implementation, their evaluation and the dissemination of all information concerning them. One of the most important innovation programmes currently being coordinated by S.C.R.I.P.T. is the PROF / PROOF project to redefine the aims and objectives of initial vocational training. S.C.R.I.P.T. is also in charge of coordinating in-service training for teaching and training staff in classical and technical secondary education.

2.2 Curricula and Coursebooks

The National Commissions for Timetables and Curricula are responsible for developing curricula and prescribing the relevant coursebooks. The members of these commissions evaluate the coursebooks available on the market and/or used in corresponding classes abroad. They decide on the usability of these coursebooks in the Luxembourg education system or propose adaptations or translations of their contents. The coursebooks used in Luxembourg schools may therefore either be coursebooks produced abroad, adaptations of coursebooks produced abroad, or coursebooks produced in Luxembourg by the commissions themselves. In the latter case, the Ministry of National Education and Vocational Training serves as editor: in 1995, 24 new coursebooks were published. In August 1996, the Ministry of National Education was publishing 10 coursebooks for pre-primary education, 128 for primary education and 116 for post-primary education. Similarly, the Ministry of Education is involved, either as coproducer or as editor, in the production of educational software and multimedia applications. Although such innovations are relatively few in number at present, a rapid increase is anticipated for the coming years.

Every year, the Ministry of Education and Vocational Training publishes the examination questions set in the previous school year. Volume 1 concerns technical secondary education and contains the questions set for the entrance examination to class 7 of technical secondary education, the school-leaving examination leading to the technician diploma, the school-leaving examination for the technical secondary division of general technical studies, and the school-leaving examination for the administrative division of technical secondary education. Volume 2 contains the questions set in the school-leaving examinations for the vocational track of technical secondary education and the school-leaving examinations for classical secondary education.

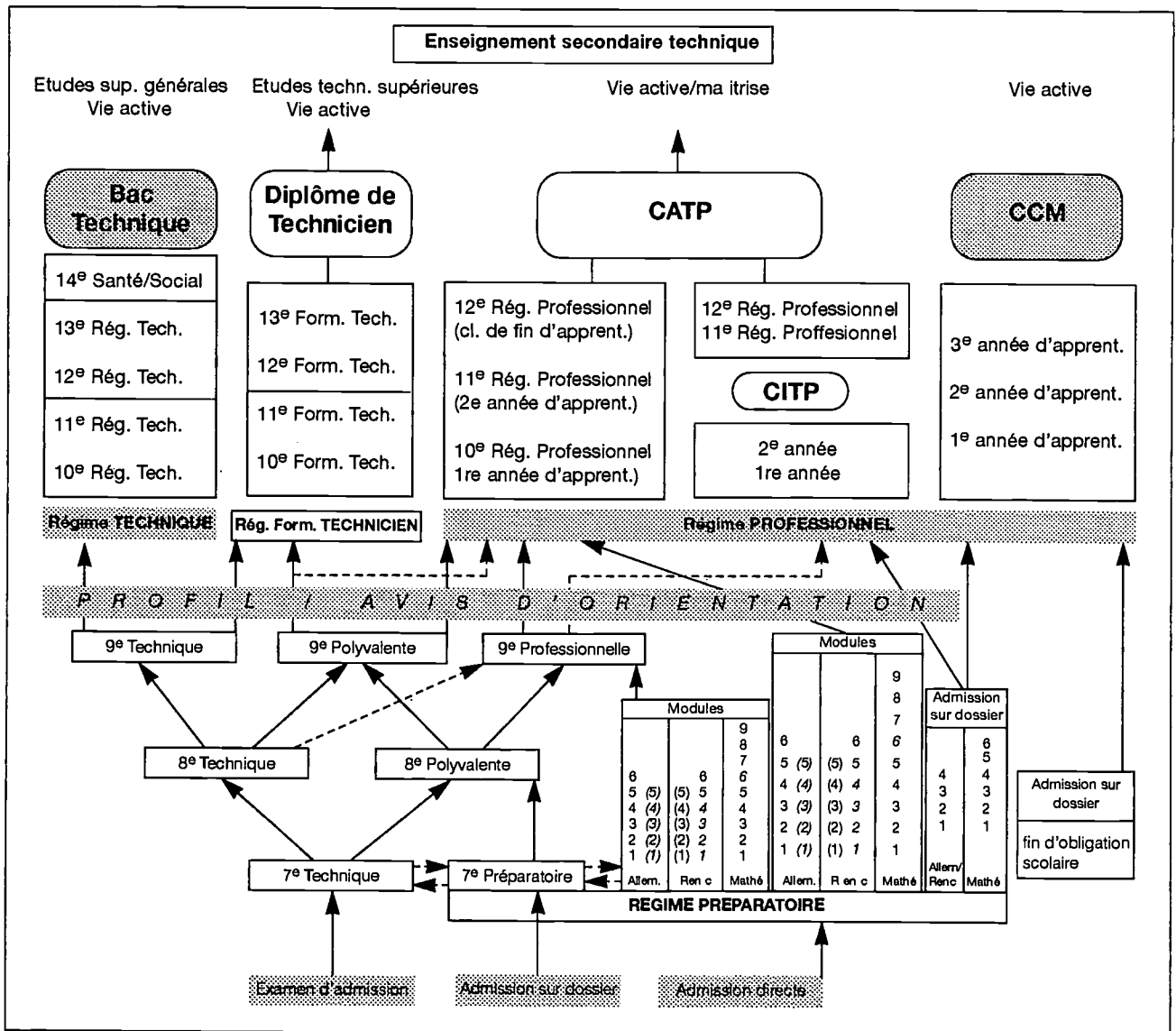
The Ministry of National Education and Vocational Training works in collaboration with the Federation of Bookshops (Fédération des

Libraires) and the Central Service for Printing and Publications (Service Central des Imprimés et des Fournitures de l'Etat) in the publication, dissemination and marketing of the coursebooks.

2.3 Initial Vocational Education and Training

Technical Secondary Education

A large proportion of initial vocational education and training in Luxembourg takes place in technical secondary schools (lycées d'enseignement secondaire technique). Diagram 1 below gives a general overview of the different tracks available within technical secondary education.



The aim of technical secondary education, a segment instituted by legislation adopted on 21 May 1979 and 4 September 1990, is to educate and train pupils for a chosen profession; technical secondary schools do, however, also prepare pupils for higher education.

The courses extend over a period of six or seven years. Technical secondary education is offered by fifteen public-sector schools and seven private institutions, of which some offer specialised curricula (commerce and office management, agriculture, hotel industry and tourism, paramedical studies).

Technical secondary education comprises three cycles:

- the lower cycle (classes 7, 8 and 9);
- the intermediate cycle (classes 10 and 11, and also - depending on the track chosen - class 12);
- the upper cycle (classes 12 and 13 - depending on the track chosen).

The lower cycle Until recently, pupils who passed an admission examination proceeded to the lower cycle and those who failed were admitted to a preparatory class. From school year 1996/1997 on, this admission examination will be replaced by a new orientation procedure whereby pupils will be guided towards classical secondary education, technical secondary education or a preparatory class on the basis of their achievement record during the final year of primary education, their parents' wishes, and the advice of a "pupil orientation team" composed of teachers from all sectors of education.

The aim of the lower cycle is to improve the pupils' general education and guide them towards the type of vocational education and training which corresponds best with their abilities and aspirations. Apart from general courses (languages, mathematics, human and natural sciences, etc.), the lower cycle offers various optional courses, initiation programmes and so-called "pre-vocational classes" (classes préprofessionnelles), which take up an increasing part of the curriculum as pupils proceed through the cycle. Their aim is to give pupils a general overview of the various occupations open to them.

The intermediate and upper cycles On successful completion of class 9, pupils proceed to the intermediate cycle of technical education, the aim of which is to offer them a vocational education which leads to the "Certificate of Technical and Vocational Ability" (C.A.T.P. = Certificat d'aptitude technique et professionnelle). For pupils who attend classes with a stronger theory component, the intermediate cycle also offers access to the upper cycle.

Pupils can choose between three different tracks:

- the vocational track (régime professionnel),
- the track leading to the general technician qualification (régime de la formation de technicien),
- the technical track (régime technique).

The vocational track is the most direct and simple route to a vocational qualification, the "Certificate of Technical and Vocational

Ability" (C.A.T.P.). Pupils can choose from the following courses: agriculture, handicrafts, commerce, hotel industry and tourism, industry, domestic science, paramedical studies.

- The vocational track** The structure of the training depends on the chosen field of study:
- the dual system structure (régime concomitant): practical training in a company for three years, accompanied by 8 hours of theory courses per week at a technical secondary school;
 - the mixed system structure (régime mixte): full-time attendance at a vocational course in a technical secondary school for two or three years followed by practical training in a company.

Also worthy of mention here is the so-called "two-stage system" (apprentissage à deux degrés): pupils who can cope with the practical skills necessary for the chosen vocational track but experience difficulty in assimilating the more theoretical elements of the course are allowed to sign a training contract with an employer and attend the school-based technical theory courses in accordance with their individual needs and learning pace.

The aim of this track is to produce highly skilled workers who, in their future careers, will be able to participate in the planning and implementation of far-reaching technical projects requiring a sense of personal initiative and responsibility. The training is therefore highly specialized.

- The track leading to the general technician qualification** The intermediate cycle of this track comprises classes 10 and 11, the upper cycle classes 12 and 13. For these two cycles pupils can choose from the following courses: administration and commerce, agriculture, fine arts, biology, chemistry, electrical engineering, civil engineering, hotel industry and tourism, mechanical engineering.

On completion of class 13, pupils are awarded the "Technician Diploma" (diplôme de technicien), which allows direct access to a professional career or to higher education in the field studied either in Luxembourg or abroad.

The aim here is to produce administrative and technical executives who can take on jobs requiring a relatively high degree of responsibility. Pupils undergo not only practical workshop training but also an extensive programme of general and theoretical courses.

- The technical track** The intermediate cycle of the technical track comprises classes 10 and 11, the upper cycle classes 12 and 13. The two cycles offer the following course options: administration and commerce, paramedical and social studies, general technology.

- Preparatory classes for technical secondary education** Since the reform of complementary education which took effect in school year 1994/1995, complementary classes have been integrated into technical secondary education under the name "preparatory

classes" (classes préparatoires). These classes (7, 8 and 9) are for pupils who have failed the entrance examinations for classical secondary and technical secondary education. The curriculum is designed to develop practical skills rather than abstract knowledge. Success in these classes allows pupils access to the vocational track of technical secondary education.

The pupil population at technical secondary schools

In school year 1994/1995, 16,914 pupils were undergoing technical secondary education.

males:	53.5%
females:	46.5%
public schools:	87.1%
private schools:	12.9%

Pupil enrolment figures for the various cycles and tracks of technical secondary education (both public and private) were as follows:

Lower cycle		9,078 (of whom 1,962 in preparatory classes)
Intermediate and upper cycles	vocational track	1,312
	general technician track	1,637
	technical track	2,668
	dual system	2,219
		7,836
Total:		16,914

These figures do not include learners attending technical secondary education in an evening course format (adult education), who total an average of 150 per school year.

Higher Vocational Education

At the higher education level, the initial vocational provision is organized on the basis of the following institutions.

The Higher Vocational Education Certificate

The Higher Vocational Education Certificate (B.T.S. = brevet de technicien supérieur) was instituted by the law of 4 September 1990 on the reform of technical secondary education. It is obtained on completion of a highly specialized two-year course of vocational education. The corresponding courses are offered by only some technical secondary schools. At present, pupils can choose from the following programmes:

- accountancy and management,
- marketing and international commerce,
- secretarial skills and office automation,
- cartoon animation.

The Higher Institute of Technology

The Higher Institute of Technology (I.S.T. = Institut Supérieur de Technologie), established by the law of 21 May 1979, offers courses

in higher technical education and trains pupils for posts as technical managers and designers in manufacturing, applied research and the service industries.

The Institute runs departments in the following disciplines: civil engineering, mechanical engineering, electrical engineering and applied computer engineering. The courses extend over three years and lead to the "Diploma of the Higher Institute of Technology" (diplôme de l'Institut Supérieur de Technologie).

General culture, languages, mathematics, science and technology all figure on the curriculum, and the theory study is complemented by an extensive programme of practical workshops and study projects.

The Short Cycle of Advanced Studies in Management

The Short Cycle of Advanced Studies in Management (cycle court d'études supérieures en gestion) is organized by the law department of the Luxembourg University Centre (Centre Universitaire de Luxembourg). The course is a two-year, full-time course offering two programmes:

- computing and management,
- general management with the sub-sections commerce, banking and management, and control.

The courses are designed to give pupils direct access to intermediate-level professional careers, mainly in the areas of banking, insurance, trust companies, small and medium commerce and industry.

Education science and social studies

The Institute of Advanced Education Science Studies and Research (I.S.E.R.P. = Institut Supérieur d'Etudes et de Recherches Pédagogiques) is responsible for training teachers for nursery and primary education. The courses extend over a period of three years.

The Institute of Education and Social Studies (I.E.E.S. = Institut d'Etudes Educatives et Sociales) trains educators mainly for children with special needs.

The Institute for Administrative Training

The Institute for Administrative Training (I.F.A. = Institut de Formation Administrative) trains future civil servants for posts as forwarding agents (expéditionnaire) and administrative editors (rédacteur).

2.4 Innovation and Reform Projects

The reforms initiated by the law of 4 September 1990 brought about substantial changes in the aims and content of technical secondary education. The PROF project was therefore established to accomplish three general objectives:

The PROF / PROOF project

- to develop a methodology whereby it is possible simultaneously to carry out a systematic needs analysis in order to define, in cooperation with experts from the private sector, the objectives of technical secondary education (key skills), to create a flexible

system of new curricula, and to ensure continuous curriculum evaluation;

- to develop guidelines for new teaching methods appropriate to the changing needs in vocational education and training resulting from on-going developments in working life;
- to establish a proficiency unit capable of applying to technical secondary education the methodology developed for other types of education and training, particularly continuing education and training.

A direct follow-up to the PROF project, the PROOF project is concerned with ensuring a system of continuous evaluation of technical secondary education.

Promoting key skills Discussions on key skills and transversal competences have been particularly intensive over the past twenty years. The need to promote these abilities is seen as resulting from the following factors of socioeconomic change:

- the rapid pace of technological innovation, particularly in microelectronics and communication technologies, which has resulted in skill and knowledge obsolescence in many specialized fields; policy-makers are now fully conscious of the challenge which technological progress represents for the training of apprentices, technicians and engineers;
- changes in production procedures and in the management of human resources, particularly in large firms, where horizontal structures are replacing vertical structures.

As a direct consequence of these discussions on key skills and transversal competences, the Ministry of National Education and Vocational Training, in collaboration with ARBED (Acieries Réunies de Burbach Eich Dudelange), has implemented a pilot project to promote the targeted and systematic development of such abilities in technical secondary education.

Aims The idea of promoting the development of key competences is certainly not a new one and has always been the concern of most teaching and training personnel. But the efforts made in this respect have not always been pursued conscientiously and systematically, nor have they always been on target.

Various private-sector companies, for example Audi, Ford, Hoesch, VW, and AEG, have developed a multitude of methods to promote the development of key skills, most of which have been based on guidelines and concepts pursuing a common objective: the application of a specific methodology which integrates fundamental work procedures within the framework of practical training during apprenticeship.

Drawing on these findings, the pilot project has been given the following main objectives:

- to identify a flexible concept which is appropriate both to the specific national context and, more particularly, to everyday teaching and training practice in technical secondary education;
- to train a team of teachers who are motivated by and dedicated to a project aiming to replace, at least partially, conventional pedagogic methods.

Training of teachers and trainers

The training of teachers and trainers within the context of promoting key skills is based on a concept called "Self" which emerged as a direct result of the following two projects:

- The national pilot project "Self", which was jointly implemented by ARBED, Esch-sur-Alzette technical secondary school, and the Ministry of National Education and Vocational Training. This partnership contributed considerably to harmonizing the objectives of schools and the private sector with regard to key skills.
- A transnational project entitled "Petra grandes entreprises", which investigated transversal competences and key skills from various aspects, particularly from the perspective of training projects carried out in Germany and in French-speaking countries. The project led to the definition of a common concept of training, the feasibility of which was evaluated at an international conference. The experience gained during the project and the transfer of know-how between all the partners had a significant impact at national level.

Prospects

Future steps to improve vocational education and training have to be based on a sense of mutual confidence among all the players involved. Regular conferences and discussions are anticipated to initiate a process of self-improvement:

- to adapt vocational training to fit in better with other areas of education,
- to produce an appropriate concept for initial teacher training,
- to encourage the development of efficient didactic tools for teachers and trainers (output from the PROF / PROOF projects),
- to integrate key skills and transversal competences into the curricula in order to strike an appropriate balance between traditional technical skills and modern transversal know-how.

2.5 Continuing Vocational Training

Continuing vocational training, as defined by the law of 4 September 1990, has three aims:

- to adapt an existing ability in response to changes in technology and the needs of the economy,
- to offer fast-track training for the unemployed and persons at risk of losing their jobs,
- to support in-company apprenticeship training.

Continuing vocational training is organized by several bodies:

- the Ministry of National Education and Vocational Training,
- professional chambers,
- local authorities,
- private associations individually recognized as continuing training providers by the Minister.

The modalities for organizing continuing vocational training activities are proposed to the Minister by a coordination commission composed of representatives - as appropriate - of the ministries concerned, the professional chambers and the directors of studies of technical secondary schools.

The continuing vocational training organized by the Ministry of National Education and Vocational Training is implemented at local level by four continuing vocational training centres located in Walferdange (coordinating centre), Esch-sur-Alzette, Helfent and Ettelbrück. Courses and workshops are run by teachers and trainers who have civil servant status and are attached to the centres either full-time (about 70 persons in August 1996) or part-time, and also by external "chargés de cours". The latter are about 200 in number, each giving an average of nine hours of teaching or training per week (estimation).

Concerning the continuing vocational training organized by the professional chambers, the statistics available at present do not provide a clear picture. Each professional chamber organizes its training activities on an individual basis, offering training programmes to its clientele according to demand, i.e. the number of prospective applicants and participant satisfaction levels.

The teachers and trainers implementing continuing training programmes on behalf of the professional chambers are mainly employed on an informal basis for a limited number of teaching / training hours. The participants are usually from small and medium enterprises but also include independent individuals and staff from larger firms. The training programmes tend to focus on general issues (e.g. communication and human resource management), language courses, business administration (accountancy, management, correspondence, taxation), computing, etc. More specific modules geared to training needs in specific occupations or allowing access to specific occupations also figure on the programme.

Of the private associations individually recognized by the Minister as providers of continuing vocational training, the I.F.B.L. (Institut de Formation Bancaire Luxembourg = Institute for the Training of Bankers, Luxembourg) is the most important in this context. Teachers and trainers employed by the I.F.B.L. are required to come from the banking sector and have completed a training of trainers course lasting at least three days. For obvious reasons the I.F.B.L. does not employ full-time teaching staff, relying instead on external staff employed on a part-time basis.

3 Teachers and Trainers in Vocational Education and Training

The staff of technical secondary schools which deliver the major part of all initial vocational education and training in Luxembourg are teachers qualified either for post-primary education or for technical secondary education only. All these teachers have the legal status of civil servants.

3.1 Teachers in Initial Vocational Education and Training

A considerable number of courses, especially in general subjects (languages, mathematics, natural and human sciences), are given by teachers qualified for post-primary education (professeurs-docteurs) (grade E7 - for an explanation of grades, see Chapter 4). These teachers must have successfully completed at least four years of university study in the subject they teach. Although their training is geared to classical secondary education, they can be posted to a technical secondary school. The required qualifications and the initial teacher training are further described in chapters 5 and 6.

Teachers qualified to work in technical secondary education only can be divided into the following categories:

- the upper career grades in education (grades E5 to E7):
 - * teacher-engineers (professeurs-ingénieurs) and teacher-architects (professeurs-architectes) are in charge of courses with a strong technical or theoretical content;
 - * science teachers in technical secondary education (professeurs de science de l'enseignement secondaire technique). The post of science teacher in technical secondary education was created by the law of 4 September 1990 to cater for courses specific to that segment of education (i.e. courses not figuring on the programmes of classical secondary education, e.g. paramedical studies, certain courses in computer science);
 - * teachers of technical education (professeurs d'enseignement technique);
- the intermediate career grades in education (grades E1 to E4):
 - * masters of special courses (maîtres de cours spéciaux), who are in charge of courses and/or workshops of a more practical nature, particularly in the areas of secretarial skills and office management;
 - * masters of technical education (maîtres d'enseignement technique), who are mainly in charge of courses developing manual skills.

overview of the teaching faculty at each school.

	T	S	P	A	Total	Grand Total
AL	95	13		5	113	153
CLL	14			32	46	54
CUL	15				15	93
ISERP	8			12	20	60
IST*	34				34	50
LCD*	116	15		6	137	163
LCE*	87	5	1	6	99	114
LGE	71	7		5	83	97
LGL	92	16		7	115	132
LHCE	82	5		4	91	110
LMR	108	17		8	133	154
LNW*	90	12	10	15	127	125
LRS	65	16		7	88	97
LT-ECG*	60	1		18	79	96
LTAETT*	44	5		26	75	78
LTAM*	149	16		30	195	233
LTB*	85	8	22	32	147	160
LTC*	145	10	45	58	258	286
LTE*	157	21	38	23	239	237
LTETT*	110	5	12	21	148	149
LTHD*	27	1		8	36	49
LTJB*	44	2	17	16	79	83
LTMA*	65	4	22	25	116	114
LTMERSCH*	18	2	7	6	33	41
LTML*	99	6		16	121	136
LTNB*	56	3	26	15	100	116
Others	1				1	
Total	1,938	190	200	406	2,734	3,183

T = posted teachers (grades E1 - E8)
 S = trainee teachers (grade F1)
 P = preparatory classes (grade B1 - B8)
 A = other grades

The last column on the right indicates the total number of personnel (part-time teachers included) at each school. Schools marked with an asterisk are technical secondary schools or offer courses in technical secondary education.

Depending on the needs of individual schools, the teaching staff in technical secondary education can also include part-time teachers (*chargés de cours*), teacher assistants (*assistants pédagogiques*) and trainee teachers (*stagiaires*). Persons in these categories are public employees (*employés publics*) rather than civil servants.

The recruitment of teachers with civil service status is governed by a needs inventory regularly carried out by the Ministry of National Education and Vocational Training. Should there be more candidates than vacancies for a given specialism, applicants have to take a competitive entrance examination.

A head of studies (*directeur d'établissement*) is responsible for the overall management of the school. He/she holds the most senior post in the hierarchy of teachers and other school personnel. As Luxembourg has no inspectorate for post-primary education, the head of studies is also responsible for supervising the teaching, the teachers and the pupils. What is inspected is adherence to school regulations and discipline, timetables and official programmes, and the use of recommended or prescribed coursebooks and didactic tools. The head of studies may be assisted by one or several deputy head(s) of studies (*directeur adjoint*). Heads of studies and deputy heads are fully qualified teachers in the upper career grades (E5, E6 and E7, for an explanation of grades see Chapter 4), who have at least five years of professional experience. Heads of studies are designated by the Minister of National Education and Vocational Training and appointed by the Grand Duke.

Teachers are generally posted by the Ministry of National Education and Vocational Training to one classical or technical secondary school but may also give courses in another school. At the end of every school year, teachers can apply to be posted to another school of their choice, the criteria for acceptance of such an application being a suitable vacancy in the chosen school, appropriate professional experience (number of years in teaching), and personal considerations (e.g. proximity to the school).

According to statistics for August 1996, a total of 2,734 teachers are currently employed in technical secondary education (see Diagram 2). Of these, 1,938 are fully qualified, i.e. have successfully completed appropriate teacher training (see Chapter 6) and have an employment contract of indefinite length (*contrat de travail à durée indéterminée*). They have civil servant status.

The 190 trainee teachers are persons who have passed the competitive entrance examination for the teaching profession and are currently attending teacher training as described in Chapter 6.

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The teachers in preparatory education are former primary education teachers who have been integrated into the faculties of technical secondary education under the provisions of the law reforming complementary education. Having become teachers in post-primary education, they now enjoy full civil servant status.

The category of 406 part-time teachers (*chargés de cours*), of all specialisms, needs to be further explained. In status terms they are classified as part-time teachers for a limited period of time, i.e. they are not civil servants and their employment contracts are renewable every year. This is an exception to the law on employment generally valid in Luxembourg which stipulates that a contract for a limited period of employment can only be renewed twice.

Part-time teachers with public employee status are teachers who have not yet completed their teacher training in their specialism but earn the same gross salary as their fully qualified colleagues. Differences in net salary, however, do result from different social security contributions and from the fact that these teachers do not benefit from the augmentation coefficients used to determine the weekly workload of fully qualified teachers. No reliable statistics are currently available on the distribution of this category of teacher by subject taught as these teachers may be assigned to courses not only in their own subject but also, depending on needs, in other subjects. There are plans to award a different status to these teachers, though no details have yet been published.

Teacher unions Teachers' interests are represented by their professional unions, a list of which can be found in Chapter 8. Many teachers are also active within non-profit associations (*associations sans but lucratif*) which pursue educational aims. The professional impact of the unions is very limited.

3.2 Teachers and Trainers in Continuing Vocational Education and Training As Luxembourg does not have a general framework law governing continuing vocational education and training, it is not surprising that there are no clear regulations concerning the training of teaching and training personnel for that sector.

Generally and in principle, the regulations and guidelines governing teachers and trainers in initial vocational education and training also apply to teachers and trainers in the continuing education and training sector, at least as far as public institutional providers are concerned. This principle is confirmed by articles 8 and 9 of the law of 19 July 1991 instituting a Service for Adult Education which states: "The teaching staff in charge of courses organized by the Service for Adult Education are subject to the same conditions of recruitment and employment as those valid for the sector of education in which he/she teaches". As far as other training providers are concerned, this obligation does not obtain and different situations can prevail.

Private institutional providers of continuing training have their own, in most cases very informal, recruitment and employment conditions for their teaching and training staff. The staff employed by the professional chambers are very often practising teachers with posts in classical or technical secondary schools.

All institutions claim that, when recruiting teachers and trainers, they make a careful and well-informed choice based on personal references, subject competence, and teaching and communication skills.

4 Regulations Governing Teachers and Trainers

As seen in Chapter 3, there are different categories of teachers and trainers operating at different levels in vocational education and training. Depending on the level of the qualification they hold, they are classified in different salary groups.

Basically, the law on the salaries of civil servants (law of 21 December 1973) attributes each category to a specific salary level as specified in the table below. It should be noted that teachers and trainers attain seniority based on their professional experience (levels 15-20).

**an overview of
teachers' and trainers'
gross monthly income.**

Grade	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
E8	440	455	470	490	510	530	550	570	590	610	625									
E7ter	335	350	365	385	405	405	440	455	470	485	500	515	530	545	560	575	591			
E7bis	315	330	345	365	385	405	420	435	450	465	480	495	510	525	540	555	571			
E7	290	305	320	340	360	380	395	410	425	440	455	470	485	500	515	530	546			
E6ter	311	323	335	350	365	385	400	415	430	445	460	475	490	505	520	535	549			
E6bis	291	303	315	330	345	365	380	395	410	425	440	455	470	485	500	515	529			
E6	266	278	290	305	320	340	355	370	385	400	415	430	445	460	475	490	504			
E5ter	299	311	323	338	358	373	388	403	418	433	448	463	478	498	518	525				
E5bis	279	291	303	318	338	353	368	383	398	413	428	443	458	478	498	505				
E5	254	266	278	293	313	328	343	358	373	388	403	418	433	453	473	480				
E4	214	226	238	250	262	277	292	307	322	337	352	367	382	397	409	421	441	453	465	475
E3ter	214	226	238	250	262	274	286	298	310	322	334	349	364	379	394	409	424	439	450	
E3bis	198	209	221	233	245	260	275	287	299	311	323	335	347	359	371	383	398	413		
E3	185	196	208	220	232	247	262	274	286	298	310	322	334	346	358	370	385	400		
E2	176	185	196	209	222	235	248	261	274	287	300	313	326	339	352					
E1bis	176	185	194	205	216	227	238	249	260	271	282	294	307	320	333					
E1	163	172	181	192	203	214	225	236	247	258	269	281	294	307	320	333	339			

The index points shown in the above table are multiplied by a coefficient which varies according to a progressive scale (in August 1996 the value of each index point was 421.5 LUF = approximately 11 ECU).

Additionally, civil servants receive a family allowance which is equivalent to 8.1% of the salary but cannot be fewer than 25 points or greater than 29 points. The gross monthly salary received is subject to compulsory deductions for pension and medical insurance and taxation.

Grades E1 to E4 are the intermediate career grades, grades E5 to E7 the upper career grades. The grades E7ter and E8 denote management positions such as heads and deputy heads.

Salaries increase through a system of "biennial progression": roughly speaking, each teacher moves up one grade every second year until they reach the highest shown in the table above.

It should be noted that this classification by grades also applies to part-time teachers who do not have civil servant status.

On request, civil servants can teach either full-time or part-time. Requests for part-time teaching service are subject to approval by the government (gouvernement en conseil) and admitted only on certain conditions. Most applications for part-time service are from female teachers with young children. Except in such cases, the State does not, in principle, approve part-time work for its civil servants or public employees.

Teachers can retire between the ages of 60 and 65, at the age of 60 only if they have completed 40 years of service and at the age of 65 at the latest. The monthly retirement pension is equivalent to 5/6 of the final salary.

5 Training Paths Leading to Qualification as a Teacher / Trainer

Initial vocational education and training is delivered mainly in technical secondary schools. Being part of the post-primary education sector, these schools employ both fully qualified teachers for secondary education and teachers who are qualified to teach only in technical secondary schools.

To become a fully-qualified teacher in post-primary education, a full course of at least four years of university education is required in the subject matter(s) in which the teacher intends to specialize. As the Luxembourg University Centre (Centre Universitaire de Luxembourg) only offers the first year of university studies in most

disciplines, students are expected to continue their studies at a university abroad. In the choice of a foreign university, the three neighbouring countries - Belgium, France and Germany - are generally preferred, though some students continue their studies in the United Kingdom, Austria, Switzerland and, to a lesser extent, in other countries. Although the choice of foreign university is generally unrestricted, students intending to become language teachers in post-primary education are expected to continue their studies in a country where the language to be studied is the native tongue. On completion of the course of study, the diploma/certificate obtained has to be submitted to a special recognition committee (comité d'homologation des diplômes).

It is recalled here that the recruitment of teachers for civil service posts is governed by a needs inventory carried out regularly by the Ministry of National Education and Vocational Training.

The teachers qualified to teach only in technical secondary education are classified as teacher-engineers, teacher-architects, science teachers in technical secondary education, teachers of technical education, masters of special courses and masters of technical education. The paths leading to these professional classifications are the following:

- Teacher-engineers and teacher-architects are required to have obtained a registered diploma in engineering or architecture as prescribed by the law of 17 June 1963.
- Science teachers in technical secondary education are required to have obtained a final diploma awarded on completion of at least four years of higher education study in science.
- Teachers in technical secondary education are required to have obtained the diploma awarded on completion of a full cycle of classical secondary or technical secondary education in Luxembourg or abroad, to have successfully concluded at least six semesters of higher education, to have acquired at least three years of professional work experience and to have passed a qualifying examination.
- Masters of special courses are required to have obtained either a diploma concluding a full cycle of classical secondary or technical secondary education in Luxembourg or abroad, or the technician diploma; in addition, they must have successfully concluded two years of study at a specialized higher education institution, have gained at least three years of professional work experience and passed a qualifying examination.
- Masters of technical secondary education are required to have obtained a master's certificate (brevet de maîtrise) in their craft, to have gained at least three years of professional work experience and to have passed a qualifying examination.

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6 Initial Training Programmes for Teachers and Trainers

6.1 Initial Teacher Training for Post-Primary Education

The initial training programme for teachers in post-primary education is organized by the Teacher Training Department (Département de Formation Pédagogique) of the Luxembourg University Centre and takes the form of a three-year probationary programme (stage pédagogique) extending over seven school terms.

After admission by competitive entrance examination (concours d'admission au stage pédagogique), trainee teachers are assigned a limited number of classes in a classical or technical secondary school where they work under the supervision of a "training advisor" (patron de stage). During the first year of the probationary period, they also attend courses at the Teacher Training Department of the Luxembourg University Centre (approximately 20 hours per week). These courses and workshop sessions cover a wide range of subjects including general pedagogy, psychology, sociology, school legislation, general teaching methodology, etc. During the course of their probationary period, trainee teachers are also expected to prepare a scientific dissertation and a pedagogy report, to teach a minimum of 12 model lessons in the presence of their training advisor, and to observe other teachers during their classroom work. The certificate of full qualification as a teacher in post-primary education is awarded on the basis of an examination which tests the candidate's knowledge of general methodology (held at the end of the first year), assessment of the scientific dissertation and the pedagogy report (submitted at the end of the second year and beginning of the third year, respectively), and the quality of a series of lessons (two model lessons and two inspection lessons) given in front of a class and in the presence of an examining panel (at the end of the third year). Successful candidates are then nominated for service by the Minister of National Education and Vocational Training and posted to a school in either the classical or the technical secondary education sector. The probationary period can be extended to a maximum of five years; candidates who have not fulfilled all the requirements within that period are excluded from teaching in state schools.

The initial teacher training programmes for post-primary education are currently being analysed with a view to a reform which should be operational by school year 1998/1999.

6.2 Initial Teacher Training for Secondary Technical Education Only

The structure of the initial training for teachers qualified to work only in the technical education sector is governed by the Grand-Ducal Decree of 26 January 1993 (règlement grand-ducal). This decree stipulates that initial training is to take the form of teaching practice involving a general pedagogy training component (two school terms) and a practical training component (five school terms).

The decree also instituted a national council for the initial training of teachers in technical secondary education (conseil national de

stage de l'enseignement secondaire technique), the mission of which is to organize the period of teaching practice. The members of this council, all fully qualified teachers, are designated by ministerial decree.

Training in general pedagogy

The training in general pedagogy covers pedagogic, psychological and sociological issues of education, general teaching methodology and school legislation plus specialized courses on the didactics of the subject which the trainee teacher intends to teach and also practical workshop training. This training amounts to 10 hours of study per week during the first year. The courses are given by members of the national council for the initial training of teachers in technical secondary education or by special tutors, from Luxembourg or elsewhere, who are designated by the Ministry of National Education and Vocational Training. The courses lead to a final examination comprising one or several theory and practice components.

Trainee teachers aiming for the upper career grades of the profession are expected to prepare and submit a scientific research project presented in the form of a dissertation. Trainee teachers aiming for the intermediate career grades are required to submit a report on a work project of practical pedagogic interest or on a series of lessons. All these submissions are assessed by a specially constituted board composed of three members designated by the Ministry of National Education and Vocational Training.

Practical training

During their practical training the trainee teachers are employed in a technical secondary school where they are assigned a limited number of classes. The practical training is organized by the head of studies of the school concerned in collaboration with pedagogy advisors designated by the Ministry of National Education and Vocational Training who are competent for the areas of general, technical or practical education and training in which the trainee teacher is specializing. Trainee teachers work under the supervision of a training advisor (patron de stage) designated by the head of studies. The practical training involves, inter alia, teaching a series of model lessons, inspection by the training advisor and assessment of the pupils' work.

The practical training is followed by an examination involving two inspections, two model lessons in the subject in which the trainee teacher specializes, and assessment of three series of pupils' work or tests.

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The examination findings are assessed by special committees designated by the Ministry of National Education and Vocational Training. These committees award each trainee teacher a grade based on the results obtained in the examinations concluding the general pedagogy and practical training and on the assessment of the research project or practical project report submitted. The grades awarded are taken into account when teachers are posted to a particular school for service.

7 In-Service Training of Teachers and Trainers

7.1 In-Service Training for Classical and Technical Secondary Education

In the absence of any framework legislation governing continuing training for teachers in classical and technical secondary education, the body responsible for coordinating all in-service training activities for teachers is the Service for the Coordination of Pedagogic and Technological Innovation and Research (S.C.R.I.P.T.) of the Ministry of National Education and Vocational Training.

At the end of each school year, S.C.R.I.P.T. publishes a list of general objectives for in-service training activities for the coming school year. The list is drawn up after close consultation with heads of studies, the Commissions for Timetables and Curricula, the coordinators of innovation and reform projects, teachers and their associations. It is approved by the Minister of National Education and Vocational Training. The main concern is to ensure that in-service training activities are specifically geared to the needs expressed by teachers.

Various in-service training programmes are organized in line with the following general guidelines laid down by ministerial decree:

- In-service training programmes must:
 - * help teachers develop their scientific, technical and pedagogic expertise;
 - * provide access to all available information on new educational concepts, methods and resources;
 - * assist teachers in developing their own pedagogic projects;
 - * give teachers the opportunity to participate in educational research and innovation and contribute to the development and evaluation of new concepts and methods;
 - * provide a platform where know-how and expertise in pedagogy can be discussed and shared;
 - * provide access to training activities organized on an international basis (Euro-region Sarre-Lor-Lux, European Community, Council of Europe).
- In-service training events must be flexibly organized and cover a diverse spectrum; they must not constitute an unduly great additional workload for teachers and must not unnecessarily disturb normal school operations.
- Participation in in-service training events must always be

voluntary; teachers who participate in any event which is part of the official programme coordinated by S.C.R.I.P.T. must be admitted free of charge.

Furthermore, teachers participating in general in-service training events coordinated by S.C.R.I.P.T. can draw on a "training credit" scheme (crédit-formation) of forty hours per year. Within the limits of this credit, teachers who undergo in-service training outside their normal working hours or who have to catch up on lessons not given due to the training qualify for appropriate financial remuneration.

In-service teacher training activities are organized in a very flexible way, ranging from one or two afternoons over a fixed period to several consecutive days. In the absence of a dedicated training centre for in-service training, the events are generally held in secondary schools or higher education institutions. Recently, some in-service training has been organized in distance learning format (telelearning and teleconferences).

During school year 1995/1996, S.C.R.I.P.T. coordinated a total of 61 in-service training events attended by 1,322 teachers.

7.2 Priorities for the In-Service Training of Teachers in Vocational Education and Training

The Minister for National Education and Vocational Training determines annually the priorities and general objectives for in-service training activities for all teachers in classical and technical secondary education. As far as the priorities for teachers and trainers in vocational education and training are concerned, there is a clear tendency to assist teachers in responding to the challenges posed by the changes taking place in working life. Although these challenges are more or less the same in most countries of the European Union, Luxembourg has acted on the reform of 4 September 1990 by attaching absolute priority to the following objectives:

- redefining learning goals to take account of the economic, social and technological developments taking place in working life and also of the European dimension in training;
- reducing underachievement at school and guiding more young people towards a vocational qualification;
- improving the educational and social integration of pupils of foreign origin;
- reforming teaching and learning methods to promote independent learning, creativity, exploratory learning, problem-solving skills and peer-group work;
- speeding up the integration of information and communication technologies into curricula, both as a field of learning and as learning tools, and at the same time adapting curricula to the requirements of the modern information society.

The efforts to achieve these objectives have had a considerable impact on initial training and, more specifically, on in-service training for teachers and trainers engaged in the vocational education and training sector. Three main tendencies can be

observed in this latter area:

- a reduction in underachievement at school and better integration of pupils of foreign origin;
- an on-going process to adapt the objectives, contents and methodologies of vocational education and training to the constantly changing needs of the labour market;
- a certain tendency to privatize continuing vocational training in order to make it more flexible.

One important step in reducing pupil underachievement was the full integration of complementary classes into technical secondary education under the name "preparatory classes" (see chapter 2). At the same time, the old system of traditional classroom teaching was replaced by independent learning modules, graded by degree of difficulty or complexity, which allow pupils to manage their studies in line with their own learning pace and needs. In-service training events were organized to inform the teachers concerned of the new system and help them develop a pedagogic approach based on individual tutoring and continuous assessment.

The aim of adapting vocational training programmes and methodologies to respond to continuous changes in working life also brought into being the PROF / PROOF project, which is intended to implement the new priorities in vocational education and training and evaluate the results (also see Chapter 2). The in-service training activities organized within the framework of the PROF / PROOF project address the following issues:

- informing teachers and trainers on the new framework curricula (programmes-directeurs) and providing them with the new didactic tools developed within the project (coursebooks, resource dossiers, equipment, software, etc.);
- familiarizing teachers and trainers with new methods of organizing the teaching and learning process which focus on active pupil participation, pupil autonomy, interdisciplinary project work, and practical work in a "simulated office" (bureau modèle);
- sensitizing teachers and trainers to new methods of evaluating pupils' knowledge and skills;
- increasing openness to the out-of-school world by encouraging teachers and trainers to participate in training activities organized in cooperation with the private sector or held within the private sector (stages dans les entreprises).

Information and communication technologies have significantly influenced our society and have had a particularly strong impact on working life. Considerable efforts are therefore still being invested in educating teachers and trainers in the use of these technologies in order to ensure that they are used in vocational training both as a field of learning and as learning tools. With computers already being used extensively as a tool in vocational training (word processors for office automation, computer-aided manufacturing and design, etc.),

attention is now being given to the issues raised by teleworking/telelearning and the pedagogic potential of multimedia tools in vocational education and training.

8 Useful Addresses

- 8.1 General Addresses**
- Ministère de l'éducation nationale
et de la formation professionnelle (MENFP)
29, rue Aldringen
L-2926 Luxembourg Tel.: (+352) 478-1
URL: <http://www.men.lu>
- MENFP
Service de la formation professionnelle
29, rue Aldringen
L-2926 Luxembourg Tel.: (+352) 4785239
Fax: (+352) 474116
- MENFP
Service de la coordination de la recherche
et de l'innovation pédagogiques et technologiques
29, rue Aldringen
L-2926 Luxembourg Tel.: (+352) 4785196
URL: <http://www.men.lu/script/>
- MENFP
Service de la formation des adultes
29, rue Aldringen
L-2926 Luxembourg Tel.: (+352) 4785153
Fax: (+352) 4785155
- Ministère du travail et de l'emploi
26, rue Sainte-Zithe
L-2939 Luxembourg Tel.: (+352) 478-1
Fax: (+352) 478-6325
- Administration de l'emploi
rue Bender
L-2010 Luxembourg Tel.: (+352) 478-1
Fax: (+352) 464519
- 8.2 Professional Chambers: Employers**
- Chambre de commerce
7, rue Alcide de Gaspéri
L-1615 Luxembourg Tel.: (+352) 435853
- Chambre des métiers
B.P. 1604
L-1016 Luxembourg Tel.: (+352) 426767-1

Chambre d'agriculture
B.P. 81
L-8001 Strassen Tel.: (+352) 313876

8.3 Professional Chambers: Employees

Chambre des employés privés
13, rue de Bragançe
L-1255 Luxembourg Tel.: (+352) 444091-1

Chambre de travail
18, rue Auguste Lumière
L-1950 Luxembourg Tel.: (+352) 488616

Chambre des fonctionnaires et employés publics
11, avenue de la Porte Neuve
L-2227 Luxembourg Tel.: (+352) 472224

8.4 Trade Unions

OGBL/SEW Syndicat Education et Sciences
19, rue d'Epernay
L-1490 Luxembourg Tel.: (+352) 496005

LCGB/APESS
11, rue du Commerce
L-1012 Luxembourg Tel.: (+352) 499424-1

8.5 Professional Bodies

Various associations of teachers of the same discipline have joined together to discuss and promote their common interests, including issues relating to initial and continuing training.

9 Institutions and Courses

A complete list of institutions offering initial vocational education and training can be obtained from the Ministry of National Education and Vocational Training.

Chapter 11.1 provides a list of state schools in the classical secondary and technical secondary education sectors.

The following is a list of institutions which are directly concerned with the training of teachers and trainers.

I.S.E.R.P.
route de Diekirch
L-7220 Walferdange Tel.: (+352) 333420-1

I.E.E.S.
75, route de Bettembourg
L-5811 Fentange Tel.: (+352) 369441

Centre Universitaire de Luxembourg
Département de formation pédagogique
162a, avenue de la Faïencerie
L-1511 Luxembourg Tel.: (+352) 46644-260

S.C.R.I.P.T.
Service de formation continue
Ministère de l'éducation
nationale et de la formation professionnelle
L-2926 Luxembourg Tel.: (+352) 478-5196

10 Sources and References

(As these are official documents, the authors have preferred to indicate their original titles in French. An approximate English translation follows in brackets. Apart from the publications cited, the authors consulted various internal and unpublished documents which are not available to the general public.)

- Mémorial A/43 - loi du 4 septembre 1990 portant réforme de l'enseignement secondaire technique et de la formation professionnelle continue (law of 4 September 1990 reforming technical secondary education and continuing vocational training)
- Loi du 2 juillet 1935, portant réglementation des conditions d'obtention du titre et du brevet de maîtrise dans l'exercice des métiers (law of 2 July 1935 regulating the conditions governing the award of the master craftsman certificate)
- Règlement ministériel du 28 janvier 1982 fixant le programme et la procédure des examens de maîtrise (ministerial regulation of 28 January 1982 determining the programme and the procedure for examinations leading to the master qualification)
- Loi du 21 décembre 1973 fixant le traitement des fonctionnaires de l'Etat (law of 21 December 1973 determining the salaries of civil servants)
- Loi du 19 juillet 1991 portant création d'un service de la formation des adultes et donnant statut légal au Centre de Langues Luxembourg (law of 19 July 1991 creating a service for adult education and granting legal status to the Language Centre Luxembourg)
- Courrier de l'éducation nationale (Bulletin of National Education):
 - * L'enseignement secondaire technique 1992/93 (technical secondary education 1992/1993)
 - * Aperçu global et analyse de la promotion des élèves février 1995 (Global overview and analysis of the advancement of pupils, February 1995)

- * Bulletin d'Information: Recherche et Innovations Pédagogiques (Information Newsletter: Pedagogic Research and Innovation, published on average three times a year)
- Loi du 1er décembre 1992 portant création d'un établissement public pour le développement de la formation professionnelle continue (law of 1 December 1992 creating a public institution for the development of continuing vocational training)
- Rapport national sur la la formation professionnelle continue au Grand-Duché de Luxembourg suivant l'Article 11 de la Décision du Conseil du 29 mai 1990 sur le programme d'action FORCE décembre 1993 (national report on continuing vocational training in the Grand Duchy of Luxembourg pursuant to article 11 of the Council Decision of 29 May 1990 on the FORCE action programme, December 1993)
- Loi du 7 octobre 1993 ayant pour objet (law of 7 October 1993 concerning)
 - a. la création d'un service de coordination de la recherche et de l'innovation pédagogiques et technologiques S.C.R.I.P.T. (the creation of a service for the coordination of pedagogic and technological innovation and research)
 - b. la création d'un centre de technologie de l'éducation (the creation of a centre for technology in education)
 - c. l'institution d'une commission d'innovation et de recherche en éducation (the establishment of a commission on innovation and research in education)
- Règlement Grand-Ducal du 26 janvier 1993 déterminant les conditions d'admission au concours de recrutement, la formation scientifique et pédagogique et les conditions de nomination des différentes fonctions enseignantes de l'enseignement secondaire technique (grand-ducal decree of 26 January 1993 concerning eligibility conditions for the competitive recruitment examination, scientific and pedagogic training, and conditions of posting for the various grades of teachers in technical secondary education)
- Les chiffres clés de l'éducation dans l'Union Européenne (Key statistics in education in the European Union) CEEA-CE-CEEA, Bruxelles Luxembourg 1996
- Ministère de l'Education Nationale et de la Formation Professionnelle
Rapport annuel 1995 (mars 1996) (annual report of the Ministry of National Education and Vocational Training, March 1996)
- L'évolution économique, financière et sociale au Luxembourg 1995
Avis du Conseil Economique et Social
(Economic, financial and social evolution in Luxembourg 1995, Opinion of the Economic and Social Council)

- STATEC: Le Luxembourg en chiffres 1996 (Luxembourg in figures 1996)
- Ministère de l'Education Nationale et de la Formation Professionnelle:
Demain l'école (School tomorrow), 1992

11 Acronyms

11.1 Acronyms used in the Report

ARBED	Acieries Réunies de Burbach Eich Dudelange
BTS	Bac Technique Supérieur
CATP	Certificat d'Aptitudes Techniques et Professionnelles
CFPC	Centre de Formation Professionnelle Continue
CUL	Centre Universitaire de Luxembourg
IEES	Institut d'Etudes Educatives et Sociales
IFA	Institut de Formation Administrative
ISERP	Institut Supérieur d'Etudes et de Recherche Pédagogiques
IST	Institut Supérieur de Technologie
MENFP	Ministère de l'Education Nationale et de la Formation Professionnelle
SCRIPT	Service de Coordination de la Recherche et de l'Innovation Pédagogiques et Technologiques
SFP	Service de la Formation Professionnelle

11.2 Acronyms for Classical and Technical Secondary Schools

AL	Athénée de Luxembourg
CLL	Centre de Langues Luxembourg
IST	Institut Supérieur de Technologie
LCD	Lycée Classique Diekirch
LCE	Lycée Classique Echternach
LGE	Lycée de Garçons Esch
LGL	Lycée de Garçons Luxembourg
LHCE	Lycée Hubert Clement Esch
LMR	Lycée Michel Rodange
LRS	Lycée Robert Schuman
LT-ECG	Lycée Technique - Ecole de Commerce et de Gestion
LTAETT	Lycée Technique Agricole Ettelbrück

LTAM	Lycée Technique des Arts et Métiers
LTB	Lycée Technique de Bonnevoie
LTC	Lycée Technique du Centre
LTE	Lycée Technique Esch
LTETT	Lycée Technique Ettelbrück
LTHD	Lycée Technique Hôtelier Diekirch
LTJB	Lycée Technique Joseph Bech
LTMA	Lycée Technique Matthias Adam
LT Mersch	Lycée Technique de Mersch
LTML	Lycée Technique Michel Lucius
LNW	Lycée du Nord Wiltz
LTNB	Lycée Technique Nic Biever

The Netherlands

1. Introduction This section presents some general information on the Netherlands and on the education system within which vocational education is provided.

1.1 The Netherlands The Netherlands is situated in the northwest corner of the European continent, surrounding the combined estuaries of three rivers: the Rhine (Rijn), the Meuse (Maas) and the Scheldt (Schelde). The name 'Holland' is frequently used instead of the Netherlands, but Holland actually refers to the western provinces North and South Holland. The landscape is rather flat and the country has a temperate, rainy climate. Many regions are below sea level, some having been reclaimed as 'polders'.

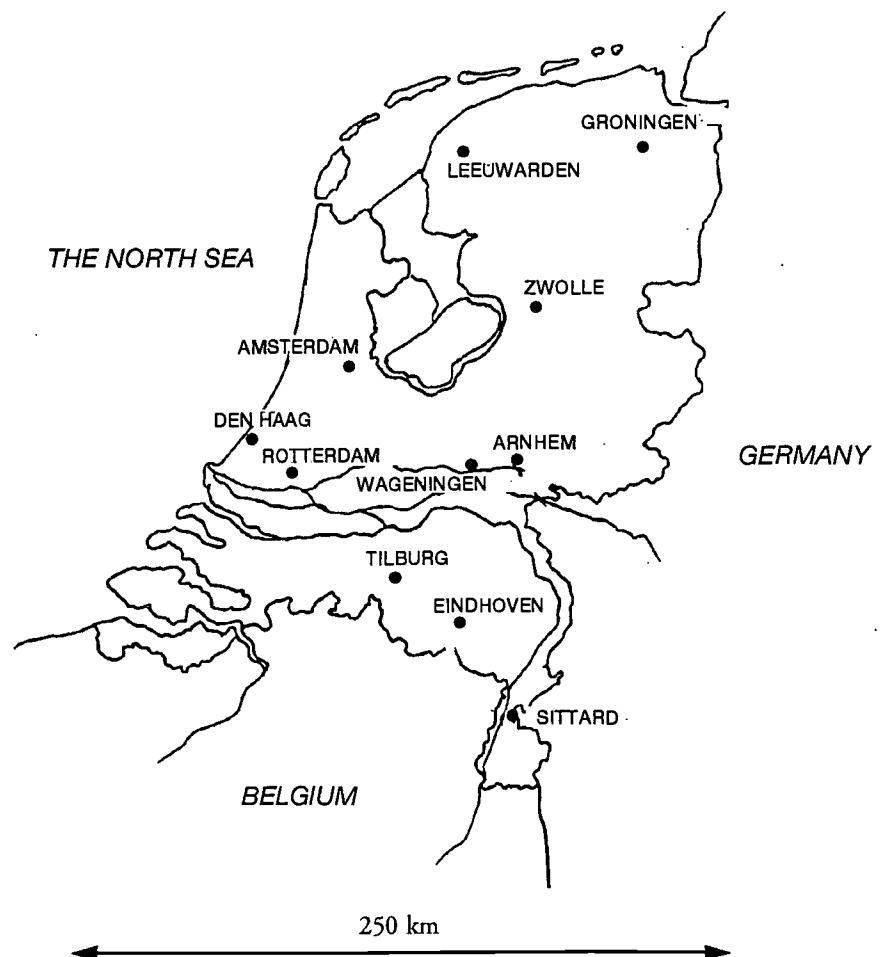


Figure 1: Geographical position of the Netherlands

The country is flanked to the north and the west by the North Sea, to the east by Germany and to the south by Belgium (see Figure 1). Its territory, the mainland and the West Frisian Islands, covers only (175 x 235 km =) 41,500 km².

Since 1648 the Netherlands has been recognized as an independent republic, uniting the Protestant northern and Catholic southern provinces, and since 1815 it has had a monarchy. The present form of government is a constitutional monarchy.

The Netherlands has a population of 15 million. From the administrative viewpoint, the country is divided into 13 provinces. The capital is Amsterdam but the seat of government is 's-Gravenhage (The Hague). Other large cities include Rotterdam, Utrecht and Eindhoven. The official language is Dutch. The monetary unit is the 'gulden' (guilder; 1 ECU = 2.15 NLG, exchange rate October 1996).

About 23% of the working population is employed in industry, 42% in commercial services, 31% in other services and 4% in agriculture and fishing. The agricultural sector is mainly concerned with cattle, flower and vegetable production and, in some regions, potato, wheat and sugar beet farming. Fishing is concentrated on herring, flatfish and eel fishing. The three most important industries are technical equipment (including industrial machinery, cars and consumer goods), foodstuffs and luxury goods, and the chemical industry. The Netherlands has strong banking and international transport sectors.

Sector	%GDP
industry	20
agriculture and fisheries	4
mineral extraction	4
banking and insurance	5
other business services	19
construction and contractors	6
trade, catering and repairs	16
transport, storage and communication	8
government, defence and education	11
other sectors	7

Table 1: Contributions of various sectors to the Dutch economy as a percentage of gross domestic product

(Source: CBS; Nationale Rekeningen 1991)

Although the contribution of the various sectors differs slightly from year to year, Table 1 gives an impression of the relative importance of these sectors.

1.2 Education in the Netherlands

Vocational education is a regular and substantial part of the Dutch education system, a fact which reflects the Dutch perception of culture and society, and the working conditions of teachers and trainers employed in regular vocational schools are officially identical to those of other teachers. This is the upshot of a broader historical process during which national approaches to centralized and decentralized responsibilities took shape.

The following are some general characteristics which have an impact on vocational education.

A major characteristic of Dutch education is the national policy of making no distinction between public and private school status. The Minister of Education, Culture and Science is responsible for regulating the entire regular education sector and for financing all instruction in the corresponding schools. For the agricultural sector in cooperation with the Minister of Agriculture, Nature Management and Fisheries.

Legislating on education matters is subject to an 'obligatory advice' procedure involving the National Education Council, a body which acts on behalf of school boards and is assisted by a number of experts. Regional governments have no regulatory competence in education matters. Local authorities may set up school boards or be represented on such boards, but this practice is no longer usual (less than 30% representation).

Under the provisions of the constitution, 'freedom of education' establishes the right to set up schools, to run schools and to determine their (pedagogic) principles. In the final analysis, this freedom signifies that all schools are funded on an equal basis and are required to meet common standards. Despite the pronounced diversity encountered on the school landscape, these principles have brought about a certain degree of uniformity which allows for the recognition of qualifications and a certain permeability within the education system.

As a rule, schools within the regular education sector are established as autonomous foundations. The school board functions as the 'employer' of the teaching and non-teaching staff and is responsible for the appointment, remuneration and dismissal of staff within the limits of formal contracts drawn up by the Ministry. The Netherlands has a tradition of regulating terms of employment and salary scales at national level on the basis of negotiations between the government and the teachers' unions. A tendency towards decentralization is noticeable here.

Development to the present system

In the past, vocational education and general education were separate sectors. They have recently been integrated into a single structure.

Primary education was instituted at an early date. In 1920, education was made compulsory for a period of six years. Today education is compulsory from 5 to 16 years of age and additionally, for 16 year-olds who are no longer in full-time education, it is compulsory for two days or one day a week for a period of two years.

Secondary education was first regulated in 1863 and took the form of general education. Vocational education developed from various local initiatives taken from 1800 on, but it remained a separate and private sector. It was first regulated by the 1919 Industrial, Technical and Domestic Education Act (*Nijverheidsonderwijswet*), which created a three-tier structure: 'lower vocational education', 'advanced lower vocational education' and 'apprenticeship'. The 1968 Secondary Education Act (*Wet voortgezet onderwijs*) subsequently integrated general education and vocational education into a single structure. Recently (1993) a further step was taken towards stronger integration with the introduction of a 'basic education' (*basisvorming*) for all pupils of compulsory schooling age. The main streams in secondary education (pre-university, general and preparatory vocational education) now follow a curriculum based on a common subject core with a view to promoting equal participation (gender and cultural groups) in all sectors of education.

The structure of education

Initial vocational education holds an important position in the regular education structure (see Figure 2).

In full-time education it has three levels:

- lower secondary education,
- senior secondary education,
- higher education.

Apprenticeship and adult education are encountered within the system as part-time courses in post-16 education.

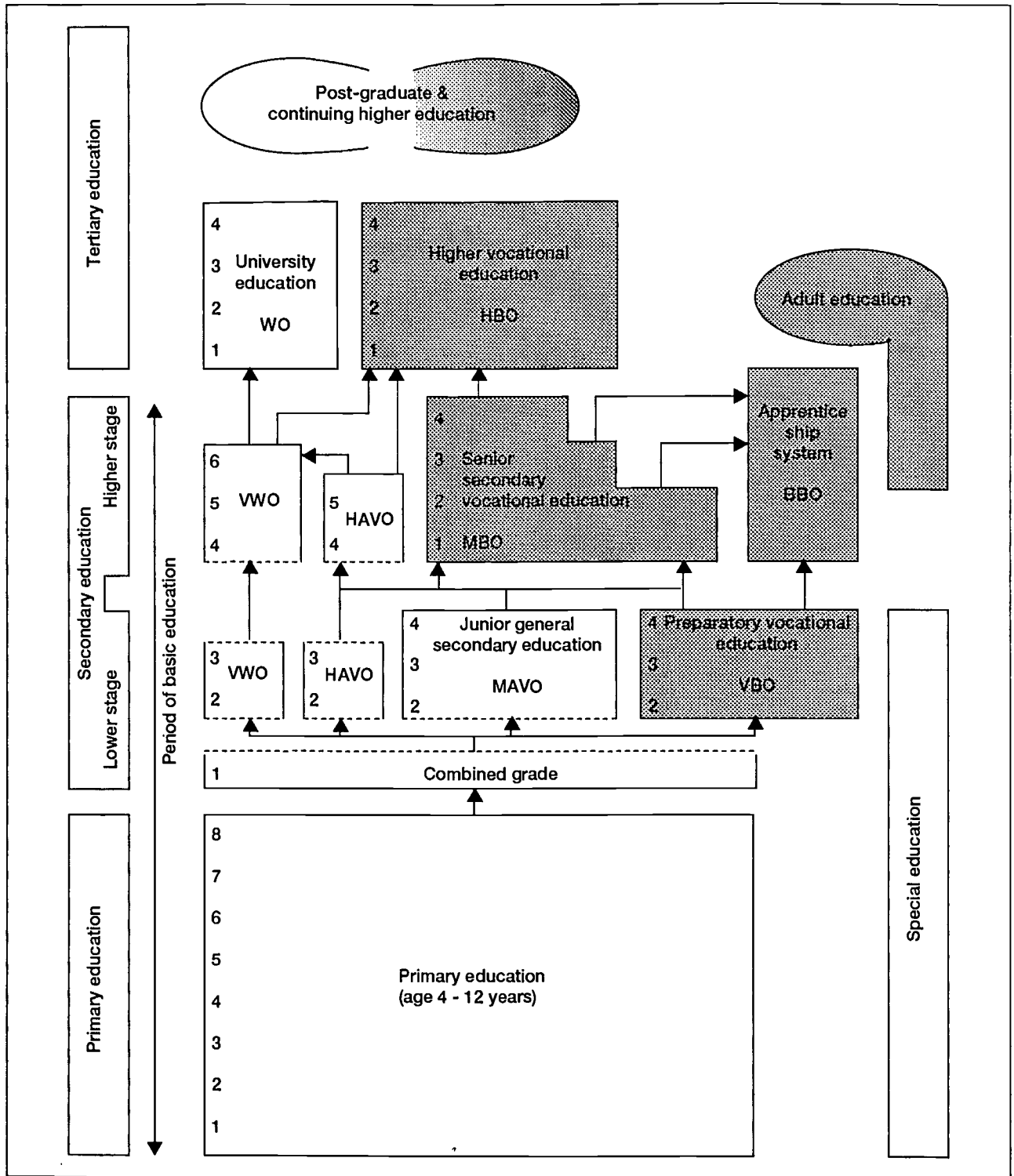


Figure 2: The position of vocational education within the Dutch education system (to scale)

= vocational education

Important for understanding the system is the choice which 12 year-old pupils (and their parents) have to make between four education tracks: VWO, HAVO, MAVO or VBO. Each of these tracks used to be housed in separate schools. Concern about high drop-out rates and the number of pupils leaving school with no qualifications, however, caused the government to press different school types to merge and arrange some harmonization of their curricula in the first year (later the first three years). These moves have resulted in an 11-year period of 'basic education' for all pupils and a variety of combinations of school type, such as VWO-HAVO, HAVO-MAVO or MAVO-VBO.

Secondary education now consists of two stages in all school types. The lower stage consists of one general year (allowing for transfer to another type of school), and two years with 15 common-core subjects (at two levels) which complete the basic education. In the MAVO and VBO sectors pupils proceed to the second (senior) stage without interruption, and after certification pupils from these sectors can apply for HAVO or MBO (full-time). Pupils preferring to leave school may (or may have to) enter the apprenticeship system or a similar programme.

At tertiary level, university-run academic courses and higher vocational courses at HBO colleges are regulated by the Higher Education and Research Act (*Wet op het hoger onderwijs en onderzoek*). The proportion of students in university education is 40% compared with 60% in HBO, a figure which indicates the popularity of the latter.

There is no tradition of entrance examinations in the Dutch education system. The appropriate leaving certificate is an entitlement to access a more advanced type of school. The application procedure for higher education is centralized at national level in order to optimize the institutions' capacities. Some university courses (such as medicine) have only a limited number of study places and these are allocated by drawing lots.

The diagram may give the impression that secondary education is strongly geared to higher education and that the third stage generally marks the end of initial education and leads to qualification for an occupation. The reality is more complex. Many pre-university pupils opt for HBO. Only 50% of HAVO pupils enter HBO, whereas 40% of all pupils come from MBO.

In an attempt to facilitate the transition from secondary to higher education and to reduce the number of youngsters leaving school without any qualifications, a range of projects have been initiated under the responsibility of specific national committees. Some of the projects address problems in general education, such as transition from HAVO to HBO, others focus on the exact sciences, multicultural participation, etc., and still others aim to raise the number of vocational qualifications.

1.3 The education environment

The education system also covers a number of organizations involved in negotiations, support services, quality assurance and various other aspects. The following examines the most important of these organizations, funding arrangements and the position of teacher training within the system.

General umbrella organizations, advisory bodies, support services and inspectorate

There are four umbrella organizations, one each for Catholic, Protestant, private non-denominational and public-authority schools in primary and secondary education. They promote the respective interests of these four main 'compartments' in Dutch education, bringing together affiliated organizations of the same denominational or ideological leaning. These 'compartments' identify the ideological tendencies which laid the foundations for many social organizations. 'Compartmentalization' is currently apparent in the worlds of television, radio, the press, education and social activities. The Minister of Education consults representatives of these umbrella organizations on matters of general education policy within the framework of the Central Committee for Educational Consultation and the Secondary Education Consultative Committee.

External advisory bodies provide the Minister with written advice on future policy. These bodies are composed wholly or predominantly of independent members.

The Education Council is a permanent body which must be consulted. There are also advisory councils for each sector of education. In principle, their recommendations are made public. The Minister is not obliged to follow the advice given.

The support structure consists of various organizations whose task it is to help schools solve any problems they may encounter in attaining their objectives. The services provided concern educational theory, teaching methods, subject contents, educational psychology, school organization and innovation.

The Education Support Structure Act distinguishes between general and specialized support organizations, the latter being private bodies. The three national education advisory centres (for non-denominational, Protestant and Catholic schools respectively) offer counselling and development activities and evaluation and information services throughout the country. They also provide services for teacher training colleges and have special responsibilities for coordinating the implementation of national innovation policy. The specialized support organizations include the Foundation for Educational Research (SVO), the National Institute for Educational Measurement (CITO) and the National Institute for Curriculum Development (SLO).

Not covered by the legal provisions of the Education Support Structure Act are some organizations geared specifically to vocational education.

The Centre for Training Innovation (CINOP) is responsible for development and innovation in vocational education and training. It conducts research on adult education and employment and develops and tests teaching methods, teaching materials and management methods for training institutes.

The National Organization for Part-time Education of Young Working People (LOVW) and the Protestant Organization for Part-time Education of Young People (LOCV) monitor standards and provide continuing training and non-formal education for young adults. They cooperate closely with the Association for Vocational Training and Adult Education (BVE), an organization established by the leading vocational colleges and organizations involved in vocational education to initiate and coordinate the reform of education in this sector.

The Education Inspectorate inspects both publicly-run and private schools. Its remit is to ensure compliance with statutory regulations, to promote the development of education, and to report to and advise the Minister, either on request or on its own initiative.

The Inspectorate for Higher Education is additionally responsible for organizing and providing administrative support for review committees.

The teachers' unions are organized at national level according to the 'compartmentalization' phenomenon. In addition to negotiating with the national authorities and college boards on social agreements and working conditions, they also participate in discussions on educational policy issues, particularly those which would improve the social status and standing of teaching personnel.

Funding, tuition fees and allowances

Regular education is funded by the Ministry of Education; in the agricultural sector it is co-funded by the Ministry of Agriculture. Certain types of adult education are partly funded by the Ministry of Welfare, Health and Cultural Affairs, the Ministry of Economic Affairs and the Ministry of Social Affairs and Employment. Schools may tap alternative sources of funding for other courses and activities.

Education is free of charge for all pupils up to 16 years of age. Tuition fees are payable for all pupils of 16 years or over attending full-time secondary education. Fees are compulsory for all students in higher vocational and university education. Tuition fees for the Open University are determined per module. Fees for adult

education classes vary depending on the course concerned.

Depending on parental income, pupils aged from 12 to 18 may receive an allowance towards their study costs. Full-time students (18-30 years of age) may be eligible for student grants or loans which are regulated by the Financial Aid to Students Act. All students and pupils within this age group who are enrolled in full-time secondary or higher education are entitled to a basic grant. In addition, depending on their parents'/partner's income, students may claim supplementary financial assistance which is disbursed partly as a repayable interest-bearing loan and partly as a non-repayable supplementary grant. The size of grants takes account of both course fees and living costs.

2 Initial vocational education and training

As a consequence of the introduction of the common-core 'basic education' (1990), the former division between general and vocational education at the interface between primary and secondary school has now become a more gradual transition. Today, vocational education commences after the basic education period and covers VBO, MBO, HBO, apprenticeship and a wide range of courses for adults.

As indicated by the statistics (see 2.5), vocational education forms a substantial part of secondary education (42%), of higher education (54%) and of adult/part-time education (81%).

An interesting fact is that, despite intensive equal opportunities promotion by the government, most vocational sectors in all types of school still typically attract predominantly male or female pupils (see Tables 4 to 7).

2.1 Preparatory vocational education (VBO)

Preparatory vocational education superseded junior vocational education in 1990. The curriculum includes general education and provides a basis for a subsequent corresponding vocational education. The name makes it clear that the aim is not to train pupils for a full vocational qualification but merely to prepare them for proceeding further towards that ultimate goal. The programme lasts four years, working towards attainment targets at two levels which are prescribed by law. Today, the first three years fall within 'basic education' and are therefore rather general. New subjects at this stage are 'informatics', 'technology' and 'health and care'. In the fourth year a substantial part of the course is devoted to practical vocational subjects. Here VBO schools can specialize in two or more of a possible range of 17 vocational fields. The technical sector is the largest and represents 48% (see Table 4).

building techniques
mechanics
electrical engineering
motor engineering
fitting techniques
catering
printing techniques
care
beauty care and hairdressing
fashion and clothing
retailing
clerical work
commerce
agriculture and horticulture
forestry
agricultural engineering
nautical education

Table 3: The 17 vocational fields covered by VBO

Junior vocational education used to be delivered in separate schools specializing in one of five sectors (technology, home economics, agriculture, commerce or economics). Despite a strong tradition, the importance of these schools declined as a result of drastic falls in pupil numbers, restricted possibilities of transition to more advanced education, high drop-out rates and the existence of too many small mono-sectoral establishments.

The transformation into a single school type (VBO) was intended to strengthen this practical form of education under improved conditions:

- strong multi-sectoral schools with a departmental structure;
- a minimum of 24 practical lessons per week (of 50 minutes each) in the last year;
- compulsory examination subjects for each department;
- possibilities of gaining work experience.

2.2 Senior secondary vocational education (MBO)

Senior secondary vocational education follows immediately after preparatory vocational education (VBO) or junior general secondary education (MAVO) and prepares pupils for lower and intermediate-level positions in civil engineering, industry and the service sector. Pupils may choose between technology (including nautical studies), services and health, home economics, commerce, retailing and agriculture. A compulsory work-experience placement represents an important part of the course.

The final MBO examination consists either of six or seven subject-specific examinations or of several sub-section examinations appropriate to the occupation aspired to. The final examination is to some extent internal, though for some subjects pupils also have to sit a national examination.

Historically a separate entity, MBO was brought into the purview of the Secondary Education Act in 1968. Since then it has secured a growing and now stable share of the secondary education market (see Figure 2). Recently it was subjected to an important reform initiated under the heading Sectoral Training and Innovation (1993), the aim of which was to strengthen MBO by means of merging separate institutions into multi-sectoral colleges and to update the range of courses on offer. The reformed MBO colleges today run courses in nearly all vocational areas for thousands of pupils.

The traditional course structure was revamped to create - in principle - three course types. These are comparable to the standardized European training levels 4, 2 and 3 respectively:

- a four-year, full-time course with a strong theory component leading to intermediate-level employment or advanced study in HBO;
- a two-year, full-time course with a strong practical component leading to employment in manufacturing (a course which was developed on the basis of pilot projects);
- an intermediate course (two years full-time + two years part-time), which is still at the experimental stage and therefore of limited availability.

Partly because of the MBO tradition, 85% of the courses on offer fall within the long course category (see Table 6).

The new programmes were developed by means of a complex process orchestrated under the responsibility of 'sector-wide education and industry forums', which organized cooperation between school teachers, representatives of industry and educational experts (from universities and the education support services) aimed at formulating successively job profiles, attainment targets and teaching objectives. The Association of MBO Colleges played a powerful role in this process.

The reformed programmes are now delivered in modular format and lead to a set of certificates. Series of modules are geared to certificate units. Each course includes both vocational and general subjects.

The certification system in MBO is now comparable with that in apprenticeship and some parts of adult education. The entire qualification system for vocational training courses is regulated by law (1993). The next step will be legislation placing all qualifying vocational courses (MBO, apprenticeship courses, adult education and non-formal youth education) within the purview of a single law (WEB , 1995) in order to concentrate the training provision in regional training centres (ROCs) which are responsive to regional labour market needs. Training priorities at regional level will be discussed and determined by a Regional Education Consultative Committee (ROA). The provision will cater for the standardized European training levels 1, 2, 3 and 4.

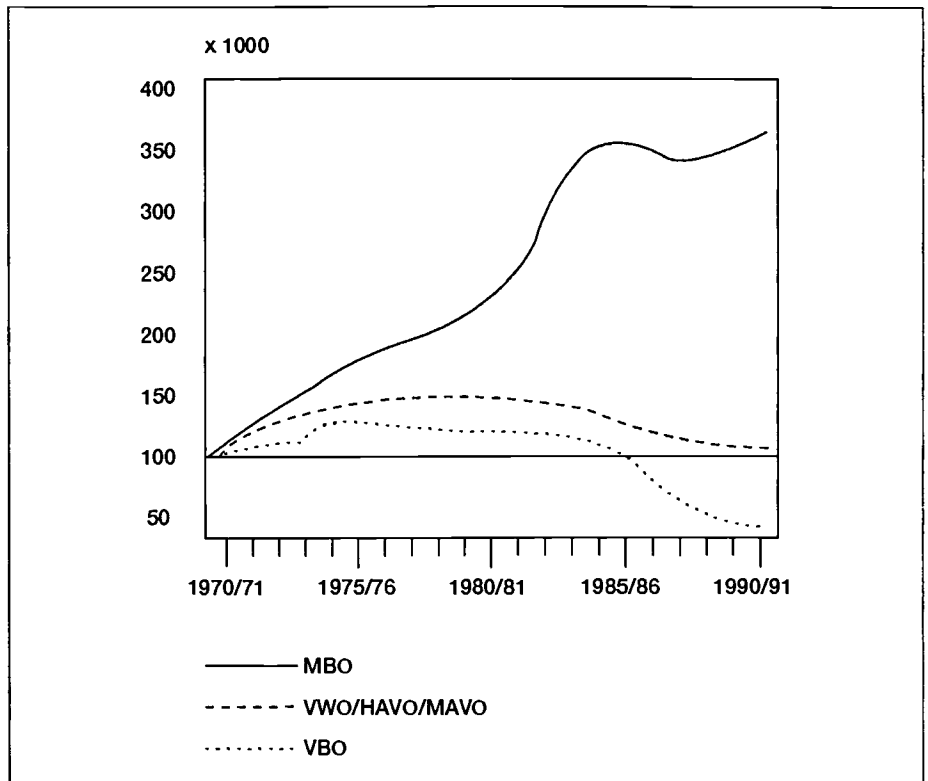


Figure 2: Development of MBO since its inception in relation to that of other segments of secondary education

(Source: CBS, 1996)

2.3 Higher vocational education (HBO)

Higher vocational education (HBO) provides theoretical and practical training for professions requiring the application of scientific understanding based on research. It is delivered at HBO colleges for graduates of the various types of upper secondary education (i.e. HAVO, VWO and MBO). The courses can last up to four years, the foundation stage of which lasting no more than one year. Students cannot remain registered as full-time HBO students for longer than six years. HBO is governed by the Higher Education and Research Act (1992), which also governs university education and the Open University.

Recently HBO colleges merged to form multi-sectoral institutes catering for several of the seven sectors covered by this type of education:

- agriculture;
- teacher training, for primary education, 'grade-two' education (general and vocational subjects) and physical education, and part-time courses for 'grade-one' teachers;
- technical studies, including technology, engineering, laboratory and nautical studies;
- commerce, including applied home economics, librarianship and

- documentation, hotel management and journalism;
- social work and community education, including education supervision, social work, labour market policy and personnel management, welfare work and counselling;
- health care, including nursing, physiotherapy, speech therapy, ergotherapy and dietetics;
- arts, including dance, theatre, music and the visual arts.

As shown in Table 7, the economic and technical sectors cater for the largest number of students, followed in third position by teacher training.

Students in all disciplines within HBO complete a foundation course before proceeding to the main part of the programme. The compulsory practical training period is an important element of all HBO courses. Graduates of the four-year programme in higher technical education and higher agricultural education are awarded the title of 'ingenieur' (ing.). Graduates of the other sectors are awarded the 'baccalaureus' (bc.) title. Internationally, HBO graduates are entitled to bear the title of 'bachelor' (B.).

In order to be recognized internationally, many HBO institutes operate under the title 'university of professional education'.

2.4 Apprenticeship

The total number of persons in the types of education and training examined here and in 2.5 below is greater than in all other types (see Table 8). Policymaking for the sector as a whole reflects the interests of both government and industry.

Apprenticeship is a vocational training scheme which entails a combination of one or two days a week at school and practical training during the rest of the week in a craft, industrial or service enterprise. It is governed by the 1986 Apprenticeship Act and integrated into the new Adult and Vocational Education Act.

Theory instruction is provided on a day-release basis (BBO) at regional apprenticeship training institutes or other educational establishments. The practical instruction takes place in industry or in trainee workshop facilities. In the first case the apprentice concludes an apprenticeship contract with the employer, who undertakes to provide a thorough training. In the second case, pupils practise their skills under the supervision of an instructor in company-run trainee workshops. Sometimes these workshops are used in addition to training in industry, sometimes as a substitute.

There are three phases in the apprenticeship training track: elementary training, which lasts 2 to 3 years and leads to a diploma examination (level 2), and optional advanced courses which also develop entrepreneurial skills and last 1 to 2 years (levels 3 and 4). Apprenticeships are available to young people aged 16 or over, with or without an LBO or MAVO certificate. For trainees with a poor

education record, the apprenticeship is usually prolonged by one year. Apprenticeships are available in over 350 occupations. The certificate structure is comparable to that in MBO.

Responsibility for programming and guidance rests with national branch-specific training organizations. The number of trainees catered for by these organizations are listed in Table 9.

Financial support for enterprises and institutions offering practical training places is available not only from government but also from special training and development funds set up by national apprenticeship bodies and administered by branch organizations.

2.5 Adult education and private training opportunities

The 1970 Decree on Part-time Non-formal Education for Young People lays down the official framework for part-time youth education, i.e. including courses for youngsters who, still subject to compulsory education, are required to attend classes two days a week. These courses are intended to promote personal and social development in a manner appropriate to the individual's present and anticipated future circumstances. There are no admission requirements.

Adult education covers all activities and facilities designed to provide education and training for adults (persons of and over 18 years of age). The aim here is to promote personal development and social competence by developing knowledge, insight, attitudes and social, cultural, technical and domestic skills in ways which are relevant to the individual's needs, opportunities and experience. Many adult education programmes are geared towards helping overcome unemployment or smoothing the transition from school to working life for persons with no qualifications. The programmes include a large number of bridging courses and level-1 courses.

Regulating adult education is the responsibility of the Minister of Education and Science, who lays down the general and financial framework at national level by determining budgets and priorities. The education and training activities themselves are planned at regional level. Apart from the ROCs, some of the most important bodies in this respect are:

- Regional Manpower Services Board (Regionaal bestuur voor de arbeidsvoorziening; RBA);
- Regional Training Bureau (Regionaal bureau onderwijs; RBO);
- Career Guidance Information Centre (Adviesbureau voor opleiding en beroep; RDC/AOB);
- Women's Training Centre (Vrouwenvakschool);
- Adult Vocational Training Centre for Technical Occupations (Centrum voor vakopleiding voor technische beroepen; CVV);
- Adult Vocational Training Centre for Clerical Occupations (Centrum voor vakopleiding voor administratieve beroepen; CVA);
- Corporate Training Activities for Administration

- (Gemeenschappelijke opleidingsactiviteiten voor administratie; GOA);
- Centre for Vocational Guidance and Training (Centrum voor beroepsoriëntatie en beroepsuitoefening; CBB);
 - Regional New Technologies Centre (Regionaal centrum voor nieuwe technologieën).

Industrial training is very well developed, partly because of the Netherlands' long tradition in this respect and partly because of the general consensus that the function of the regular education system is to prepare people for working life. Rapidly changing training needs in industry and commerce call for flexible and customized training provision here.

2.6 Statistics

	Pupils	% female
common years	202,452 (17%)	52
VBO	214,274 (18%)	40
MAVO	167,549 (14%)	53
HAVO	142,571 (12%)	53
VWO	155,854 (13%)	51
MBO	188,144 (24%)	47
All	1.167,944	

Table 4: Breakdown of pupil numbers in full-time secondary education by type of establishment and gender, 1993/1994
(Source: CBS, 1996)

	schools	pupils	%female
years 1 & 2	548	86,882	41
years 1 & 2			
engineering & technology	341	60,875	6
agriculture	70	10,790	37
clerical work	254	12,206	63
retailing	201	5,917	55
commerce	47	4,627	45
caring occupations	366	23,943	93
fashion & clothing	202	4,318	95
beauty & hairdressing	81	2,968	98
others	104	1,748	52
All	548	214,274	40

Table 5: Breakdown of schools and pupil numbers in full-time preparatory vocational education (VBO) by department and gender, year 1993/1994
(Source: CBS, 1996)

	colleges	pupils	% female
long courses			
engineering & technology	78	77,539	15
agriculture	22	14,636	27
economics	79	80,413	49
personal and social services & health care	76	62,076	89
preparatory HBO	21	4,315	72
HAVO/MBO-combinations	21	4,005	61
short courses			
engineering & technology	73	10,423	7
agriculture	21	1,644	40
economics	83	18,172	54
personal and social services & health care	70	5,082	90
orientation programmes	101	6,939	56
All	154	285,244	47

Table 6: Breakdown of pupil numbers in full-time senior secondary vocational education (MBO) by department and gender, year 1993/1994

(Source: CBS, 1996)

	institutes	students	% female
agriculture	8	9,127	29
engineering, technology & applied sciences	23	52,242	14
health care	29	18,065	80
economics	35	64,535	43
social work	25	24,448	77
arts	20	16,439	55
teacher training	42	37,111	70
All	85	221,967	48

Table 7: Breakdown of student numbers in full-time higher vocational education (HBO) by department and gender, year 1993/1994

(Source: CBS, 1996)

training schemes for the unemployed	85,530
industrial training	871,000
private correspondence courses	190,807
private face-to-face tuition	177,279
entrepreneurship training	64,781
non-formal education for young people	184,690
regular part-time education	11,587
adult basic education	142,000
Teleac	120,546
apprenticeship courses	165,675
All	2,013,895

Table 8: Number of students/trainees in part-time and adult education and training schemes

(Source: CBS, 1995)

apprenticeship body	contract	apprenticeship body	contracts
ECABO (economics)	7,963	SOM (metals)	9,947
GOC (printing)	1,166	OVDB (care)	6,998
INNOVAM (automotive)	10,731	SVB (building)	9,520
INTECHNIUM (fitting)	6,423	SVGB (optics)	1,048
KOC (beauty & hair)	3,994	SVO (butchery)	1,807
LOBAS (agriculture)	7,615	VLT (transport)	3,889
HORECA (catering)	5,983	VAPRO (process ind.)	5,467
SVS (painting)	3,758	VEV (electrotechn.)	10,370
OVD (distribution)	10,225	VOC (coach-work)	2,031
SBW (civil eng.)	2,329	VOC/BETEX (textiles)	439
SH&M (timber)	2,394	others	1,560
SOBB (bakery)	2,242		
		Total	117,900

Table 9: Number of trainees per sectoral body in the apprenticeship system

(Source: COLO & CBS; 1996)

3 Teachers and trainers

In the Netherlands all persons engaged in teaching are referred to as 'teachers', irrespective of the level of education in which that person is employed. The Secondary Education Act formally states that a person who teaches in a school is entitled to use the designation 'teacher'. A school director depending on school tradition also called headmaster or principal, also counts as a teacher. The term is thus used in the broadest sense.

3.1 The teaching function

Depending on the qualifications held, teachers are classified as follows:

- a) teachers in primary education, including early childhood education;
- b) 'grade 2' teachers, who teach the first three years of HAVO and WO and all classes at MAVO, VBO and MBO (and some practical subjects of HBO);
- c) 'grade 1' teachers, who teach throughout secondary education and higher vocational education.

Applicants for teaching appointments are required to hold the following:

- a judicial certificate of reputable conduct;
- a higher education certificate in the subject area to be taught appropriate to the corresponding education level;
- a certificate attesting pedagogic competence.

As a rule the latter two certificates are combined in a single teacher training qualification, but this is not necessary.

A higher education qualification (or equivalent) in the subject area to be taught plus a 'preparation for teaching' certificate may also be deemed to be appropriate.

Teachers of vocational subjects in higher education are required to hold a higher education diploma in their subject area plus an additional certificate attesting that they have undergone special training for teaching in HBO.

All theory and practical classes in secondary and higher vocational education are thus taught by trained teachers. In some situations the teacher may be helped by a technical assistant, but schools/colleges employ only few of these non-teaching staff. A national debate is currently discussing the introduction of assistants in order to solve class size problems.

Teachers working in non-university education can be divided into two categories of roughly equal numbers: those in primary and special education on the one hand and those in secondary and higher education on the other (see Table 10). About 54,000 teachers are employed in vocational education (see also Table 11), teaching either general subjects or vocational subjects. Official statistics on the exact number of teachers of vocational subjects are no longer available, but given the relative curriculum weight of general and vocational lessons, the number can be estimated at 20,000.

Female teachers are still in the minority in vocational education, though the percentage of female teachers is rising here.

	primary education	special education	secondary education	higher voc. education	all
male	29,113	7,624	59,898	13,735	110,375
female	59,634	8,984	26,497	6,225	101,340
All	88,747	16,613	86,395	19,960	211,715

Table 10: Breakdown of teaching staff numbers in regular education by sector and gender, year 1993/1994

(Source: CBS 1995)

	male	female	all
general education	37,430	16,351	53,781 (61%)
VBO	8,733	3,518	12,251 (14%)
MBO	12,700	6,565	19,265 (22%)
agricultural	2,356	576	2,932 (3%)
total	61,219 (69%)	27,010 (31%)	88,229 (100%)

Table 11: Breakdown of teacher numbers in secondary education by sector

(Source: CBS, 1995)

3.2 The training function

The term 'trainer' refers to people engaged in the apprenticeship system, in in-company training activities, and on the independent training market. No statistics are available on trainers, but the trainer population must be enormous: given a trainer/trainee ratio of 1:3, the authors estimate that 90,000 trainers are engaged in the apprenticeship system alone. This document examines only trainers engaged in apprenticeship-like situations.

The training concept for apprenticeship entails guided, on-the-job training on the basis of plans and conditions determined by the competent national vocational training body (one such body exists for each sector: industrial, commercial and services).

The company is responsible for the industrial part of the training. The traditional apprentice-master relationship turned practical instructors into trainers. Depending on size and organization, a company may have several trainers at the same or different levels. Some companies run their own internal 'schools', with staff members formulating their training policy, setting up training schemes and organizing or buying-in the desired courses. Such 'training managers' also fall within our definition of trainers.

The relevant sectoral apprenticeship body is responsible for the provision of training places, determining the programmes, conducting the examinations and monitoring compliance with the terms of the training contract. The duties of these bodies are laid down in the Apprenticeship Act. The personnel engaged in programme development, examinations and monitoring are known as 'consulenten' or counsellors. Some do R&D work (programme coordinators), others supervise and advise both the apprentice and the trainer in industry (advisor). Under the new Adult and Vocational Education Act the duties of the latter are shortly to be transferred to the teaching staff at ROCs.

	<i>responsible organization</i>	
<i>level</i>	apprenticeship body	industry
<i>programme/ organization</i>	programme coordinator	training manager
<i>individual trainee & instructor</i>	advisor	practice instructor

Table 12: Model for a typology of trainers in apprenticeship

3.3 Teacher unions

Teacher unions have a very important role to play in determining and defending conditions of employment in the broadest sense of the term. Additionally, they seek to influence reform processes in education, teacher training and professional standards. Although

these areas of interest may be complementary, to some extent they are also conflicting.

The organization of teacher unions, their position within the educational networks and their working methods are changing in response to developments in the educational environment. The following describes the main trends in this respect.

Traditionally, each group of teachers had their own union and the union landscape was correspondingly varied. All possible subdivisions were represented separately, for example:

- school heads in secondary education;
- Catholic teachers in vocational education;
- Protestant teachers in senior secondary vocational education.

These specialized unions participated in larger federations for the purposes of negotiations at national level but were also themselves a party to deliberations on terms of employment and education policy matters affecting their own members. The following example illustrates the situation: in 1970, 10 teacher unions and 16 other unions (crafts, industry and trade) were represented on the board of the National Technical Teacher Training Institute.

Recently, various small unions have merged to form a few large, internationally active teacher unions (or federations).

There are four main levels for negotiations and collective agreements:

1. the national level in the wider sense: collective agreements for civil servants (which apply to all teachers) concluded with the Secretary of State for Home Affairs;
2. the national education policy level: special collective agreements applicable to teachers concluded with the Minister of Education, Culture and Science (and the Minister of Agriculture, Nature Management and Fisheries);
3. the sectoral level: specific agreements per sector of education sector, e.g. rules of conduct with respect to mergers, concluded with the Minister of Education and associations of institutions;
4. the institutional level: specific arrangements regarding employment, staff development and secondary labour conditions concluded with institutional boards and participation councils.

These levels also serve as channels for communicating advice on educational matters to ministers, the Parliament, sectoral organizations and specialized institutions. Such advice usually concerns legal regulations, education structure reforms or compulsory programme routing but sometimes concerns incidental problems such as teacher attack by students.

A remarkable trend for the near future is being set by a leading teacher union which has taken the initiative of establishing a professional code for teachers as a contribution towards raising teachers' professional status.

4 Regulations governing teachers and trainers

As a rule a teacher can seek appointment after completing the required education and obtaining a teaching qualification.

The Secondary Education Act does not specify teachers' working conditions but does refer to the Minister's responsibility regarding salary scales and terms of employment. As a consequence of this 'freedom of education', the teacher's employer is not the Minister but the school board. Nevertheless, salary scales, terms of employment and working conditions are largely determined through negotiations at national level between the government and the teacher unions. A recent innovation was the possibility of arriving at collective agreements per institute, but in practice institutes negotiate collectively as well. The following examines some aspects and trends concerning the improvement of working conditions.

4.1 Career prospects In principle and within certain limits, appointments in education is a matter of supply and demand on a free market. The boards of institutions are required to publish vacancies (as employers), and applicants apply direct to them.

The first year of an appointment is usually a temporary (conditional) post which subsequently becomes a permanent appointment. Depending on the teaching load to be covered, the appointment may be for full-time or specific part-time employment.

Traditionally the subject taught was closely related to the discipline studied, but today the school management in vocational education can assign teachers lessons in other subjects as well.

The employment contract used to be permanent until retirement age, but many variations are and will be possible.

A clear trend is a shift in responsibility for employment conditions away from the national level and towards the employer institution. This is related to the expansion in institution size caused by the ongoing process of school mergers: today, a full-size ROC can have 10,000 or even 20,000 students and 1,000 to 1,500 staff. Personnel management has thus now been placed in the hands of those already responsible for educational, quality and financial management. The implications of this for the near future are not yet entirely clear.

Teachers are graded in salary brackets according to their qualifications (grade 1 or 2) and experience, and the level of education in which they teach (secondary or higher). Young teachers at the beginning of their career usually start in the lower salary brackets. Advancement to a higher bracket depends on length of service, additional or further training, and promotion to head of a task group, department or sector (i.e. more administrative duties). Promotion is no longer automatic (neither for age nor for academic

qualifications). Dismissal on account of insufficient pupil/student numbers is now a regular practice.

Although the retirement age for a regular pension is 65, the pressure of diminishing enrolment numbers in secondary and higher education has made earlier full-time or part-time retirement at or after the age of 55 or 62 quite common (at 70% or less of the former salary). The conditions for these options are being changed almost annually.

4.2 Salary schedules

As stated above, teachers' salaries have traditionally depended on education level (lower secondary, senior secondary, higher education), their qualifications (grade 1 or grade 2) and experience. Vocational secondary schools were classified as lower secondary education for salary grading purposes, but even so, the salaries payable here were supposed to be comparable or even better than those payable for production jobs in industry. Today, teachers' salaries are an issue under renewed discussion, especially because the salaries earned by newly recruited teachers are lower than those for industrial or commercial jobs (for which there is a strong demand). In actual fact, however, it is not easy to compare earnings prospects over the long term.

International comparison is also complicated, with corrections being needed to take account of workload, study facilities, redundancy pay and pensions. Table 13 provides some data on teachers' salaries. Salary brackets 9 to 12 are for secondary education, 11 to 14 for higher vocational education and 11 to 16 for university education.

Recently, management in MBO and HBO have been authorized to vary salaries on their own initiative (within limits) to take account of individual circumstances and terms of reference.

scale	secondary education			higher vocational				
	8	9	10	11	(12)	13	(14)	(15)
minimum	1200	1300	1225	1600	1900	2125	2160	2300
maximum	1600	1790	1940	2200	2500	2650	2760	3000

Table 13: Salary schedules for teachers and directors in secondary and higher education, reduced to average net level; in ECU (1996)

The retirement pension payable after 40 years of service is equal to 70% of the average salary over the last two years prior to retirement.

4.3 Duties of teachers Teachers in the Netherlands have a particularly heavy workload. According to a recent OECD report, teaching time in secondary education is the highest in Europe. With an employment contract for 38 hours per week, most teachers actually have 875 class contact hours per year, in practice 24 to 27 lessons per week and this in large classes. Together with declining teacher status and continuous changes to organizational structures and teaching programmes, the reduction of the teaching function to 'bare' teaching is a factor which can result in low levels of job satisfaction.

These problems were analysed recently by a national committee which put forward a number of policy recommendations aiming to upgrade the teaching profession in the near future. One recommendation called for more flexibility in teachers' roles and functions. Others drew attention to the possibility of reducing class contact hours and increasing the research, special tuition and work organization component. A further suggestion was specialization in learning environment arrangements based on multi-media, group work and self-managed learning concepts. Whatever the outcome, the government is known to be preparing measures to transform teachers' duties into a more attractive package.

In addition to a heavy workload, the teaching profession faces other problems, such as poor school conditions, low professional status, and an ageing workforce. The Dutch government has declared that revitalizing the teaching profession is a policy priority.

Interest in the European dimension is rapidly increasing in schools in the Netherlands.

4.4 The school as an autonomous professional organization In addition to having been made larger, schools are now equipped with more facilities for functioning as autonomous professional organizations. Measures to 'revitalize the teaching profession' include:

- strengthening schools as autonomous professional organizations,
- furthering adequate human resource management in schools,
- enhancing possibilities for functional differentiation among the teaching staff.

Until now the teacher's task has been limited largely to classroom work. The proposed model for autonomous schools calls for less regulation from national authorities and other bodies and greater professional leeway at the school level.

Decentralization of power has taken place in MBO, and discussions have started on introducing this principle throughout the entire secondary education sector. A characteristic feature of decentralization is a system of lump-sum funding which gives school managements more freedom with respect to manpower and material spending and thus affects not only school management but also all teachers. 'Restricted professionalism' (classroom work) is to be

replaced by 'extended professionalism', i.e. additional cross-curricular activities such as:

- participation in decision-making and school policy-making;
- cooperation between school departments;
- study, research and development work;
- meso-situation activities.

4.5 Raising professional standards

The national government has launched a programme to reformulate occupational profiles for teachers. One problem being encountered here concerns the former affiliation preference for occupational group or school, a problem which is related to the definition of 'professional' or 'employee' staff status. Another problem is the controversy between advocates of separate profiles for lower and upper secondary education and advocates of a single profile.

Moreover, whereas universities emphasize the importance of teachers' academic achievements as a guarantee of quality, teacher unions attach greater priority to professional development.

Although the recommendations are not yet fully clear, there is a noticeable general concern about teaching quality and the professional status of teachers.

Concerning the application of methodology theory to classroom practice (filling the theory-practice gap with 'competencies', see also the experimental LIO project referred to in 6.2.), the aim is to achieve a combination of thorough subject expertise and the ability to implement research findings to one's teaching activities.

Both policy-makers and representatives of the teaching profession are fully aware of the challenges facing education today and are intent on finding ways and means of raising professional standards.

4.6 Working conditions for trainers

There is no legal description of the function of an instructor or trainer in industry.

Most collective agreements in industry provide for further efforts to expand vocational training and apprenticeship. Employers are obliged to draw up a training plan scheduling training for each employee at least once every three years. If the employer does not provide the instruction himself, he appoints a suitably qualified employee as instructor or trainer. Apart from within this framework the term 'trainer' or 'instructor' does not feature anywhere as a recognized function.

Most instructors are employed in production functions and provide instruction in addition to their regular production duties - generally without any additional remuneration. Providing instruction thus greatly increases the workload without bringing any financial gain.

Table 14 shows the usual level of payment for production work

based on an example from the construction sector (six function levels).

function levels	minimum	maximum
3	1050	1180
4	1420	1625

Table 14: Example of net wages for production functions applicable to instructors, in ECU

(Source: Collective agreement, construction sector 1995)

The national vocational training bodies of the various branches of industry have criteria for the training personnel engaged in the apprenticeship system:

- industrial experience plus relevant vocational qualifications,
- relevant instruction experience or qualifications,
- at least 15% of weekly worktime set aside for guidance and instruction.

These bodies have the task of improving the quality of the training provision and therefore organize courses to train trainers.

Obtaining instructors is currently very difficult because of the poor working conditions, and this in turn will result in a considerable shortage of skilled workers. The construction sector has responded to this problem recently by launching an action programme to increase its current total of 4,000 instructors by a further 3,500. Additionally, a regulation has already been drawn up to award certified trainers an allowance for their instruction duties.

5 Training paths for teachers and trainers

Since 1970 the main route to becoming a teacher has been via a teacher training programme run by a teacher training institution. These programmes adopt an integrative approach to study in a specific subject area and study of pedagogy. The underlying concept here is that there is a strong interrelationship between the philosophy of education, teaching methodology and (vocational) study content and that this interrelationship should be experienced and acted on during preparation for the teaching profession. The full-time integrated study concept has ousted the former concept of specialist subject study plus a separate part-time course in education. The requirement that a prospective teacher be fully qualified before being appointed also argues in favour of the present training concept.

In day-to-day practice, however, it is not always possible (or even

desirable) to adhere to this path for all vocational subjects. It is simply impracticable to establish integrated teacher training departments or programmes for all vocational subjects. So although the main route is via an integrated teacher training programme, there are some alternative ways of securing appointment and recognition as a teacher.

	integrated teacher training		teaching preparation course	certification grade
	full-time	part-time		
entrance qualification:				
advanced apprenticeship		x		2
HAVO	x			2
MBO	x	x		
recognized highly specialisation			x	2
HBO			x	1 or 2
university			x	1

Table 15: Initial teacher training variants for vocational subjects

Teacher training programmes for vocational secondary education (VBO, BBO, MBO, adult education) prepare students for a 'grade 2' qualification. Students coming direct from secondary education (HAVO, MBO) study the vocational subject at higher education level and learn about education theory and practice. They are also required to gain some practical experience in industry as part of their training.

Experienced practitioners from the industrial, craft or services sectors who hold an advanced apprenticeship or MBO qualification can attend part-time programmes (evening courses) leading to the same certification grade. This is the more common route for teachers of the practical component of technical and vocational subjects. In some cases an impressive record of practical experience and specialized expertise is recognized as being adequate for the subject-specific component of the training.

A parallel situation exists after HBO certification in a vocational discipline. These prospective teachers are required only to attend a course preparing them for a teaching post. A specific HBO course was recently made compulsory to qualify for a 'grade 1' certificate.

No specific training tracks are officially prescribed for trainers engaged in industry. However, many companies prefer their trainers to have some training in education or personnel management, and can purchase such training on the independent training market, where a countless number of training agencies offer courses in a wide range of subjects at all levels.

apprenticeship system					
	specific branche instruction	general short courses	advanced courses	teacher training	free market courses
instructors	x		x		x
supervisors	x		x	x	x
trainers			x	x	x

Table 16 : Some of the training options for training personnel'

National apprenticeship bodies often require their supervisors to hold a teaching qualification, preferring to work with certified instructors from industry who are then recognized after undergoing a specific training. The apprenticeship bodies run short, branch-specific courses for their training staff and often require them to attend short or advanced courses under the supervision of COLO (Central Office of the National Apprenticeship Training Bodies). These courses for instructors, trainers and supervisors are delivered at OPO (training centre for trainers and supervisors).

As a result of the strong demand for 'train the trainers' courses, a large-scale market has developed where not only private-sector training providers but also the 'contract departments' of colleges and universities compete for clients on the basis of price and quality. Not all providers can guarantee quality and relevance. Many of the better providers operate under the auspices of branch organizations, which prescribe quality management procedures and undertake evaluation and quality certification. The supervising organization is often a criterion for course selection. See also the section on useful addresses.

6 Initial training programmes for teachers and trainers

Initial integrated training programmes for teachers in secondary education are available for agricultural, technical and some other vocational subjects such as business economics, health care, home economics, social skills and textile crafts (see also Section 9). These are known as 'grade 2' programmes, except in the agricultural sector, which also offers 'grade 1' programmes.

There follows a description of the three types of programme, plus an example of a course preparing university graduates for a career in teaching/lecturing in HBO. The latter is a 'grade 1' course.

No teacher training programme exists for vocational subjects not falling within the categories listed above. Practical training solutions have to be found for small (very specialized) subject areas taught in only few establishments and with only few students (e.g. a level-4 certificate plus a course in pedagogy).

6.1 Initial teacher training in agriculture

The teacher training institute for agriculture prepares students for a 'grade 2' certificate and teaching careers in agriculture departments in VBO and secondary agricultural schools (MAS). Additionally, in cooperation with the Agricultural University (Wageningen), it also trains for 'grade 1' posts in secondary and higher agricultural education (MAS and HAS).

The superordinate body is the Foundation for the Development of Agricultural Education and Training (STOAS). The board of STOAS includes representatives of the Ministry of Agriculture, Nature Management and Fisheries and of the three national agricultural organizations. STOAS organizes full-time and part-time courses in cooperation with the colleges of advanced agricultural studies in Dronten and 's-Hertogenbosch (see Table 17).

	full time	part time
food processing		x
horticulture	x	x
plant production	x	x
animal farming and products	x	x
rural engineering	x	x
agricultural economics	x	x

Table 17: Full-time and part-time teacher training in agriculture

Agricultural teacher training is strongly geared to practice and covers both subject-specific study and study of pedagogy. Students attend theoretical and practical classes, but also gain work experience in agricultural and horticultural enterprises and undergo specific courses in 'practice schools'. These regional specialized innovation centres are equipped with all modern production facilities and specially developed teaching aids. Full-time training also includes teaching practice in agricultural secondary schools supervised by a qualified teacher and the teaching practice tutor. The courses in horticulture are delivered in cooperation with secondary horticultural colleges.

The full-time courses last four years. The first part covers a broad agricultural foundation course plus relevant general subjects such as mathematics, statistics, informatics, science and biology. It also provides a general orientation towards teaching. The second part emphasizes specialization and the corresponding teaching methodology.

The eligibility requirements for full-time courses are a secondary education qualification, preferably in a relevant subject area (e.g. MAS for horticulture and farming, MTS (secondary technical education) for rural engineering, MEAO (secondary economic and administrative education) for agricultural economics).

The part-time courses are add-ons to higher agricultural education (HAS or university).

6.2 Initial teacher training in technical subjects

The teacher training programmes for technical subjects in secondary education are provided by the Fontys Technical Teacher Training College, Fontys PTH (Pedagogisch Technische Hogeschool). PTH functions on a nationwide basis and offers full-time and part-time courses in Eindhoven, Amsterdam, Rotterdam and Zwolle.

Because of its historical connection with technical schools, Fontys PTH is a unique institution. Traditionally it was governed by a board composed of representatives of national technical school associations. In 1996, however, Fontys PTH merged with other HBO colleges in the southern part of the Netherlands to form the 'Fontys-Hogescholen', an institution with 33,000 students, 3,500 employees, 7 HBO sectors and 180 disciplines.

Until 1979 technical teacher training was available only via part-time courses because of the requirement that technical teachers have at least three years of industrial experience, or appropriate enterprise experience. The teaching specialisms were highly diversified, covering a broad range of theoretical and practical subjects geared primarily to junior vocational education.

	subject	profile	full-time	part-time
1	mechanical engineering & fitting & automotive	design & construction control techniques processing engineering production technology installations automotive engineering	x x x x x x	x x x x x x
2	architecture & building & construction	architecture industrial woodwork building production painting & conservation	x x x x	x x x x
3	electrical engineering & electronics	electrical engineering electronics technical informatics	x x x	x x x
4	catering	restaurant techniques bakery	x	x x
5	printing technology	printing techniques		x

Table 18: Technical subject areas and 'profiles' of teacher training programmes

In 1979 technical teacher training was reformed, the main innovations being:

- introduction of full-time courses;
- extension of coverage, with specific programmes for senior secondary technical education;
- broader technical subject areas;
- integration of technical and educational subjects in school practice and in subject-specific didactics.

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Under the influence of recent reforms to VBO and MBO, the programmes today are geared to teaching in all segments of technical secondary education. The qualifications obtained attest to a broad-based competence but also reflect the MTO specializations. These smaller subject areas are referred to as 'profiles' (see Table 18).

The initial teacher training programmes are modularized and include specialized subjects, preparation for teaching, ethics, practical work in schools and (in the full-time variant) one year of industrial experience (see Table 19).

	programme elements	full-time	part-time
1	theoretical and practical technical subjects	42.5	32.2
2	supporting sciences and informations	10.7	7.7
3	education theory, laboratory and school practice	22.9	21.1
4	philosophical and ethical background	5.1	3.6
5	industrial practice	16.7	(25)
6	optional courses	2.1	2.1
7	concurrency options	0	8.3

Table 19: The main module clusters as a percentage of the programmes

The initial teacher training programme lasts four years. An optional fifth year course has been developed for students wishing to study MBO specializations in greater depth. An extra international course was offered recently to candidates for the master's degree in education.

The theory and practice of technical subjects account for a substantial part of the curriculum. A technical teacher in secondary education is required to teach a range of technical subjects which are listed separately in the timetables but actually belong to a single subject area. Teaching across this range calls not only for understanding of the different subjects but also for competence in the corresponding workshop and laboratory techniques and technical drawing. The prospective teacher has to acquire skills in all these respects.

The supporting sciences are mainly pure and applied mathematics, physics, some chemistry (or biology) and informatics.

The preparation for teaching includes language proficiency, personal presentation (drama), the theory of pedagogy and psychology, educational methodologies, extensive laboratory training ('micro-teaching'), many weeks of school practice and both general and subject-specific didactics.

The foundation training in philosophy is provided as a necessary basis for personal development, reflective ability, awareness of the

social implications of technology, and particularly as preparation for the compartmentalization (the channelling of social forces and interests along political and religious lines.) within the Dutch education system.

In full-time programmes the industrial experience component extends over almost one year and is an important part of the course. Students are guided by a supervisor, with whom they have several meetings in order to discuss and evaluate their experience. This element of the course focuses not only on occupational techniques but also on the organization of industrial production. Students on part-time courses usually already have more than three years' relevant occupational experience.

Only a small percentage of the curriculum is reserved for options. So-called concurrent options are available in part-time courses for students wishing to develop their specific field of interest on the basis of a combined training/work approach.

The modular system is based on 13 modules plus practice time. The modules are broken down into 'study hours', 'contact hours' and different types of training (theory, practice, laboratory). A student's weekly workload of 40 hours is equal to one credit point. Under the terms of the Higher Education Act, the four-year programme runs up a total of 168 credit points.

One of the features of the programme is the important role played by modern learning environments allowing for independent learning, self-tuition, group work, variations in teaching/learning situations, and subject integration. For the students this approach means more benefits, more responsibility, and opportunities for reflection, self-managed learning and cooperation. The classical methodology has been replaced by instruction in learning skills, a tutoring system, a series of module guides and appropriate infrastructure including a multi-media centre, computer software and laboratories.

Fontys PTH headquarters is located on the university campus in Eindhoven. The various high-tech centres which Fontys PTH has set up underscore the institution's innovative character: the high-tech centre for woodworking, the CAD/CAM centre, the robotics centre, the centre for advanced technology (CAT), and the software development point (SWOP). These facilities are all open to Fontys PTH students.

Fontys PTH students are also entitled to participate in the LIO project, (Prospective teacher project) a project set up by the Ministry of Education with a view to reducing what is commonly referred to as 'practice shock' among young teachers. Systematic activity planning and supervision helps to facilitate the initial period in secondary education. Students can also carry out 10 extra weeks of teaching practice during the final semester. The project is still at an experimental stage and is being implemented in cooperation with STOAS.

The master course is a new activity focusing on the European dimension in teacher training. It is a one-year, full-time course intended for newly qualified teachers who have already completed a module on international trends in vocational education and the English language. The curriculum was developed in cooperation with the Anglia Polytechnic University in Chelmsford (UK) and has been approved by the Academic Standards Committee.

The studies are carried out in the Netherlands and the UK and the study content is highly customized. The modules cover modern trends in international vocational secondary education and also develop the student's research abilities. As much as 40% of the programme consists of teaching practice in secondary schools. A dissertation complying with high standards of academic rigour has to be submitted at the end of the course. Successful students are awarded the 'Master of Arts' qualification.

6.3 Initial teacher training for other vocational subjects

Initial training courses for vocational subjects in the economics, care and service sectors are structured according to a common pattern. The courses extend over four years and have both full-time and part-time variants.

The first (foundation) year is an orientation year focusing on the subject area chosen and the prospective profession. The remaining main part of the course is directed more specifically at developing the knowledge and competences required for teaching in that subject area.

Many teacher training institutes offer an alternative programme for students who change their mind about the profession but still want to study their subject: so-called 'compiled programmes' which, although they vary from one institute to another, generally concern public relations, environmental studies, writing professions, etc.

The teacher training courses consist of an education component, a subject-specific component and several periods of teaching practice. Although the courses for the various subject areas are based on a common core curriculum developed jointly by the institutes concerned, the content structure and methodology differ substantially.

About 60% of the curriculum is devoted to the subject area. Again, as the aim is to educate students to HBO level, the subject coverage - both theory and practice - is wide.

The education component develops an understanding of educational principles, psychology, philosophy and sociology. It also includes study of the education system and education policy-making. The practical activities centre on teaching methodologies and possibly also learning materials, timetable problems, homework assistance or cultural work. Instruction in subject-specific didactics

studies the subject as it is taught in secondary education and the associated teaching methodologies.

During the initial part of the course the teaching practice is restricted to mini-lessons (simulation) and short school visits. During the second part it takes on a more substantial role and concentrates on entire series of lessons.

The eligibility requirements for all these courses are generally reported to be the MBO or HAVO qualification (without further subject specification).

The final certificate is a full 'grade 2' teaching qualification.

6.4 Preparation course for teaching in higher vocational education

Since 1991 all new teaching staff in HBO are required to have undergone special HBO courses preparing for teaching in HBO. The legal regulations stipulate that this course cover lecturing and the supervision of practical work and thesis preparation. Also important is the development of competence in media use, school organization and quality management. All further course specifications are customized to respond to HBO sector and individual needs. The study load is standard: 300 study hours.

The course activities take the form of:

- participation in contact instruction,
- in-service activities focusing on supervised practical training.

module	contents
1	Orientation on learning and teaching <ul style="list-style-type: none"> • the teaching profession • education as social system • use of analytical models • objectives and entering behaviour • teaching technical subjects
2	The teaching/learning process in HBO <ul style="list-style-type: none"> • preparation of lessons • structuring content knowledge • teaching and learning strategies • instructional procedures • problem-solving in learning
3	Teaching aids and media <ul style="list-style-type: none"> • typology and use of media • use of information technology in instruction • modules and modular systems • textbook evaluation • construction of self-instructional materials
4	Evaluation and tuition <ul style="list-style-type: none"> • assessment instruments • administration • test construction • student guidance and tutoring

Table 20: Content of the special preparation course for teaching in HBO run by the Technical University Eindhoven

These special preparation courses are offered by universities (in cooperation with teacher training institutes) and vary substantially from one institution to another.

6.5 Initial training of trainers As previously mentioned, no training track is officially prescribed for trainers engaged outside the education system (industry, etc.).

Instructors engaged in the apprenticeship system are recognized by the relevant vocational training bodies on condition that they hold suitable qualifications in their subject area (at least advanced apprenticeship level) and have undergone a suitable training of trainers course.

Under the supervision of COLO, the Education Centre for Supervisors and Trainers offers two types of initial training for instructors, a short, seven-day basic course and a more in-depth course based on a one-year, part-time programme.

Basic course for instructors:

This is a seven-day course which is delivered partly as block instruction to groups from the same occupational branch - an approach which allows for adaptation to needs as perceived by the branch training body. The content focuses on:

- motivating young trainees,
- counselling and tuition in practical situations,
- leadership and control,
- communication skills,
- instruction techniques,
- the tasks and duties of instructors.

In-depth course for instructors:

This course is officially recognized as an advanced training course within the meaning of the legal regulations on apprenticeship. It extends over one year and is structured in five blocks.

The course includes both theory and practical training. Some issues of educational, psychological and organizational theory are addressed from the viewpoint of the participants' practical experience. The development of social skills (with respect to instruction, evaluation, discussion and counselling) forms a substantial part of the programme.

The blocks are concerned with the following topics:

1. the trainer,
2. training and instruction,
3. counselling,
4. planning and structuring,
5. training in productive settings.

The Education Centre for Supervisors and Trainers also offers in-service training for apprenticeship supervisors, likewise supervised by COLO.

A short introduction course for supervisors provides some basic insights on:

- the apprenticeship structure,
- the sphere of activity,
- reforms and trends in assignments and activities.

The contents addressed are:

- the transition from the Apprenticeship Act to the WEB,
- the dual system of apprenticeship in the Netherlands,
- changes in role and activities,
- making and maintaining educational contacts,
- time management.

The in-service training for supervisors lasts two years and is divided into six blocks:

1. the trainer in apprenticeship,
2. basic supervision skills,
3. organization and management,
4. strategies for training, information and guidance,
5. relations between the labour market and vocational education and training,
6. new trends in vocational training.

7 Continuing training of teachers and trainers

Post-initial training opportunities generally take the form of:

- upgrade courses,
- subject-specific refresher or specialization courses,
- educational and managerial courses.

7.1 Upgrade courses Upgrade courses are very closely related to initial training. Many programmes are also delivered in a part-time format. Teachers and trainers are not required to undergo any specific upgrade training.

7.2 Further training courses for teachers Usually these courses are referred to as 'in-service training'; the acronym INSET is common. There is no formal obligation to attend in-service training courses, but teachers do have a moral obligation to acquaint themselves with contemporary developments both in their subject area and in the teaching profession.

Public opinion sees the voluntary nature of in-service training as a drawback and as one of the causes for the unsatisfactory in-service training attendance rates. A recent policy of the Minister of Education is to confer more responsibility on schools for improving quality standards by means of in-service training.

The national government traditionally limited its intervention in matters relating to in-service training to providing financial support to the organizing bodies, such as teacher unions. Later, agreements were concluded with teacher training colleges whereby the latter were to offer in-service courses on the basis of a fixed budget. Over the past decade the Ministry has made an extra effort to promote the development and implementation of information technology in both general and vocational education. Recently, the Ministry discontinued its direct financing of in-service courses run by teacher training institutes. The budget appropriations are now channelled direct to schools and colleges as part of the lump-sum funding scheme. Schools and colleges are expected to 'buy in' training and other support to meet their own needs. This is not applicable in agricultural education.

The above refers to the national setting. Additional grants are usually available for course attendance within the framework of international exchange programmes. The contact agencies in this respect are NUFFIC for higher education and CINOP for other levels of vocational education and training.

As stated above, teachers are at liberty to attend courses on their own initiative. Attendance during working hours with financial support, however, presupposes obtaining the consent of the school management. The management can in turn avail itself of four types of assistance in meeting staff training needs:

- internal advisory service,
- external advisory service,
- in-house courses,
- extramural courses.

No statistical information is available on the use made of these instruments or the impact thereof.

Under these circumstances the reaction of training providers is to offer both customized, in-house courses and courses which are open to individuals. The duration is usually between 2 and 12 days spread over a longish period. The courses on vocational subject issues mainly track new trends in the occupation concerned.

Teacher training institutes differ from other training providers by offering courses not only on new technology but also on its application in education and the corresponding teaching methodology. Courses of this type are run every year for all subject areas and cover many topics, mainly in the agricultural and technical sectors.

By way of example the following is a list of the courses offered by Fontys PTH-Contract branches, to technical secondary teachers in 1996:

- introduction to AutoCAD
- advanced AutoCAD
- CAE with AutoCAD, 2 levels

- specialized AutoCAD for electrical engineering
- AutoLISP
- AutoCAD applications
- 3D drawing
- SteCAD update
- installing SteCAD
- GBa Tabletmenu
- AutoCAD measuring in construction
- AutoCAD release 13 update
- electrical project engineering
- CNC timber manufacturing, 4 levels
- 7 specific automatic timber processing devices (incl. LICOM APS, Routomat NUM 750, ASPAN)
- introduction to robotics
- robot welding
- manufacturing with robots
- off-line programming and safety using robots
- modern welding TIG 1
- MIG/MAG welding level 2; short and long courses
- sheet steel technology
- assembly techniques for Transmission
- trends in robotics
- production and preparation
- controlling by means of PLCs
- workshop PLC programming with ACTGRAFH+
- Sequential Function Chart applications
- system development for controllers
- electrical automation management
- introduction to digital technology
- methodical development of teaching and learning materials
- introduction to Authorware
- computer networking in education
- Windows 3.11 and Novell netware
- modems and CD-ROMs in Novell networks
- HTML, introductory and advanced levels
- advanced MS DOS commands
- WP6.1, introductory and advanced levels
- practical introduction to the Internet
- Internet installation and modems
- remote control for systems management
- Internet stations in schools
- IntraNet and UUCP
- Novell, various courses (effective working, servers, stations, peripheral devices, workgroups)
- MS DOS memory management
- systems management
- introduction to Delphi
- data communication and networking.

The courses on educational topics do not have a strong bearing on vocational subject matter and deal primarily with curriculum

development, pupil guidance, classroom and school management, use of modern media, methodologies, and new trends such as learning to learn.

The approaches to the training vary from courses of instruction for individual teachers to school-related support services. Except in the field of specialization training, team-based support has been found to be more effective than the individual course approach. Of particular importance here are training in procedures for intake analysis, work planning and follow-up activities. Other fields in which support is available from further training experts include:

- assistance to steering groups and task forces,
- advice to (middle) management,
- study meetings organization,
- school-related course delivery,
- project plan development, documentation and implementation,
- project management.

The range of courses on offer usually tracks the most important current trends and reforms in secondary (vocational) education and changes from year to year. The following are some examples:

1. Help structures for secondary education
2. Remedial teaching in secondary education
3. School work plan development
4. Individual learning programmes in basic education
5. School organization in basic education
6. Strategic options for upper grades (VBO/MAVO).

7.3 Further training courses for trainers

Again, two types of course are available for trainers: subject-related courses and courses to improve training skills.

Training needs among trainers generally cover a very wide spectrum reflecting their own work circumstances, their personal development potentials and their employer's manpower development ambitions.

Many providers are operating on this train-the-trainers 'market', sometimes under the supervision of certifying institutions. The national apprenticeship bodies frequently organize information meetings for their own trainers.

By way of example, the following are some of the train-the-trainers courses offered by the Education Centre for Trainers and Supervisors (Utrecht). Many of the courses include simulation with the aid of specialized actors in order to enable participants to practise questioning, functional discourse and other verbal interactions.

1. Support and supervision at the workplace
2. Independent learning guidance
3. Workplace management
4. Supplementary module: the learner as an individual client

5. Project management for training schemes
6. Time management
7. Course for examiners
8. Industrial training management.

8 Useful addresses

This list should be consulted in combination with the addresses listed in Section 9.

- 8.1 National authorities** Most of these organizations are also accessible on the Internet, e.g. Ministry of Education: <http://www.minocw.nl>.

Ministry of Education, Culture and Science
(Ministerie van onderwijs, cultuur en wetenschappen)
Europaweg 4
P.O. Box 25000
2700 LZ Zoetermeer
Tel.: +31-79-3531911
Fax: +31-79-3512651

Ministry of Agriculture, Nature Management and Fisheries
(Ministerie van landbouw, natuurbeheer en visserij)
Bezuidenhoutseweg 73
P.O. Box 20401
2500 EK Den Haag
Tel.: +31-70-3793911
Fax: +31-70-3815153

Education Council
(Onderwijsraad)
Nassaulaan 6
2514 JS Den Haag
Tel.: +31-70-3637955
Fax: +31-70-3561474

CBA; Central Manpower Services Board
(Centraal bestuur arbeidsvoorziening)
Visseringlaan 26
P.O. Box 5814
2280 HV Rijswijk
Tel.: +31-70-3130911
Fax: +31-70-3130260

- 8.2 Higher education** VSNU; Association of Universities in the Netherlands
(Vereniging van samenwerkende universiteiten)
Leidseveer 35
P.O. Box 19270
3501 DG Utrecht
Tel.: +31-30-2363888
Fax: +31-30-2333540

HBO-Raad; Association of Dutch Polytechnics and Colleges
(Vereniging van Hogescholen)
Riviervismarkt 2
P.O. Box 123
2501 CC Den Haag
Tel.: +31-70-3624951
Fax: +31-70-3655816

NUFFIC; Dutch Organization for International Cooperation in
Higher Education
P.O. Box 90734
2509 LS Den Haag
Tel.: +31-70-3510510
Fax: +31-70-3510513

University of Rotterdam (EUR)
Burgemeester Oudlaan 50
P.O. Box 1738
3000 DR Rotterdam
Tel.: +31-10-4081111
Fax: +31-10-4520204

Tilburg University (KUB)
Warandelaan 2
P.O. Box 90153
5000 LE Tilburg
Tel.: +31-13-4669111
Fax: +31-13-4663019

University of Nijmegen (KUN)
Comeniuslaan 4
P.O. Box 9102
6500 HC Nijmegen
Tel.: +31-24-3616161
Fax: +31-24-3564606

Wageningen Agricultural University (LU)
Costerweg 50
P.O. Box 9101
6700 HB Wageningen
Tel.: +31-317-489111
Fax: +31-317-484449

Nijenrode
University of Business Administration
Straatweg 25
3621 BG Breukelen
Tel.: +31-346-291211
Fax: +31-346-264204

Open University
Valkenburgweg 167
P.O. Box 2960
6401 DL Heerlen
Tel.: +31-45-5762222
Fax: +31-45-5711486

University of Groningen (RUG)
Broerstraat 5
P.O. Box 72
9700 AB Groningen
Tel.: +31-50-3639111
Fax: +31-50-3635280

Leiden University (RUL)
Stationsweg 46
P.O. Box 9500
2300 RA Leiden
Tel.: +31-71-5272727
Fax: +31-71-5273118

University of Limburg (RL)
Bouillonstraat 3
P.O. Box 616
6200 MD Maastricht
Tel.: +31-43-3882222
Fax: +31-43-3252195

Delft University of Technology (TUD)
Julianalaan 134
P.O. Box 5
2600 AA Delft
Tel.: +31-15-2789111
Fax: +31-15-2786522

Eindhoven University of Technology (TUE)
Den Dolech 2
P.O. Box 513
5600 MB Eindhoven
Tel.: +31-40-2479111
Fax: +31-40-2445187

University of Amsterdam (UvA)
Spui 21
P.O. Box 19268
1000 GG Amsterdam
Tel.: +31-20-5259111
Fax: +31-20-5252136

University of Twente (UT)
Drienerlo
P.O. Box 217
7500 AE Enschede
Tel.: +31-53-4899111
Fax: +31-53-4357132

Utrecht University (RU)
Heidelberglaan 8
P.O. Box 80125
3508 TC Utrecht
Tel.: +31-30-2535198
Fax: +31-30-2521818

'Vrije Universiteit' of Amsterdam
vd Boechorststraat 7
P.O. Box 7161
1007 MC Amsterdam
Tel.: +31-20-5489111
Fax: +31-20-6428998

**8.3 Secondary
vocational education**

BVE; Association for Vocational and Adult Education
(Vereniging voor Beroepsonderwijs en Volwasseneneducatie)
Henrica van Erpweg 2
P.O. Box 196
3730 AD De Bilt
Tel.: +31-30-2219811
Fax: +31-30-2202506

BVE-Innovation Process Coordination
Regulierenring 16
P.O. Box 145
3980 CC Bunnik
Tel.: +31-30-6571071
Fax: +31-30-6570900

8.4 Apprenticeship

COLO; Central Office of the National Apprenticeship Training
Bodies
Bredewater 8
P.O. Box 7259
2701 AG Zoetermeer
Tel.: +31-79-3523000
Fax: +31-79-3515478

ECABO; (economics)
Landelijk orgaan economische en administratieve beroepscategoriën
Amsterdamseweg 16
P.O. Box 1230
3800 BE Amersfoort
Tel.: +31-33-4613342
Fax: +31-33-4612828

GOC; (printing)
Instituut voor de grafische- en communicatieindustrie
De Schuttery 2
P.O. Box 347
3900 AH Veenendaal
Tel.: +31-318-539111
Fax: +31-318-529969

INNOVAM; (automotive)
Het opleidings- en examencentrum van de mobiliteitsbranche
Structuurbaan 2
P.O. Box 2360
3430 DV Nieuwegein
Tel.: +31-30-6087777
Fax: +31-30-6087700

Intechnum; (fitting)
Het kennis- en technologiecentrum voor de installatietechniek
P.O. Box 484
3440 AL Woerden
Tel.: +31-344-437437

IVOB; (security)
Instituut vorming opleiding beveiliging
Achter het Veer 14
4191 AD Geldermalsen
Tel.: +31-345-572833
Fax: +31-345-573065

KOC Nederland; (beauty & hair)
Het kenniscentrum voor uiterlijke verzorging
Bisonspoor 3000
P.O. Box 1444
3600 BK Maarssen
Tel.: +31-346-592211
Fax: +31-346-570532

KOFS; (shipping)
Stichting koninklijk onderwijsfonds voor de scheepvaart
N.Z. Voorburgwal 120-126
P.O. Box 19219
1000 GE Amsterdam
Tel.: +31-20-6240941
Fax: +31-20-6209629

LOBAS; (agriculture)
Landelijke organisatie beroepsopleidingen agrarische sectoren
P.O. Box 601
6710 BP Ede
Tel.: +31-318-649500

LSBL; (food technology)
Landelijke stichting beroepsopleiding levensmiddelenindustrie
Kruizemuntstraat 28
P.O. Box 1244
7301 BL Apeldoorn
Tel.: +31-55-3664022
Fax: +31-55-3669903

Onderwijscentrum Horeca; (catering)
Landelijk orgaan beroepsonderwijs horeca, instellingskeuken,
contractcatering en tourisme/recreatie
J. Bellamyhove 34
P.O. Box 303
2700 AH Zoetermeer
Tel.: +31-79-3711711
Fax: +31-79-3212327

OVD-Groep; (distribution)
Stichting landelijk orgaan opleidingen voor de distributie
Horapark 7
P.O. Box 331
6710 BH Ede
Tel.: +31-318-649999
Fax: +31-318-640646

SBW; (civil engineering)
Stichting beroepsonderwijs weg- en waterbouw
Kampenringweg 43
P.O. Box 279
2800 AG Gouda
Tel.: +31-182-578200
Fax: +31-182-537728

SH&M; (timber)
Stichting hout en meubel
Johan de Wittlaan 303
3445 AG Woerden
Tel.: +31-348-420132
Fax: +31-348-423038

SOB&B; (bakery)
Stichting opleidingen brood en banket
Agro business park 75-83
P.O. Box 360
6700 AJ Wageningen
Tel.: +31-317-424344
Fax: +31-317-425569

SOM; (metalworking)
Opleidingen metaal
Watermolenlaan 4
P.O. Box 83
3440 AB Woerden
Tel.: +31-348-410955
Fax: +31-348-419611

OVDB; (care)
Stichting landelijk orgaan van het beroepsonderwijs
gezondheidszorg, dienstverlening, welzijn en sport
Runnenburg 34
P.O. Box 131
3980 CC Bunnik
Tel.: +31-30-6570244
Fax: +31-30-6567974

SLHV; (harbour transport)
Stichting ter bevordering van het leerlingstelsel in het haven- en
vervoerbedrijf
Waalhaven zz 16
3088 HH Rotterdam
Tel.: +31-10-4298655
Fax: +31-10-4951508

SVB; (construction)
Stichting vakopleiding bouwbedrijf
Eleanor Rooseveltlaan 29
P.O. Box 3011
2700 KG Zoetermeer
Tel.: +31-79-3685848
Fax: +31-79-3620006

SVGB Onderwijscentrum; (optics)
Stichting vakopleiding voor gezondheidstechnische beroepen
Kruisweg 643-647
P.O. Box 701
2130 AS Hoofddorp
Tel.: +31-20-6531536
Fax: +31-20-6531371

SVO; (butchery)
Opleiding voor de vleessector
Pompelaan 8
P.O. Box 13012
3507 LA Utrecht
Tel.: +31-30-2717121
Fax: +31-30-2733374

SVS; (painting and decorating)
Opleidingscentrum voor het schilders- en stukadoorsbedrijf &
reclame- en presentatietechniek
Noordkade 94
P.O. Box 76
2740 AB Waddinxveen
Tel.: +31-182-641111
Fax: +31-182-619282

Vakopleiding Transport en Logistiek; (transport)
Anth. van Leeuwenhoekweg 8
P.O. Box 112
2400 AC Alphen aan de Rijn
Tel.: +31-172-448606
Fax: +31-172-431814

VaPro; (process industry)
Stichting vakopleiding procesindustrie
Overgoo 3a
2266 JZ Leidschendam
Tel.: +31-70-3209388
Fax: +31-70-3205186

VAS; (footwear)
Stichting vakopleiding schoenindustrie
Reitseplein 1
5037 AA Tilburg
Tel.: +31-13-4654455
Fax: +31-13-4686872

VEV; (electrical engineering)
Landelijk orgaan beroepsonderwijs elektrotechniek
Oude Barneveldseweg 65
P.O. Box 275
3860 AG Nijkerk
Tel.: +31-33-2479393
Fax: +31-33-2460273

VOC; (coachwork)
Stichting vakopleiding carrosseriebedrijf
Warmonderweg 1-5
P.O. Box 294
2170 AG Sassenheim
Tel.: +31-252-265265
Fax: +31-252-221040

VOC/BETEX; (textiles)
Onderwijscentrum textiel en confectie
Keurenplein 9
1069 CD Amsterdam
Tel.: +31-20-6198888
Fax: +31-20-6108233

VVA; (tailoring, jewelry and ceramics)
Maatkleding, goud, zilver en keramische beroepen
De Steiger 7A
P.O. Box 50035
1305 AA Almere
Tel.: +31-36-5315700
Fax: +31-36-5319820

**8.5 Educational
support services**

AOC; Agricultural Education Centres
(Agrarische opleidingen centra)
Zandlaan 27
P.O. Box 458
6710 BL Ede
Tel.: +31-838-640666
Fax: +31-838-641610

APS; Non-denominational Educational Advisory Centre
(Algemeen pedagogische studiecetrum)
P.O. Box 85475
3508 AL Utrecht
Tel.: +31-30-2856600

CPS; Protestant Educational Advisory Centre
(Christelijk pedagogisch studiecetrum)
P.O. Box 1592
3800 BN Amersfoort
Tel.: +31-33-4534343
Fax: +31-33-2541246

KPC; Catholic Educational Advisory Centre
(Katholiek pedagogisch centrum)
Kooikersweg 2
P.O. Box 482
5201 AL 's-Hertogenbosch
Tel.: +31-73-6247222
Fax: +31-73-6247294

SLO; National Institute for Curriculum Development
(Instituut voor leerplanontwikkeling)
Boulevard 1945 nr. 3
P.O. Box 2041
7500 CA Enschede
Tel.: +31-53-4840840
Fax: +31-53-4307692

CITO; National Institute for Educational Measurement
(Instituut voor toetsontwikkeling)
Nieuwe Oeverstraat 65
P.O. Box 1034
6801 MG Arnhem
Tel.: +31-85-3521111
Fax: +31-85-3521356

CINOP; Centre for Training Innovation
Centrum voor innovatie van opleidingen
Pettelaarpark 1
P.O. Box 1585
5200 BP 's-Hertogenbosch
Tel.: +31-73-6800800
Fax: +31-73-6123425

LOCV; National Protestant Organization for Part-time Education
for Young Working People
(Landelijke organisatie voor christelijk vormingswerk)
Regulierenring 2E
3981 LB Bunnik
Tel.: +31-30-6564709
Fax: +31-30-6561062

LOVWJ; National Organization for Part-time Education for Young
People
(Landelijke organisatie vormingswerk voor jongeren)
Catharijnesingel 33
P.O. Box 9175
3506 GD Utrecht
Tel.: +31-30-2369228
Fax: +31-30-2367945

8.6 Industrial training SER; Socioeconomic Council
(Sociaal-economische raad)
Bezuidenhoutseweg 60
P.O. Box 90405
2509 LK Den Haag
Tel.: +31-70-3499499
Fax: +31-70-3832535

VNO; Association of Dutch Enterprises
(Verbond van Nederlandse ondernemingen)
Prinses Beatrixlaan 5
P.O. Box 93093
2509 AB Den Haag
Tel.: +31-70-3497373
Fax: +31-70-3819508

FNV; Dutch Union Federation
(Federatie Nederlandse vakbeweging)
Naritaweg 10
P.O. Box: 8456
1005 AL Amsterdam
Tel.: +31-20-5816300
Fax: +31-20-6844541

VETRON; Association of Dutch Training Institutions
(Vereniging van trainings- en opleidingsinstituten in Nederland)
Van Stolkweg 34
P.O. Box 84200
2508 AE Den Haag
Tel.: +31-70-3505995
Fax: +31-70-3544067

CEDEO; Centre for Documentation and Information on
Extramural Training
(Stichting centrum documentatie en voorlichting bedrijfsexterne
opleidingen)
Nassauplein 13
P.O. Box 638
3500 AP Utrecht
Tel.: +31-30-2963295
Fax: +31-30-2944410

NVvO; Dutch Association of Trainers
(Nederlandse vereniging voor opleidingsfunctionarissen)
Woeste Hoefweg 80
7351 TB Hoenderlo
Tel.: +31-55-5062733
Fax: +31-55-5063560

9 Institutions and courses

This section examines the teacher training institutes providing the initial and further (in-service) training programmes for vocational teachers and trainers described in sections 6 and 7.

Over the past decade the traditional institutions have been undergoing a merging process. They now form the 'education sector' within huge multisectoral colleges of higher vocational education (hogescholen).

Some new trends are already emerging in teacher training. A recently established national committee on process management in teacher training suggested that incisive measures should be taken in order to reinforce the position of teacher training and to ensure:

- stronger organization: all institutions involved in or with an interest in teacher training (including individual researchers) should cooperate within a single infrastructure (a regional educational network) in order to raise the supply of and demand for teacher training courses;
- harmonized programmes: a (70%) common core curriculum for secondary education teachers with one variant for general education and another variant for vocational and adult education;
- more effective further training: teacher training colleges should establish a network at national level to develop national curricula

for post-initial courses leading to certificates attesting to additional competence in teaching, examination design, curriculum development, pupil guidance and communication technology (these specializations are expected to be associated with improved career prospects).

9.1 Teacher training institutes for vocational secondary education

Table 21 shows a breakdown of the teacher training subject coverage by institution. As mentioned in sections 6 and 7, whereas STOAS and Fontys PTH offer a range of agricultural and technical subjects, the other institutes cover one or more vocational subjects in addition to general subject areas.

The programmes are offered in full-time study format, part-time study format or in both formats. The locations of the various institutes are indicated on the map in Section 1.

	agricultural subjects	technical subjects	business economics	health care	home economics	social skills	technology	textile crafts
STOAS	x							
Fontys PTH		x					o	
Algemene Hogeschool Amsterdam			x					x
Hogeschool Gelderland			x	+	+			x
Hogeschool Holland			x	x	x		o	
Haagse Hogeschool			o					
Noordelijke Hogeschool Leeuwarden			x	+	+		o	x
Hogeschool Rotterdam & O			x	+	+		o	x
Katholieke Leergangen Sittard			x				o	
Katholieke leergangen Tilburg			x	+	x	+		x
Hogeschool Midden Nederland			x	x		x	o	
Christelijke hogeschool Windestein			x					x

+ = full-time
o = part-time
x = full-time & part-time

Table 21: Initial teacher training programmes offered by teacher training colleges for vocational secondary education

For applications or further information please contact:

Hogeschool van Amsterdam
Wibastraat 2-4
1091 GM Amsterdam
Tel.: +31-20-5995555
Fax: +31-20-5995771

Hogeschool van Arnhem en Nijmegen
Sonsbeekweg 34
6814 BD Arnhem
Tel.: +31 85-3713131
Fax: +31 85-4452207

Hogeschool Holland
Wildenborch 6
1112 XB Diemen
Tel.: +31 20-4951111
Fax: +31 20-6994636

Haagse Hogeschool
Louis Couperusplein 2
2514 HP 's-Gravenhage
Tel.: +31 70-3108888
Fax: +31 70-3652821

Noordelijke Hogeschool Leeuwarden
Oostergrachtswal 39
8921 AA Leeuwarden
Tel.: +31 58-2934466
Fax: +31 58-2934474

Hogeschool Rotterdam & Omstreken
Rochussenstraat 125
3015 EJ Rotterdam
Tel.: +31 10-4361233
Fax: +31 10-4367033

Hogeschool van Utrecht
Archimedeslaan 16
3584 BA Utrecht
Tel.: +31 30-2547100
Fax: +31 30-2517851

Christelijke Hogeschool Windesheim
Campus 2-6
8017 CA Zwolle
Tel.: +31 38-4699911
Fax: +31 38-4659277

Agrarische Pedagogische Hogeschool (STOAS)

- residence Wageningen:

Stadsbrink 427
6707 AE Wageningen
Tel.: +31 837-423355

- residence 's-Hertogenbosch

Vlijmenseweg 50A
5223 GW 's-Hertogenbosch
Tel.: +31 73-6214745

- residence Dronten

De Drieslag 1
8251 JZ Dronten
Tel.: +31 321-312824

Fontys Pedagogisch Technische Hogeschool Nederland (PTH)

- residence Eindhoven

Het Eeuwsel 2
5612 AZ Eindhoven
Tel.: +31 40-2474706
Fax: +31 40-2440045

- residence Amsterdam

Schipluidenlaan 22
1062 HE Amsterdam
Tel.: +31 20-6693636
Fax: +31 20-6143453

- residence Zwolle

Campus 2-6, Geb. E.-K102
8017 CA Zwolle
Tel.: +31 38-4650923
Fax: +31 38-4654299

- residence Rotterdam

G.J. de Jonghweg 4
3015 GG Rotterdam
Tel.: +31 10-4360799
Fax: +31 10-4367687

- residence (i)VBO Utrecht

Kaap Hoorndreef 40
3563 AV Utrecht
Tel.: +31 30-2618114
Fax: +31 30-2618343.

9.2 Preparation for teaching in higher vocational education

These courses are provided by teams of experts under the responsibility of 'clusters' of universities and teacher training institutes. It is important that the provision and subject coverage be spread across as many regions as possible so that annual access is guaranteed to the few students for whom the courses are provided.

	1	2	3	4	5	6
1 RU Groningen TU Twente Noordelijke Hogeschool Leeuwarden	x	x		x		
2 Hogeschool Gelderland Katholieke Universiteit Nijmegen		x		x		
3 Vrije Universiteit Amsterdam Hogeschool Holland		x	x	x		
4 Algemene Hogeschool Amsterdam Universiteit van Amsterdam Hogeschool Haarlem Hogeschool Amsterdam Interconf. PABO Amsterdam	x					
5 Fontys PTH Technische Universiteit Eindhoven HS. Kath. Leergangen Tilburg	x	x		x		
6 Hogeschool Nijmegen Hogeschool Midden Nederland Rijksuniversiteit Limburg			x			
7 Hogeschool Midden Nederland Rijksuniversiteit Utrecht		x		x		
8 Hogeschool voor de kunsten Arnhem/Amsterdam					x	
9 Landbouwniversiteit Wageningen						x
1 = technical/nautical sector 2 = economical sector 3 = health care sector 4 = social work sector 5 = arts sector 6 = agricultural sector						

Table 22: Survey of institutional clusters providing sector-based preparatory courses for teaching in higher vocational education

9.3 Courses for trainers

As the 'train-the-trainers' market is an open market, a variety of institutions offer courses and other types of training for trainers in industry. Only the most important can be mentioned here. The corresponding addresses are listed in Section 8.

The Training Centre for Trainers and Supervisors is a department of Fontys PTH which offers courses leading to formal certificates under

the supervision of the Central Office of the National Apprenticeship Training Bodies.

Fontys Training Centre for Trainers and Supervisors
(Opleidingscentrum voor praktijkopleiders en consultants)
Kaap Hoorndreef 40
3563 AV Utrecht
Tel.: +31 30-2628144
Fax: +31 30-2618343

Additional specialized branch-specific courses are run by the corresponding national apprenticeship bodies.

Fontys PTH-Contract and Agribusiness are departments of, respectively, Fontys PTH (Eindhoven) and STOAS (Wageningen). They specialize in courses for trainers in the technical and agricultural sectors.

Some branch organizations exist to guarantee quality standards among training providers.

10 Sources and references

CBS; Nationale rekeningen; Den Haag; 1991.

CBS; Overgangen binnen het onderwijs en intrede in de maatschappij; onderwijsmatrix 1991; Heerlen/Voorburg; 1993.

CBS; Volwasseneneducatie; beroepsbegeleidend onderwijs en vormingswerk; cursorisch beroepsonderwijs 1991/1992 en 1992/1993; Voorburg/Heerlen; 1993.

CBS; Zakboek onderwijsstatistieken; Den Haag; 1995.

CBS; Statistical Yearbook 1996 of the Netherlands; The Hague; 1996.

COLO; Overzicht aantallen leerovereenkomsten per 20 september 1996; Zoetermeer; 1996.

Ministry of Foreign Affairs;
The Netherlands in Brief; Den Haag; 1994.

Ministry of Foreign Affairs;
The Kingdom of the Netherlands; Education and Science;
Den Haag; s.a.

- Ministry of Education (Ministerie van Onderwijs):
Secondary Education Act (Wet voortgezet onderwijs)
Higher Education and Research Act (Wet hoger onderwijs en onderzoek)
Adult and Vocational Education Act (Wet educatie beroepsonderwijs)
- Ministerie van Onderwijs, Cultuur en Wetenschappen;
Vitale lerarenopleidingen; Den Haag; 1995.
- Ministerie van Onderwijs;
Uitleg nr. 3 & 4, 7 februari 1996.
- NVOB; Collective agreement construction sector (Nederlands Verbond van ondernemers in de Bouwnijverheid; UTA COA); Baarn; 1996.
- Procesmanagement lerarenopleidingen;
scholen voor de toekomst;
Den Haag; 1996.
- Vroegop, P;
Teacher education in the Netherlands; In: European Conference Teacher Education In Europe; Universitat Osnabruck. 23/24 June 1995.

11 Acronyms and abbreviations

AVO	General secondary education (Algemeen voortgezet onderwijs)
BAVO	Basic education (Basis Vorming)
BBO	Theoretical apprenticeship training (Beroepsbegeleidend onderwijs)
bc.	bachelor qualification (HBO title)
BVE	Association for Vocational Training and Adult Education (Vereniging voor beroepsonderwijs en volwasseneneducatie)
CINOP	Centre for Training Innovation (Centrum voor innovatie van opleidingen)
CITO	National Institute for Educational Measurement (Centraal instituut voor toetsontwikkeling)
CBS	Netherlands Statistics Office (Centraal bureau voor de statistiek)
COLO	Central Office of the National Apprenticeship Training Bodies (Vereniging landelijke organen beroepsonderwijs)
ECU	European Currency Unit (Europese munteenheid)
HAS	Higher agricultural school (Hogere agrarische School)
HAVO	Senior general secondary education (Hoger algemeen voortgezet onderwijs)

HBO	Higher vocational education (Hoger beroepsonderwijs)
HE	Higher education (Hoger onderwijs)
ing.	'ingenieur' qualification (HBO title)
LBO	Junior vocational education (Lager Beroepsonderwijs)
LIO	student teacher project (Leraar in opleiding)
LOCV	Protestant Organization for Part-time Education for Young People (Landelijke organisatie voor Christelijk vormingwerk)
LOVW	National Organization for Part-time Education for Young Working People (Landelijke organisatie vormingswerk)
MAS	Senior secondary agricultural school (Middelbare Agrarische School)
MAVO	Junior general secondary education (Middelbaar algemeen voortgezet onderwijs)
MBO	Senior secondary vocational education (Middelbaar beroepsonderwijs)
MEAO	Senior secondary economic and administrative education (Middelbaar Economisch Administratief Onderwijs)
MTS	Senior secondary technical education (Middelbaar Technisch Onderwijs)
NLG	Dutch guilder (Nederlandse gulden)
NUFFIC	Netherlands University Foundation for International Cooperation
OECD	Organization for Economic Cooperation and Development (Organisatie voor economische samenwerking en ontwikkeling)
OPO	Training Centre for Trainers and Supervisors (Opleidingscentrum voor praktijkopleiders en consulenten)
PTH	The Netherlands Technical Teacher Training College (Pedagogisch Technische Hogeschool Nederland) part of Fontys Hogescholen
R&D	Research and development (Onderzoek en ontwikkelingswerk)
ROA	Regional education consultative committee (Regionaal adviesbureau voor het onderwijs)
ROC	Regional training centre (Regionaal opleidingscentrum)
SLO	National Institute for Curriculum Development (Stichting leerplanontwikkeling)
STOAS	Foundation for the Development of Agricultural Education and Training (Stichting tot ontwikkeling van agrarische onderwijskunde en scholing)
SVM	Sector Training and Innovation in Senior Secondary Vocational Education (Sectorvorming en vernieuwing in het beroepsonderwijs)

SVO	Foundation for Educational Research (Stichting voor onderzoek van het onderwijs)
SWOP	Software Development Point (Software ontwikkel punt)
VAVO	Adult general secondary education (Voortgezet algemeen volwassenenonderwijs)
VBO	Preparatory vocational education (Vorbereidend beroepsonderwijs)
VO	Secondary education (Voortgezet onderwijs)
VWO	Pre-university education (Vorbereidend wetenschappelijk onderwijs)
WEB	Adult and Vocational Education Act (Wet educatie en beroepsonderwijs)
WO	University education (Wetenschappelijk onderwijs)
WOV	Education Support Structure Act (Wet op de onderwijsverzorging)

Teachers and trainers in vocational education and training

Volume 3: Austria, Belgium, Greece, Luxembourg and the Netherlands

Project Coordinator: Peter van Engelshoven — Project Manager: Pekka Kämäräinen

This book was written on behalf of CEDEFOP by **Hanspeter Tusch, Albert de Winter, Stamatis Paleocrassas, Jerry Lenert, Alexis Werné and Derk Oddens**

Luxembourg: Office for Official Publications of the European Communities

1997 – 225 pp. – 21.0x29.7 cm

ISBN 92-828-0613-8

Catalogue number: HX-06-97-060-EN-C

Price (excluding VAT) in Luxembourg: ECU 10.50

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HX-06-97-060-EN-C

Price (excluding VAT) in Luxembourg: ECU 10.50

ISBN 92-828-0613-8



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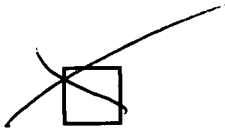


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