

# Teacher Education in The Netherlands

## *Change of gear*

Marco Snoek and Douwe Wielenga

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# Introduction: Change of Gear

Describing a complex and dynamic topic such as teacher education is a nearly impossible and precarious task. First of all because teacher education in Europe is in a state of transition and a choice must be made: do we write a clean description like a snapshot of the present state or do we try to make a more dynamic description of the trends and developments. Secondly because the perspectives of the authors play an important role in the picture that is presented. This is true in the case of the snapshot as well as in the dynamic case.

In this document that we prepared for UNESCO-CEPES, the first part contains a description of the context of teacher education by showing the formal educational system, including a general description of the educational trends that affect the system. We also focus on the teaching profession: licenses, working conditions and the provisions for educating teachers.

In the second part we describe a number of trends that have a very strong influence on teacher education in The Netherlands, showing the growing emphasis on school based teacher education and on competence based teacher education.

In the third and fourth part we focus on the consequences for schools and for teacher educators by describing changes, developments and demands with respect to these players.

Finally we summarize by putting forward some statements based on the Dutch situation.

We do believe that the exchange of knowledge about the developments in the European countries is useful and hope that the Dutch situation might be interesting for other countries. Just as in other countries a challenge in teacher education is to reduce the gap between theory and practice. Several initiatives have been undertaken to reduce this gap: by increasing the amount of practice time in teacher education and by introducing new educational approaches like problem based learning. An important change agent is the redefinition of the goals of teacher education in terms of integrated competences, which give meaning to educational and subject knowledge and skills by linking them directly to the demands of authentic work in schools.

In the last two years a new priority surfaces: the need to reduce the growing shortage of teachers. The many initiatives to deal with this shortage accelerate the above-mentioned initiatives *and* put them under pressure. In this document we state that the present situation is changing gear, which leads to a dynamic situation with respect to teacher education in The Netherlands. New and unconventional ideas are welcomed and tried out. However, the pressure underlying these developments runs the risk of leading to a lack of reflection and distance because there is so little time for critical observation (Lunenberget al, 2000).

Buchberger and his colleagues (2000) state that there is a need for new approaches in teacher education. Despite a general agreement on the necessity of dynamic conceptions of teacher education, in principle most systems and models of teacher education in the member states of the European Union are organised along traditional lines. The situation in The Netherlands may lead to new dynamic conceptions for teacher education. In this respect, the Dutch situation is a fruitful context in which to gain insights into new ways for teacher education.

# The context of Teacher Education in The Netherlands

## *The Dutch educational system*

In the Dutch educational system we can distinguish several areas: pre-school, primary education, secondary education, middle vocational education and higher education.

In this chapter the official educational system is described, in combination with the most important changes that are taking place. Background information can be found on the website of the Dutch ministry of Education:

<http://www.minocw.nl/english>.

## Pre-school

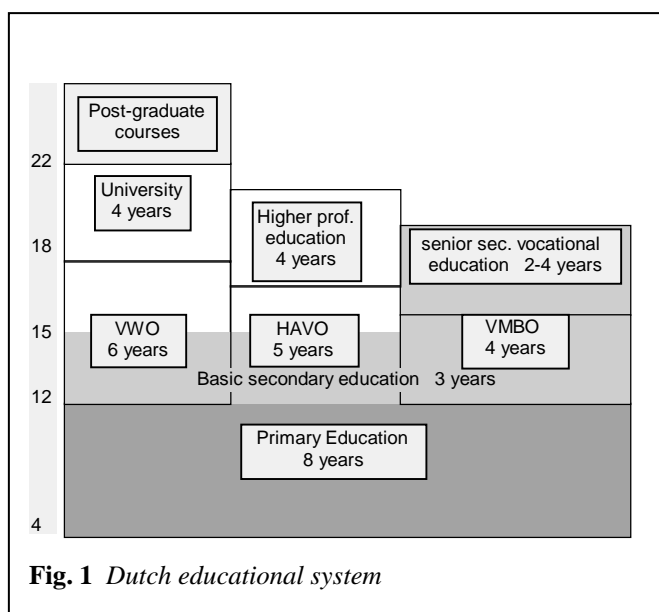
Pre-school education is not formalised in the Netherlands. There is a system of daycare-centers, where children from the age from 0 to 4 can stay during daytime. However, in general this provision is not seen as a part of the educational system. It is the responsibility of the Ministry of Social Affairs and Employment. Pre-school day-

care is seen as a provision to support parents who are working. Staff-members in daycare-centers are not called teachers and their required education is at middle vocational level and not regarded as teacher education.

Problems with the integration of children of immigrants in primary school and their lack of success in schools however stimulate the introduction of educational programs aiming at the development of the Dutch language skills of children of immigrants in the pre-school age, leading to a more educational approach in daycare-centers.

## Primary education

Primary education takes place at primary schools, offering general education for children from the age from 4 till 12. Compulsory education starts at the age of 5, but 98% of all children starts primary education at the age of 4. The first two years in primary schools are play-oriented and at the age of 6 (group 3), the actual reading-, writing- and arithmetic-education starts. There is a national curriculum for primary education, where the goals are set. These goals are evaluated in national standardised tests. These tests are not compulsory, but more and more the Inspectorate requires



**Fig. 1** Dutch educational system

the outcomes of these tests for comparison of pupil and school achievements. The end test at the age of 12 ('CITO-test') is in most cases compulsory to be accepted at a school for secondary education.

### *Educational Opportunities Policy*

To reduce the number of drop-outs and the risk that pupils are lacking behind in their development, the government started an 'educational opportunities' policy, especially focused on primary schools in the large urban communities like Amsterdam, Rotterdam, The Hague and Utrecht. The number of pupils in this category adds to some 450,000 of the 1.6 million pupils at primary schools, of whom 200,000 are children of immigrants.

Schools with disadvantaged pupils have to give priority to Dutch language learning, arithmetic and social skills.

Schools are encouraged to introduce the latest methodology for teaching Dutch. Computers can be a great help in tailoring teaching programmes to individual children, so money is invested in educational software, hardware and connections for schools.

Schools can offer better opportunities with smaller classes, so the number of pupils per class in the first four years of primary education is being reduced to an average of 20 pupils per class. The budgets for class-size reduction can also be used to appoint classroom assistants.

### *Inclusive Schools*

Since 1991 there is a policy to create inclusive schools in primary education, integrating special education and regular primary education where possible. Of course handicapped pupils in regular education need special care facilities. This is facilitated by providing handicapped pupils with a financial "backpack", which makes it possible, that the costs for these facilities can be covered by regular primary schools (co-operating with schools for special education). These pupil-connected budgets make it possible for parents of pupils with a sensory, mental, physical or social handicap to choose between special education and a regular primary (or secondary) school. Co-operation between schools for special education and regular education ensures the shared use of expertise.

Another form of inclusiveness is the strong movement in the Netherlands to include the school in a strong network of facilities for the community: education, welfare, sport and family and childcare. The goal of this movement is to increase the participation of children in society, education and recreation, to reduce possible disadvantages of children and to increase their social skills. This movement leads to "broad" schools, with strong connections and co-operation with their local environment. In some cases, these schools focus at offering after school activities, either to keep children "off the street" or to involve them in useful activities in their neighbourhood, connecting school with "real life". The role of a teacher in such a school is changing. The government supports local initiatives to create broad schools, both in primary and lower secondary education.

## Secondary education

### *Basic secondary education*

About 700 schools provide secondary education for 900.000 pupils. There are three levels of secondary education differing in their length, focus and programme. All levels provide basic secondary education (**Basisvorming**), which usually lasts three years and consists of a broad core curriculum for all pupils. This curriculum was introduced in 1993 and was aimed at a renewal of both educational approach (more independent work, co-operation between pupils and carrying out small research projects) and learning goals (aimed at the developments of skills, the application of knowledge, the connection between subjects and the relation with the daily life of students). Related subjects can be combined in a subject area like 'nature' (physics, chemistry and biology) or 'mankind and society' (history, geography, social science and economics) and certain topics are discussed in more than one subject (consumer education, environmental issues, etc.). Although the goals are the same for all pupils, the level they will reach at the end of the basic secondary education will differ according to the ability of the pupils. Schools had their own responsibility in defining the way in which they arrange their programmes according to the aims of the basic secondary education. In a recent report the Inspectorate concluded that most of the new and innovative aims of the basic secondary education were not met (Inspectie van het Onderwijs, 2000).

### *VMBO*

The four-year secondary education (**VMBO** = pre-vocational secondary education) focuses at a preparation for senior secondary vocational education. This new type of secondary education, which offers education for 60% of all pupils in secondary education, is a merging of the MAVO (junior general secondary education) and the VBO (pre-vocational education). Within the VMBO there are five different programmes: a theoretical programme, a combined theoretical and vocational programme, a middle-management vocational programme, a basic vocational programme and finally a practical training programme. All programmes can be focused on either engineering & technology, business, care & welfare or agriculture. Except for the last programme, all programmes are not considered as final education, but as preparatory for secondary vocational education.

The reason for transforming this type of education was the need to offer attractive education for the lower ability pupils leading to a qualification that gives good opportunities on the labour market. However, especially for the basic vocational programme the debate is focusing on the question whether the programme (in connection with the basic secondary education) is not too theoretical.

### *HAVO / VWO*

The five-year secondary education (**HAVO** = senior general secondary education) focuses at preparing for higher professional education. The six-year secondary education (**VWO** = preparatory academic education, including the 'atheneum', the 'gymnasium' and the 'lyceum') prepares for university education. The first three years of both HAVO and VWO cover the basic secondary education and the last two or three years pupils have to choose a stream aiming at a broad professional field (science & technology, science & health, economics & society or culture & society). In each stream there are compulsory subjects for all pupils, subjects compulsory for pupils within that stream and optional subjects. Within each stream, emphasis is put on the development of skills connected with independent learning, information processing, communication and research. The restructuring of HAVO and VWO is aiming at reducing the gap between secondary education and higher education. Next to the creation of the four streams this goal must be achieved by putting more emphasis on independent study and planning. Pupils will be encouraged to do more and more work on their own or in small groups, under the supervision of a teacher. This approach (the 'studyhouse') is based not on a set number of teaching periods, but on the time needed by the average pupil to master a particular amount of material, whether at school or at home. For pupils, the school year consists of approximately forty working weeks, each lasting forty hours. This must stimulate the responsibility of pupils for their own learning process.

The number of schools offering all three types of secondary education in one building is diminishing. More and more, schools offer VMBO and HAVO/VWO in different locations.

## **Senior secondary vocational education**

Adult and vocational education (**BVE**) offers a very broad range of educational courses, differing from courses for newly arrived immigrants and courses for adults to senior secondary vocational education for nearly two-third of all Dutch young people. This senior secondary vocational education aims at preparing students for a variety of vocations at lower and middle level. The length of the courses varies from two to four years.

In the last 5 years the change has been formidable. The institutes have coagulated into large regional training centres (ROC's) with tens of thousands of students, with strong links with the labour market. The educational philosophy has also changed. More emphasis is laid on flexibility and employability. The many different curricula focus on core competencies connected with new forms of learning: work based learning, practical learning and digital learning. Since there is a great need of qualified workers, the training centres are developing more flexible courses, taking into account qualifications that are gained through prior educational or work based experiences.

## Higher education

The system of higher education covers both higher professional education (**HBO**, 'hogescholen' = institutes for higher professional education) and academic education in **universities**. Both offer four-year courses (although in the near future this will change due to the introduction of a structure with Bachelor- Master courses, as a result of the Bologna declaration). The HBO-courses are focused on clearly defined professions or professional areas and include work field experience, whereas the university courses are focused on academic subjects and in general include research experience. The hogescholen do not have research facilities and therefore are in general not involved in research activities. The programmes are practice based. However there is a tendency in hogescholen to start research programmes, focussing on issues and problems in professions. Next to that, there is a growing co-operation between universities and hogescholen, leading to some first mergings between these two types of higher education.

The curricula in higher education have a modular structure. There are no final exams, a student graduates when he has the total number of credit points (168 credit points, 1 credit point equals a average of 40 study hours). The intake requirements are mainly based on a secondary education certificate: students can enter higher professional education when they have a HAVO- or BVE-certificate and to enter the university students need a VWO-certificate. For a certain number of courses, there are additional requirements relating to subjects. For teacher education there are no additional requirements, each student with the appropriate secondary education certificate can enter teacher education. At the end of the first year in higher education, there is a moment of selection: students with less than a fixed number of credit points (mostly 29 of 42 credit points) can not continue their study.

The institutes for higher education are funded according to the number of registered students. When students do not finish their study with a higher education certificate, there will be a reduction in the budgets of the institutions.

Next to the budget of the ministry, students will pay a yearly study fee (1300 Euro). Students can get a study allowance, partly loan, for four years.

Since the budgets of higher education institutes are based on the number of students, there is a strong competition between institutions, to attract as much students as possible. Especially in higher professional education, this leads to a number of trendy courses. E.g. within secondary teacher education, where the number of students is rather low, there is a continuous tendency to emphasise alternative professions as a future perspective for students.

### ***Educational trends that are influencing Teacher Education.***

Before describing the system of teacher education in The Netherlands, we want to discuss some philosophical issues that influence the debate on (teacher) education in our country. In a rapidly changing society, the role and goals of education are under constant discussion. The educational system must adapt to a changing society, must educate people

to live in a rapidly changing society, must help solve the social, economical and cultural problems of today. In this paragraph we will elaborate on those discussions concerning the knowledge society, the participation of pupils in knowledge production, the role of information and communication technology, the educational and pedagogical task of the school, the role of teachers in the moral development of their pupils and the consequences for teacher education. In this chapter we use partly the argumentation of Voogt & Odenthal (1997) in their government funded study of Emergent Practices: promising examples of educational practices with the flavour of the future. Partly we use concepts from a Dutch publication “Vormende Lerarenopleidingen” (De Bekker, 1998).

### *Knowledge society*

Education must be more than a body of knowledge and skills to be used in the future. Society is transforming from industrial into information mode. (OTA, 1995; COMMITT, 1996). Many pupils entering school nowadays will have jobs that don't even exist today (Roblyer, 1997). This asks for the ability of pupils to change. People have to be enabled to connect knowledge and information from different sources, check it, restructure it, until it is usable for the present circumstances. Skills are needed to identify and acquire new knowledge and solve new problems or create new solutions for old problems (Commission of the European Communities, 1995, Panel on Educational Technology, 1997). Creativity and critical thinking are needed. And not only this, but also participation and production. The moral value of education is strongly bonded with participation in the production of knowledge and responsibility. Learning and working will be connected with the generation of information. Skills such as identifying, searching for, handling and presenting information will be paramount.

### *Shift from teaching to learning*

Connected with this, there is a shift in educational focus from teaching to learning. Education industry shifts from simple delivery of knowledge to assisting people in carving their own learning process. We see a general predominance of constructivist ideas. Learning is a continuous process during which the learner tries to connect new information with prior experiences, individual ideas, insights and conceptual notions. It follows that in the design of learning environments attention should be given to the development of metacognition and to reflection. So, learning is an active process and maybe passive learning doesn't even exist. (Panel on Educational Technology, 1997, Rubin, 1996). This implies a more holistic view on the learning process. Learning is the result of interaction between learner, teacher, peer learners, counsellor, aims, content, materials and infrastructure.

### *Information and communication technology*

In this shift of educational focus, the role of information & communication technology is apparent. On the one hand it is an agent in the societal changes that lead to another role of education. On the other hand it is an agent of change in the

educational domain too. The Dutch government has invested much thought and money in the use of ICT in education. This concerns the facilities to make present day education more efficient and up to date, as well as the thinking on fundamental changes in education as a result of ICT. Schools get computers and money for in-service training of teachers. Lately the construction of a broadband network starts to connect schools, museums and libraries (and similar institutions) with each other and with internet. Also a content portal has been set up for the educational domain. This not only provides information and materials but also facilitates communities of teachers and learners that produce and exchange information. This Knowledge Net can be used for sharing confidential information both within the school and outside. Over 2.5 million people will be using the Knowledge Net in the near future. Each one will have a unique login name that gives them access to the Knowledge Net 24 hours a day, 7 days a week. The Knowledge Net website ([www.kennisnet.nl](http://www.kennisnet.nl)) already provides access to several thousands of pages of information, designed or assembled especially for pupils, teachers, school heads and parents. All these users have their own domain on the Knowledge Net site.

So we see a gradual move from the use of ICT as an efficient *delivery mechanism* to an instrument for *sharing, communication and production*. This is conform the impact of ICT on society, where large segments use ICT to collect, produce, analyse, synthesise, transform, and report information in a vast variety of contexts and formats. With the advent of internet we add the ability to collaborate, communicate, share, and exchange in ways that are truly now transforming our economy and, increasingly, our culture. Unfortunately, these tasks are exactly what most schools, and most teachers, are not yet equipped to accomplish, since the educational industry of today mostly requires teachers to “deliver” a prescribed body and sequence of information. In this future we need teachers who know how to use various technologies to shape and process and manage information, to look for relationships, trends, anomalies, and details, which can not only answer questions, but create questions as well. We need teachers who understand that learning in today's world is not just a matter of mastering a static body of knowledge, but also being able to discover the rapidly changing ideas about that knowledge itself. When teachers are given (or take) the freedom to change how they teach, using ICT for sharing and organizing themselves in a new way, and to move from "instructional deliverers" to "side-by-side learners," we will see technology employed in drastically different ways, more akin to the ways other segments of our society use it. (Citation from: Rogers, 1996).

#### *Changes in social structure*

Next to the way in which changes in the information structure of society influence education, changes in the social structure of society will have its effects on schools and teachers. The number of dropouts of the educational system is large (Commission of the European Communities, 1995). Education does not seem to be able to interest the children. The use and benefit of the things that have to be learned is not very apparent. Motivation of pupils (can I do it? why should I do it?) is low, especially in lower secondary education. The relation between school subjects and daily life,

between learning environment and reality is weak, so transfer of knowledge and skills to practice is weak too. The learning environment is much more structured and systemic than daily practical life. This produces “inert knowledge” (Roblyer, 1997). Besides, the content-structured environment is often scaled to the average pupil, not being flexible enough to accommodate different individuals.

### *Pedagogical task of the school*

Connected to the former issue, since 1998 there has been an nation wide debate on the “pedagogical task of the school” (the Dutch word “pedagogical” can not be satisfactory translated into English: it means something like nurturing, upbringing, raising, well educated). The focus on values in life and society is fortified by the rapid growth of a multicultural society in the Netherlands. Watson (1996) gives three new goals for education that seem to apply to the Dutch situation: learning to live together, learning to learn, learning to choose.

The debate showed a dividing line between people who asked for a list of values that teachers could use in their lessons, and people who argue that the pedagogical task mainly refers to helping children build their identity. According to these people, teachers should be sensible to the transformations that take place in their pupils in the perspective of the formation of their personal identity (cognitive, attitudinal, emotional and moral). Teachers should do more than just organise the learning environment, deliver the necessary content and didactical guidance and let the important construction of identity to the pupil without pedagogical guidance. This last view is now predominant.

### *The "Educational Technician"*

At the same time, we notice a growing revolt by teachers against being pushed in the role of educational technician and contractor, who has to carry out a precisely described “building plan”. The instrumental view they are revolting against is seen in modularization, in the stress being laid on results that are easily measurable, the tendency to prescribe attainment goals in detail and in the existing professional profiles of the teaching job that stresses technical-didactical/pedagogical skills. Even the changes that are shown in chapter 2.1, focusing on the active role of the learner, can be seen as just a change in the building contract. But most teachers do not see themselves as executors of prescriptions for certain content and certain pedagogy/didactics. They see themselves as human beings that wish to help their students in personal interaction onward in their life. They want to be seen as morally acting persons that have a common professional language at their disposal to think and communicate in moral terms about their work. (Strike and Soltis, 1985).

### *Conclusion*

All these trends reflect themselves in new curriculum plans in the fields in primary, secondary and higher education. Little by little, schools try to implement ICT in their education, address pedagogical questions -especially in relation to

the challenge of inclusive education and a multicultural society- and e.g. in upper secondary education try to organise education in such a way that the learning process of the pupil is the starting point for class activities.

Still there are many questions: How can education offer enough of a challenge in today's society? How can we combine pedagogical freedom for schools and teachers with guaranteed quality and accessibility? What kind of investments are needed in order to better equip the education system with the ability to innovate? How do we provide for equal opportunities in education?

One of the most urgent questions is whether teachers are equipped and competent to take part in these trends.

So, teacher education has the task to educate people for a dynamic, entrepreneurial job in a rapidly changing environment. The demands on teacher education are high. The keywords are professionalism, creative and productive, collaborative, learner centred, able to connect the worlds of Academia, Daily Life and Labour.

	<b>FROM</b>	<b>TO</b>
Curriculum	Supply	Demand
Content	Knowledge Absorbing knowledge Reproduction Book	Competence Working with knowledge Production Web
Pupil	Passive	Active
Teacher	Expert Teacher	Coach Learner
Assessment	Knowledge	Products and processes
Learning environment	Individual Physical contact fixed in place and time	Collaborative Mix of physical and virtual

Table 1: Shifts in education

Teacher Education has to operate in a educational field where a number of shifts are taking place (see table 1). The concept of educating teachers shifts from a content oriented curriculum to an explicitly development oriented one. The curriculum of teacher education should foster initiative, creativity, pride and responsibility by the learner, must be practice based, product driven and demand driven, must be holistic and competence driven, and should accommodate assessment methods accordingly. It is good to cite Bruner (1980/81, p.33) who wants teachers who are “so secure in their selfhood, in the sense of what they are up to, that they can give themselves away or take people in themselves. (...) They gave one a sense of what one could be and what one could do”.

With this mission in mind, we want to look at teacher education in The Netherlands, understanding there is still a very long way to go to realize this mission. In the next chapter we will describe the actual system and history of teacher education. In chapter 3 we will describe the actual trends in teacher education, connected and inspired by the above-mentioned mission.

# Teacher certification and teacher education

## Teacher licenses and certificates

The demands on teachers within the different educational areas differ (see table 2).

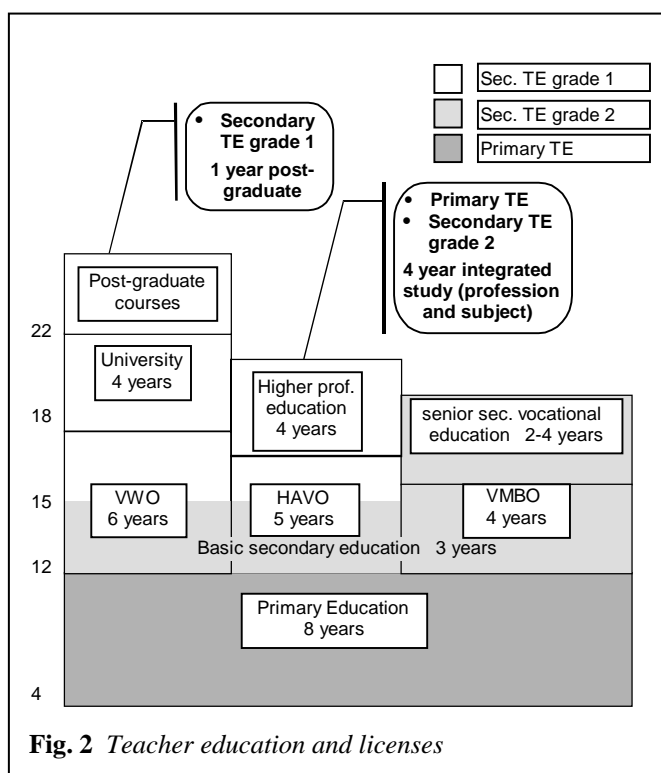
Workers in day-care centres need to have a certificate of a 4-year course focussing on professions in the pedagogical and child/day-care field within senior secondary vocational education.

Teachers in primary school need to have a teaching license for primary education, which can be obtained by following a 4-year course aimed at primary education (**PABO**). This course is offered at a Hogeschool and covers in an integrated curriculum didactical and educational subjects and the different subject areas that have to be taught in primary schools.

Teachers in lower secondary education (VMBO, HAVO 1-3, VWO 1-3) need to have a second-degree teaching license, which can be obtained by following a 4-year course at a teacher education for secondary education. This course is offered at a Hogeschool and covers in an integrated curriculum both pedagogical and educational subjects and one subject area that has to be taught in secondary schools.

Teachers in upper secondary education (HAVO 4-5, VWO 4-6) need to have a first-degree teaching license, which can be obtained by following a 1-year postgraduate course (1600 study hours). This course is offered at a university after finishing a four-year academic study in a (school) subject and covers both pedagogical and educational subjects. Nation-wide there are 9 universities offering grade 1 TE-courses.

Teachers in senior secondary vocational education need to have *either* a second or first-degree teaching license *or* a teaching certificate. This teaching certificate requires a higher education diploma and can be obtained by following a work-based course of one year (640 study hours), covering both pedagogical and educational subjects.



**Fig. 2** Teacher education and licenses

Teachers in senior secondary vocational education need to have *either* a second or first-degree teaching license *or* a teaching certificate. This teaching certificate requires a higher education diploma and can be obtained by following a work-based course of one year (640 study hours), covering both pedagogical and educational subjects.

	Education required	Length	Subjects
Pre-school	Senior secondary vocational education	3-4 year	Pedagogical subjects
Primary education	HBO-TE	4 year	All

Lower secondary education (year 1-3)	<b>HBO-TE (second degree)</b>	<b>4 year</b>	<b>1 subject</b>
Upper secondary education (year 4 – 5/6)	<b>University and 1 year post-graduate TE (first degree)</b>	<b>4 + 1 year</b>	<b>1 subject</b>
Senior secondary vocational education	<b>HBO and teaching certificate or HBO-TE (second degree)</b>	<b>4 year</b>	<b>1 subject</b>
Higher education	<b>Teaching certificate</b>	<b>½ year</b>	<b>Educational subjects</b>

Table 2: Requirements for teachers

Teaching certificates and licenses are issued by the institutes for higher education covering TE-courses. There are no additional (state) requirements to allow for registration as a licensed teacher. Neither is there any system for compulsory in-service education. The professional development of the teacher during his teaching career is a responsibility of the individual teacher and the school management. For this, there is a broad system of in-service courses and support, mostly based on needs of the schools. In-service courses and school support is offered by a variety of institutions, not only (semi-commercial departments of) hogescholen and universities, but also national pedagogical centres and local school support services and finally commercial advisers and trainers. This is a demand driven circuit because the funding for in-service training goes directly to the schools.

The TE-courses within hogescholen are located in separate educational faculties, covering the whole of the curriculum (both educational and subject studies). Within the 50 hogescholen there are 36 faculties for primary teacher education (PABO) and 7 faculties for lower secondary teacher education. Next to that, 1 institutes offers courses for teachers in agricultural subjects (STOAS) and there is one institution covering courses for teachers of technical subjects (PTH). Five institutions have a separate faculty for teachers for physical education (ALO) and at 9 institutions a teaching license for the art subjects can be obtained. In these last two courses there is no differentiation in (first or second) degree.

The situation where teacher education is divided over a great number of institutes leads to a rather fragmented situation, where each institute struggles with answering the demands of schools, students and society. Each individual institute lacks the money and expertise to make a fundamental change. The segmented situation leads also to a strong subdivision into the three different types of teacher education, without much cooperation between those three. Finally, the HBO-institutions lack the connection to educational research, since there is no research component within those institutions. In the last few years there have been several advisory reports (Langeveld et al., 1997, Wijnen et al., 1998, Slangen et al., 1999, Onderwijsraad, 2000), suggesting that the different types of teacher education should be combined in Schools of Education. Within these schools a wide variety of courses (pre-service and in-service) could be offered and fundamental educational research could be combined with action research in schools. In 1999 the first merging between a HBO-institution and a university in the field of teacher education took place. Some other institutions are preparing mergings towards a broad School of Education.

## History of Teacher Education

For primary education there is a long tradition of training colleges. These colleges were in part used for emancipation of the working class. These training colleges or pedagogical academies prepared teachers for primary education, at that time ranging from the age of 6 till 12. Apart from primary school there were 'kleuterscholen' (kindergarten or nursery schools) for age groups 4 till 6, with their own training colleges. In 1986 primary schools and kleuterscholen merged in integrated primary schools, ranging from the age of 4 till 12. At that moment the two types of training colleges merged into the PABO, the 4-year teacher education for primary education. Since the diversity of pupils in 8-year primary education is very large, there is again a tendency in teacher education to make a differentiation between lower primary education (age 4 till 8) and upper primary education (8 till 12). When finishing the PABO, students will have a full teacher license for primary education, but will have specialized in lower or upper primary education.

Based on a major reform of the educational structure in secondary education (the 'Mammoetwet') in 1968, there was a need for a new structure for teacher education for secondary education, based on three different degrees (first, second and third). The first degree (focussing on upper secondary education) could be obtained by following a short (four months) postgraduate course after university or by following a three-year part-time course as addition to a second degree (for lower secondary education). In 1986 the 4-month postgraduate course was changed in a full postgraduate year of which half was situated in schools.

For the second and third degree, the old system where one could become a teacher by following a variety of short courses, was replaced by a system of four and a half (later four) years teacher education within the system of higher education. From 1970 onwards, new institutes started to offer 'new teacher education' courses for all subjects. Students became licensed for two, independent, subjects, but this was changed in 1986 into a one-subject curriculum, based on the grown complexity of the teaching profession and the need for a thorough educational and subject knowledge.

The start of the new teacher education courses in 1970 gave a strong impulse to teacher education. Curricula were innovative, using new educational approaches, there was a strong co-operation with the universities, and institutes for teacher education took the lead in educational reforms in secondary education and in the development of new teaching materials. In twenty years time this innovative approach has disappeared and in the midst of the nineties, teacher education is lacking behind the developments taking place in schools. On top of this, especially on the secondary level, the number of students entering teacher education has dropped dramatically. Between 1990 and 1997 institutes for TE tried to attract enough students by stressing other professional opportunities outside the educational sector.

From time to time during the last decades there have been voices to incorporate the whole system of teacher education within academic universities. Advocates stressed the need for an "academic level" for all teachers, e.g. as an instrument

to raise the status of teacher profession and teacher education. This issue has got no foothold and does not play any role in the deliberations in the ministry of education.

	<i>Primary TE (PABO)</i>	<i>Lower secondary TE (grade 2)</i>	<i>Upper secondary TE (grade 1)</i>
<b>Type of HE</b>	HBO	HBO	University
<b>Age group pupils</b>	4-12	12-15/16 16-20 (middle voc. educ.)	16 – 18
<b>Number of institutes</b>	36	7	9
<b>Duration</b>	4 year integrated	4 year integrated	1 year post-graduate
<b>Content</b>	Integration of - prof. studies (50%) - subject studies (50%)	Integration of - prof. studies (50%) - subject studies (50%)	Prof. studies (100%)
<b>Teaching practice</b>	25% all four years	25% (10-15-25-50) all four years	50%
<b>Subject qualification</b>	All subjects	1 subject	1 subject
<b># students (2000)</b>	29370	14230	3833 + 3055 in arts

Table 3: Three types of teacher education

## Consensus based decision making in (teacher) Education

To understand in what way changes in (teacher) education are brought about, it is important to understand the way major changes in the Dutch society, are brought about. Authority is never taken for granted and parties involved want to have influence on the decisions to be taken. So, decision-making is based on consensus. All parties involved (government, administrators and teachers) participate in the development of major changes and are involved actively in the implementation of the innovation. This means that educational change is not the work of a small group of wise man and woman, but is prepared in a broad discussion with almost all participants involved: teachers union, organisations for (subject) teachers, organisations for school leaders, national pedagogical centres, the National Educational Council, etc. This involves a process in which communication to reach consensus is very important. If consensus is reached, (teacher) educators may accept the plans and use them to build their own curriculum.

This approach has several effects:

- The final decision is more or less a compromise, so most groups involved in the discussion can live with it.
- Educational reforms have a rather broad support from the groups involved.
- Since the proposals for educational reforms are discussed through a length of time, there is a possibility for institutions and organisations to be proactive and to act as if the decision has been taken already.

This last effect is strengthened by the policy of the Ministry of Education to shift the responsibility for educational and financial matters to schools. This leads to a growing autonomy of schools in their educational, financial and personnel policy, and a deregulation of the steering by the government.

The transition of steering from the government to the institutions is a delicate process. The ministry needs the confidence that the institutions can control their quality. At the same time, the institutions cooperate in two national councils for higher education, where there is a tendency to come to strict agreements which can be as tight as the former governmental control. A balance must be found between a minimum of regulations from the government, general internal agreements between the institutes for higher education ensuring quality, and freedom for differences between individual institutions.

The situation concerning teacher education is slightly different. The Minister of Education is responsible for the quality of primary and secondary education and since this quality is largely dependent on the quality of teachers, he feels a stronger responsibility towards teacher education than to other fields of higher education. So teacher education is stronger regulated than other courses. Institutes for teacher education try to influence these regulations by being pro-active, not waiting for decisions to be made outside teacher education. By being pro-active, institutions believe that they can influence decision-making by 'setting reality to their own hand'. The Ministry stimulates this approach by challenging institutes to be innovative and to take initiatives to answer the demands of the school. At the same time the institutions are asked to indicate which regulations are hindering their developments and innovations, so that limitations can be taken away.

This asks for institutions, which show entrepreneurship. At the same time the risk of this approach is that institutions are very autonomous in that entrepreneurship, resulting in a lack of coherence and a strong competition between those institutions.

## ***Conditions for the teaching profession***

### *Responsibility for quality of education*

In the 70's and 80's, the conviction that the government is responsible for the quality of education and of teachers led to a growing influence of the ministry of education on education and its aims. This was regulated by a policy of central laws and detailed regulations, with little room for decisions by schools and the teachers. These laws and regulations were focusing on the finances and personnel policies of the schools and on the general demands on the quality of education. Governmental control dealt with the goals and exam criteria and with the number of teaching hours per subjects, but not with the educational and didactical approach of the school. The general policy of the government was based on quality control by regulations beforehand. (van Es, 1993). The freedom of schools to define their own policies, is further restricted by the fact that government and labour unions together decide in detail on the conditions of employment. These detailed national agreements let schools no room for the development of their own personnel policies.

In the 90's a process of deregulation was started where responsibility for finances and organisation of education was shifted to the school authority (being a local authority or an independent school board). This process of deregulation started in higher education and middle vocational education, but is now also affecting primary and secondary education. Basic idea is that quality control is done by accountability of school authorities, which gives a stronger role for the Inspectorate of Education. (Ministerie van Onderwijs, Cultuur & Wetenschappen, 1999a). However, the culture of quality control by regulations is still existing, which leads to intense discussions.

### *Image of the Profession*

The situation at the end of the 80's with little to no freedom for heads of school to decide on finances, personnel and organisation, lead to a working atmosphere, in which teachers operated as autonomous and isolated specialists and where there were very few opportunities for career development, changing jobs and even for leaving the teaching profession. This resulted in a general image that the attractiveness and status of the teaching profession were declining. This image was strengthened by a reduction of the starting salaries for teachers in 1983, the growing diversity of pupils in the multicultural society of The Netherlands and the numerous national regulations for educational innovations. As a result the number of students entering secondary teacher education dropped steadily during the 80's and 90's. This effect was enhanced by the growing status of other, new and trendy, professions.

### *Revitalization*

This situation was analysed in a national report with the title "A Profession with Perspective". It dealt with the attractiveness and status of the teaching profession, leading to a number of recommendations (van Es, 1993). In reaction to and in line with the recommendations of this report, the government has taken several initiatives to improve the attractiveness of the teaching profession, the status of the profession and the quality of education (Ministerie van Onderwijs, Cultuur & Wetenschappen, 1993). Next to the deregulation of government educational policy, this policy included:

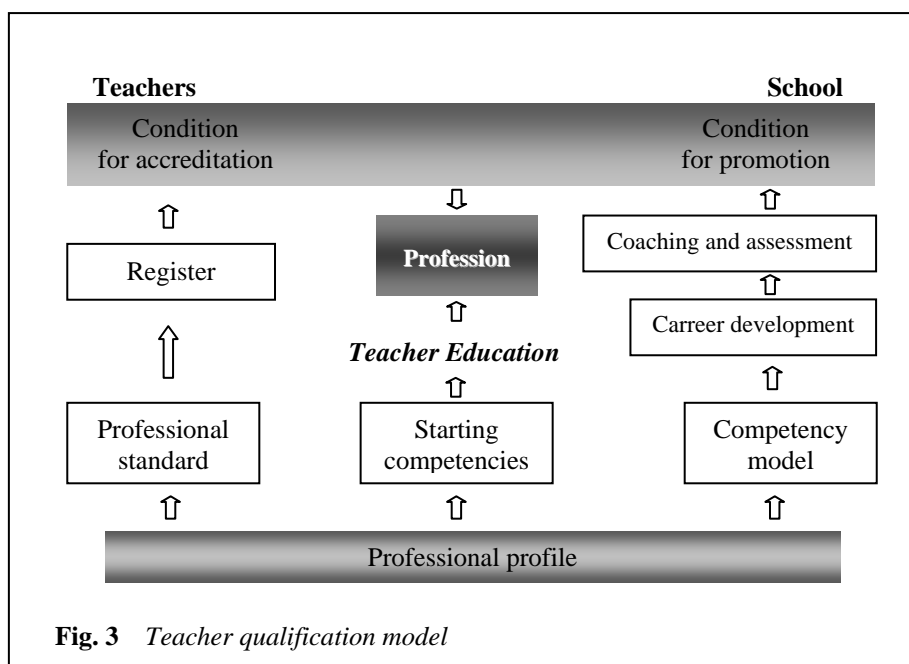
- A strong increase in the starting salaries of teachers
- More freedom for schools in the matter of collective agreements and job evaluation;
- The development of professional profiles and qualification requirements;
- The development of procedures for assessing the teachers' performance;
- Increase in the mobility of teachers, so that they can change jobs during their career;
- Professionalization of school management,
- Career possibilities and differentiation in tasks.

As a result of this policy, the starting salaries of teachers are now comparable to the starting salaries of other higher educated professionals and the working conditions have improved: the number of teaching hours has been reduced, but is still far above the OECD mean and the number of pupils per classroom in lower primary education has been reduced. Although the expenditure on education is still low compared to other countries, the investments in are highest in relation to other West-European countries (OECD, 2001).

With the growing autonomy of schools in the way they organise the educational process, job-differentiation is introduced. Especially in senior secondary vocational education, besides teachers there are teaching assistants, instructors, etc. In secondary education, this job differentiation is just starting to be implemented. At this moment the debate starts whether and how specific preparation for these new roles is needed and in what way that preparation differs from the traditional teacher education.

*Teacher quality*

One way to improve the image of the teaching profession is to emphasize the professional quality of teachers. Based on the intentions in Vitaal Leraarschap, the Ministry of Education started to develop a systematic approach for the quality of teachers.



**Fig. 3** *Teacher qualification model*

In the above model, there is a shared responsibility for schools as employers who are responsible for the quality of education in their schools, and for teachers (represented by a national teacher body) as professionals responsible for their own quality (Snoek, 1998).

Fundament for the qualification model is a description of the professional profile of the model teacher (or team of teachers). Based on this model, starting competencies for beginning teachers can be described, just as well as a competency scheme, which can be used by employers for career development and performance-judgement in relation to salaries. The need to stimulate the development of a professional register for teachers, based on a professional standard and owned by the teachers themselves is in discussion at the moment.

### *Shortage*

In 1999 a new policy document was published by the Ministry of Education focusing on a new problem: during the 80's and 90's there had always been a surplus of teachers, except for some specific subjects (economics, physics, German language, ...), but now a large shortage was perceived for the next 10 years, due to growing number of teachers leaving the profession because of retirement, a demographic reduction of the number of students in higher education in general and a specific reduction of the number of students entering teacher education, caused by the low relative image of the teaching profession (Ministerie van Onderwijs, Cultuur & Wetenschappen, 1999b). This shortage of teachers will cause large problems in primary education. The regulations in primary education concerning teacher qualifications are very strict and already it is almost impossible to find qualified replacement teachers in case of sickness. In secondary education the problem is less dramatic because it is allowed to appoint unlicensed teachers, on the condition that the Inspectorate gives approval (which it will always give if there is no other qualified teacher available).

In this report the government suggests several ways to attract more people to the teaching profession. The report does not focus on the traditional students for initial teacher education, but on adults, who either have a teaching licence but are not working as a teacher, who are unemployed, or who have another profession, but would consider a career in education. To support this diverse group in entering the profession as fast as possible, it is necessary to take into account 'prior learning' by means of an intake-assessment and to create flexible curricula.

The developments mentioned in this and the former paragraph, concerning job differentiation, the qualification model with its different elements and the formalized intake-assessments will be combined in a coherent law on Professions in Education, which is planned to be issued in 2001.

# **Towards competence based and school based teacher education**

**Curriculum developments in teacher education in The Netherlands**

## ***General description of the situation of 1996/1998***

In the last two decades teacher education in The Netherlands has been dominated by several issues (for an overview of Dutch changes in teacher education see: Willems et al., 2000). The leading pedagogical issues were dealing with the gap between theory and practice (integrating teaching practice as a core in the curriculum and putting more emphasis on practical methodologies than on theoretical educational theories) and with clarifying the professional profile of the teacher (moving towards the 'reflective practitioner') (Verloop & Wubbels, 2000). The curriculum issues were dealing with the balance between subject studies and educational studies and the integration of the two, leading to fierce discussions both in primary education (discussing whether subjects should have a place on its own or should be integrated in projects and problem-based approaches) and in secondary teacher education (shifting the amount of subject theories from 70-80% to 50% of the curriculum and discussing to what extent subject theories and educational theories could be integrated). Connected to this discussion was the fear that too much emphasis on the perspective of becoming a teacher might discourage students who were attracted to teacher education because of their motivation for the subject.

Teacher education in The Netherlands has also become increasingly school-based. Student teachers in The Netherlands now spend more time in schools than they did ten years ago. The education of teachers is more and more regarded as the preparation of professionals and the link with the work of teachers in the schools is strengthened.

Next to an extension of the amount of teaching practice in the curriculum, the nature of the teaching practice periods has changed. In 1995 the Dutch Ministry of Education initiated an ambitious plan called the LiO-project. In this project an independent teaching practice of half a year (the 'teacher-in-training'-period) was introduced at the end of the HBO-study (Lunenberg, 1999). The aim of this project was to improve the preparation of student teachers in the last year of their study and to diminish the 'praxis-shock' by stimulating them to work independently for a few months. These teachers-in-training are paid a small salary by the schools. In this way the induction-period has become part of the curriculum, with coaching from the institute for teacher education being available. The impact of the teacher-in-training-project was enormous. The curriculum was adapted to prepare students for their 'teacher-in-training' period and the supervision of student teachers and mentors was improved on a large scale.

Over the last thirty years there were no national exams (and no national curriculum) for teacher education in The Netherlands and it was up to the institutions to set goals and prepare students for their profession. This fits into a culture in which people are responsible for the contents and organisation of their own work and want to have a say in the change of their work. It also fits in the culture of a government that withdraws from direct interference in education. However it also lead to a situation where there are large differences between institutions

In 1996 the general curriculum in primary teacher education was one in which about 25% of the curriculum was dedicated to teaching practice, distributed throughout the four years, culminating in an independent teaching practice of half a year at the end of the fourth year. About 50% of the curriculum is used for subject studies (some institutions try to integrate these subject studies in projects and problem based approaches). The 25% dedicated to educational studies is mostly practice-oriented, focussing on practical skills. In their third year students choose a specialisation, focusing on lower (age 4-8) or upper (age 8-12) primary education. Next to the specialisation, student choose a differentiation, concentrating on an educational topic.

In lower secondary teacher education the teaching practice in year 1 to 3 is concentrated in periods of 8 till 10 weeks. Students work a certain number of days per week in school, teaching under supervision of a school tutor. In the fourth year there is an independent teaching practice where students have their own classes during half year. The total amount of teaching practice covers 25% of the curriculum. Half of the curriculum time is dedicated to subject studies. These studies have hardly any connection with the educational studies (including subject methodology). Students can chose a specialisation (focussed on secondary education or on senior vocational education) and a differentiation (concentrating on a specific educational subject) or a final thesis or project.

In upper secondary teacher education at the academic universities, the students can opt for a introductory course of two months during their pre-graduate study. Based on this introductory course, they can decide to subscribe for the post-graduate course. During this course they are appointed by schools for half of the year. During one day per week students come to the university for coaching and for courses on subject methodology and educational theories. Most students have to do an educational action research project in their school. (Rijlaarsdam et al., 1996).

One very important element of the Dutch cultural context of teacher education is the way in which the quality of teacher education is assessed. In The Netherlands quality in teacher education is the joint concern of the government and the institutions for teacher education. The system of external quality control consists of regular 'visitations' by committees appointed by the board of higher education. This board of higher education is 'owned' by the institutions of higher vocational education and not by the government. The role of the Inspection is restricted to the monitoring of the way in which an institution deals with the outcomes of a visitation.

In 1992 the quality of all *primary teacher education institutions* was examined for the first time by a 'visitation' committee. The result of this first visitation was quite negative (Koster & Snoek, 1998). The general outcomes revealed that the institutions for primary education had weak teaching methods, no clear educational goals and no explicit views on teaching and teacher education.

The institutions for primary teacher education took the critical outcomes very seriously and began to improve their curriculum rapidly. Some institutions worked on their own, others co-operated to innovate their curriculum.

The next visitation, in 1995, the institutions for primary teacher education showed that the innovation of the curriculum that had been initiated by the institutions had been quite successful. The visitation committee recorded many positive developments.

In 1996 the institutions for *secondary teacher education for grade two* were visited and again the results of this visitation were not very positive (Koster & Snoek, 1998). The general outcomes revealed weak teaching methods, no clear relation between theory and teaching practice, a weak link with the educational field in general, too much attention for subject teaching and not for professional preparation of student teachers, a lack of integration between subject teaching and professional studies and finally a lack of coherence between the different subject courses.

For *secondary teacher education for grade one* a visitation was held in 1992 and 1997. In general the quality of teacher education in this field is good, they are searching to find new ways of teaching and they try to renew their curriculum. There was also satisfaction about the integration of teacher education and educational research within these institutes. After the visitation in 1992 all these teacher education institutes worked together to formulate a framework plan in which they presented a proposal for a joint curriculum and attainment targets for student teachers.

Although some institutions for teacher education had successfully begun to innovate their curricula the government still worried about the quality of teacher education in general. Most innovations were on a local basis and the institutions for teacher education were not able to join their forces and to give a united solution to the problems indicated by the visitation committees. This led to a lack of coherence and a situation in which each institute has to formulate their own answers to the challenges of the future. So a process management teacher education colleges (in Dutch: Process Management Lerarenopleidingen/PmL) was installed by the minister. The main task was to develop a joint curriculum for teacher education colleges for primary and secondary education, using the contributions of staff from the colleges themselves. The result was published in 1998. (Procesmanagement Lerarenopleidingen, 1998a,b). It was to be used by the individual colleges to (re)structure their programs.

## ***Towards coherent innovation programs***

### Care and Courage

In the beginning of 1996 the Dutch Minister of Education appointed an international group of experts on education and information technology to advise him about the implementation of multimedia and information and communication technology (ICT) in the Dutch courses for teacher education.

This Committee on Multimedia in Teacher Training (COMMITT) published a rather provocative report about the transformation that is needed in (teacher) education to meet the demands of the 21st century (COMMITT, 1996).

According to committee two parallel strategies are necessary to move from the old, present-day situation to the new situation. These strategies are characterised by the words 'CARE' and 'COURAGE':

- CARE for the existing system: how can we make innovations in the existing system, taking care of the present-day students and schools.
- COURAGE to start experiments that will give some outlook into the future: exploring new ways, new technologies, new methodologies.

Using these concepts CARE and COURAGE, the national curricula that are developed by the Process management Teacher Education can be represented as the 'CARE-line' in thinking about innovation. The national curricula mirror the existing views on teacher education in The Netherlands. They are important tools in the discussion about teacher education because they present a general view on teacher education, quality standards for all institutions for teacher education and general and subject related teaching goals that can be used to assure the quality of teacher education in The Netherlands. Starting point for these national curricula was the present day situation and not the demands of tomorrow. In that respect the national curricula are not very innovative and rather supply driven (Snoek & Swennen, 1998).

In the next decade society will have gone into the information age, whilst education seems to be organized in the ways of the industrial age. In that perspective, a more far-reaching innovation is needed. COMMITT suggested an innovation program to facilitate and stimulate the necessary transformation of teacher education. In reaction to the COMMITT report, the Dutch minister of Education launched in 1997 a program on multimedia and ICT in teacher education, called PROMMITT (Ten Brummelhuis & Drent, 1999). Of the PROMMITT-program, the most successful part was the introduction of 'experimental teacher education programs'. This part was the representation of the COURAGE-approach to innovation: The 40 institutions for teacher education were invited to present proposals for a complete redesign and turnaround of teacher education. Two institutions have been rewarded a special status as 'experimental

teacher education'. These two institutions had the task to transform their courses and organisation into a new form of teacher education that is more apt to the information society (COMMITT, 1996).

### The experimental teacher education programs

With the status of 'experimental teacher education program', the Ichthus Hogeschool started to innovate her primary teacher education program, focussing on new approaches using ICT and telelearning. This curriculum is meant to equip future primary school teachers to the integral use of information- and communication technology in the schools.

The Amsterdam Faculty of Education (EFA) put her emphasis on designing a new approach to the curriculum model and the methodology for primary and secondary teacher education itself. The basic transformation concepts are set in a constructivist view on learning, seeking a combination of educational trends like learning to learn, ICT, competence- and work- based learning, transfer of responsibility to the student, et cetera. An important aspect of the transformation lies in the 'mirror'-concept: the processes of change with respect to the members of faculty and the institutional organisation (the 'expedition') should mirror the intended processes of change in the curriculum (Terwindt, 2000; Odenthal et al., 2000).

The expedition of EFA is based on a few important ideas (Dietze et al., 1998):

*Capable of managing change:* Teacher Education should adequately prepare students for their profession in a largely unknown future. It is impossible to predict what that future will be like. However, one thing that can be taken for granted is that in the decades to come there will be an increasing demand for professionals who are *capable of managing change* and who can give form and shape to education in the information society - not only because teachers must be able to react quickly to changing circumstances in their teaching, but also because learning paths, in part due to rapid developments in information and communications technology, are becoming increasingly individualized. For that purpose we need the next three ideas.

*Responsible:* The program should offer students an environment in which they are indeed given the opportunity to shape their own learning processes. For this, students need to be given *responsibility* and they need to accept it - responsibility not only for the way in which they acquire the (constantly changing) competencies they will need in professional practice, but also for the way in which they demonstrate to the outside world that they have indeed acquired these competencies.

*Freedom:* In this environment, students have a considerable degree of freedom in filling in the details of their own learning processes. The program however operates in a context in which the requirements for newly qualified teachers are stipulated by law. This means that, although students should be given the opportunity to create their own learning paths towards becoming adequately qualified, they have to demonstrate, through integrative moments of assessment at three points in the program, that they have acquired the competencies they need to be admitted to the next phase.

This view runs directly counter to the view that, under the direction of an institution offering the program, the road to becoming a competent and qualified teacher consists of parts of a curriculum that have been determined in advance, and that evidence of competence is synonymous with the successful completion of those parts of the curriculum.

*Authentic:* Based on the arguments for practice based learning (Korthagen & Kessels, 1999; OTA, 1995) EFA uses the educational concept of product-based learning. Learning is linked as far as possible to useful and meaningful work, which resembles students' future profession as teachers. This is done by providing authentic tasks for students (learning practices or LP's), leading to a concrete product or service which is useful for someone who uses it (hereafter referred to as the recipient); in principle this external person or body is related in some way to the school subject or the teaching profession.

Using these four ideas, EFA tries to redesign the curriculum, developing new approaches, curriculum elements and instruments. In chapter 3.4 we will look into some details.

### Educational Partnership, the new innovation program for 2000-2002

The 'expedition' of the EFA started in 1998 and at this moment only elements of the full concept have been implemented. However the conceptual model has strongly influenced teacher education in The Netherlands. The model put together constructivist educational concepts and elements of the policy of the ministry of education (like the teacher qualification model, the emphasis on the development of integrated assessment instruments and the need for flexible programs taking into account prior and experimental learning).

In 1999 the 7 large institutes for secondary teacher education (grade 2) jointly developed a new innovation program called Educational Partnership, taking into account the need for short teacher courses to attract new groups into the teaching profession, integrating parts of the conceptual model of EFA and strengthening the relation with schools by creating shared responsibility with schools for the education of new teachers. This ambitious innovation program was in line with the 1999 and 2000 policy documents of the Ministry of Education. So, the ministry supported this innovation by financing this program for three years (2000-2002) with an additional budget of 32 million EURO.

At this moment (June 2001) this innovation program has resulted in new curriculum approaches, where new groups are attracted to the teaching profession by offering short flexible teacher education routes, based on an intake-assessment; where assessments and the use of portfolios are introduced in the curricula, where work-based learning is introduced in initial teacher education by offering students a paid job at a school during parts of their study and where intense partnerships between schools and teacher education are developing. The institutes have developed a new quality framework, which reflects the concepts of work-based learning, competence based learning and self-responsible learning (EPS, 2001) and a competence model supporting these concepts (Dietze et al, 2000).

For primary teacher education, the situation is less coherent. The 35 institutions offering primary teacher education are not able to create a coherent conceptual model. Individual institutions or groups of institutions develop their own conceptual models, stimulated by an additional budget from the ministry (9 million EURO) to attract new groups into the teaching profession.

Within the universities, an agreement with the minister was made in 1999 aiming at attracting more students into the post-graduate course, by restructuring the postgraduate course in such a way that it could partly be followed during the graduate study and in a work based (and paid) setting. There is little need for the university teacher training institutions to create short routes for new groups, since the post-graduate course is only one year and has already a strong flexible structure.

At present, the shortage of teachers enhances the above-mentioned developments. It leads to a context with a rich variety of opportunities to explore new models and concepts in teacher education. The many initiatives to increase the number of teachers accelerate the above-mentioned developments *and* put them under pressure. At this moment there is a dynamic situation where new ideas are welcomed and tried out. However, the pressure underlying these developments runs the risk of leading to a lack of reflection and distance because there is so little time for critical observation.

In the next three subchapters we will look into the underlying agents for change and will give some examples of the two major developments concerning practice- and school based teacher education and concerning competence based teacher education.

## ***Change agents***

### Introduction

The result of the Process Management Teacher Education (Chapter 3.1) can be considered to be the last show of a certain way of thinking about vocational education. In this philosophy the profile of the vocation is being translated into requirements for a successful start in the profession. This, on its turn, is being translated into a profile of the initial training program. So, one thinks in terms of the supply of modules in the curriculum that is needed to get a student to the necessary level. The result is often that the requirements for a successful start in the profession is being fragmented into a multitude of attainment goals that students cover when following the modules in the program. The competency for a successful start becomes an addition of many molecules that can be consumed separately. The final exam is often an administrative process to check the number of credits earned.

In the last three years a new way of thinking emerges, leading to a fundamental change with respect to the supply driven way of thinking. There are several agents that cause this change of curriculum concept.

## Agents of change

*Sense of discomfort.* In general there is a growing dissatisfaction with the fragmental approach to the curriculum. It is left to the integrative ability of the student to process the atomistic elements into what today we call competencies. Also the validity of the corresponding assessment method was questioned. A sufficient mastery of separate knowledge and skill components does not guarantee adequate behaviour in complex professional situations. Especially in higher professional education, there is a tendency towards a more holistic view on the assessment of competence, related to professional behaviour in working situations (Dochy & Moerkerke, 1997; Elshout-Mohr et al., 2000). The PML-report, for that matter, already contained a chapter that stimulated a more holistic approach of the curriculum in teacher education. In reaction to this sense of discomfort, teacher educators tended to name “key” modules. Often these were practice-related modules. Thresholds were raised for entering certain phases in the curriculum, often of a credit-addition nature, however. Also final masterpieces were used to enter a holistic element. But often these masterpieces were focused on a specialization in the profession. The introduction of the final independent teaching practice of half a year (the LiO, see chapter 2.1) can also be placed in this perspective and functioned de facto as a sort of entrance assessment to the profession. But teacher education kept sending the implicit message to students that teacher educators had put much thought into the long learning lines in the curriculum. So, being a student, your horizon did not need to be farther away than the modules in the present period (often 3 months) in the curriculum. We think this basic sense of discomfort with the way in which students think and work atomistically, strengthened by the way in which educators assess them, is one of the agents that started an accelerated process towards competence based learning.

*Information society and the capacity to manage change.* The second agent lies in the changes in society, that were the starting point for COMMITT to formulate ideas about how education and the role of teachers have to change (Chapter 3.2). COMMITT also focuses attention on new competencies that learners need. The dynamics of society (including education) ask for the capacity to manage change. The development of this capacity for change must be one of the main targets of education. This agent provides a fertile soil for the constructivist philosophy of education, -in which knowledge must actively be (re)constructed by the learner-, and for the notion that learning processes must be rooted in producing behaviour. Information and communication technologies happen to facilitate this kind of behaviour very well. Also they ease the realization of individual choices. This leads to the necessity of an educational system that is fit for the individual demand for knowledge, skills and experience. This demand arises when a learner has been given, and has accepted, responsibility for the delivery of services or products for which he does not yet possesses the full competencies. Until now, however, the way in which teachers are being educated can be characterized by a deductive vision: the transfer of an academic theory that must be applied in practice. But we see a rapid burst through, on a national level, of the notion that things must change. In chapter 3.5 we will go into some detail on this aspect.

*Reflective practitioner.* A third agent is the rise, also in the Netherlands, of the notion of 'reflective practitioner'. In the Netherlands this idea has been strongly promoted by the work of Korthagen during the 80's and 90's of the last century (Korthagen, 1999, 2000, 2001). We give a short, incomplete, summary.

Teacher educators try to use and stimulate the ability of learners to be in control of their own learning process.

However, based on theories on subject didactics and methodology and on wide spread concepts of teaching, teachers and teacher educators design sophisticated teaching activities, learning environments and didactical approaches in the hope to narrow the gap between theory and practice. But in these activities and approaches, the initiative is with the teacher and the questions, and concerns and experienced problems of the learner shift to the background. Instead of bridging the gap between theory and practice in this way, the gap is widened.

Following Kohnstamm, a renown Dutch educational philosopher in the first half of the 20th century, Korthagen argues that teacher education should not aim at providing as much Theory as possible, but should help the learners to build their own theory (subjective concept of their profession). This must be done by helping them to create structure in practical situations and the corresponding problems. The aim is to learn to think with the starting point in the personal experiences and conceptions, felt problems and needs. In traditional teacher education knowledge about education is seen as a building, created by the academic world that can be transferred. In the words of Hans Freudenthal, a renowned Dutch innovator of mathematics education in the 70's, however, knowledge about education is a subject 'to be created'. (Freudenthal, 1973). So teacher education should help students to create their knowledge in a process in which they reflect on their practical experiences. During their professional life this creative process continues.

*Efficiency.* The fourth agent is a result of the shortage of teachers that we mentioned in earlier chapters. The minister of education now stimulates that many routes to the teaching profession are open. Institutes have to be able to deliver routes tailor-made to people that have a history of other study programs, other work experience, or have attained a certain level of competence for the teacher profession by own study or other activities. This means that at the start of such a (work based) route there must exist a diagnostic assessment of prior learning that can decide a) whether somebody can function with a certain level of responsibility as a teacher in a school, and b) which competencies still have to be raised to the level of a starting professional teacher. In this setting we do not think in terms of an existing curriculum in which a student can skip some modules, but in terms of an individual learning route that lets somebody grow as efficiently as possible from the diagnosed to the required situation. It is clear that this efficiency is enhanced by transferring the responsibility for this growth to the student, and by describing the required situation in such a clear way that the student is able to decide himself/herself which means are adequate in his/her situation to get that far. This is a break with the manner of description in terms of parts of an existing curriculum. Not the description of the road to Rome matters, but Rome itself. There are many roads to Rome.

It is the convergence of the effects of these factors that cause a change of gear in the evolution of teacher education in The Netherlands towards a competence based, dynamic, flexible, practice based structure. In the next chapter we will show some examples.

## ***Towards competence based and dynamic curriculum***

In the above chapter we discussed i.a. the need for a shift of responsibility to the learner, individual learning routes, demand driven facilities for learners, instruments for managing own learning process, including a corresponding change in system of assessment. Together with the need to make a closer connection between the curriculum and the reality of the working field, this has led to a general trend towards competence based learning in higher professional education (Schlusmans, et al., 1999). In all institutions for teacher education there are projects and pilots towards competence based learning, the formulation of competencies, the introduction of portfolios and the development of new competence based instruments for assessment. Here we discuss some details, using a few examples of Dutch developments.

### *Example 1: The formulation of competencies in the EPS partnership*

The institutes for secondary teacher education, working together in EPS, are tackling the development of assessments and the introduction of the use of portfolios in the curricula. Consequently they are jointly producing a redefinition of the competencies for the teaching profession in a way that can be used in the new concept (Dietze et al., 2000). In the recent past the government had stimulated the creation of documents that describe the required qualities of a starting professional teacher. So, at the moment EPS started their redefinition effort, there existed different documents that use different points of view and different frames of reference, and that are meant for different applications (PML, 1998a,b, Ministerie van Onderwijs, Cultuur & Wetenschappen, 2000b, 2000c).

In co-operation with a national organization for the professional quality of the teacher, an ngo, the joint institutes for teacher education proposed a new system of describing competencies that can function as an instrument to achieve a common frame of reference for school, student and teacher education. The description tries to be useful for students that have to analyse their position on their way to full competency as well as for institutes that have to formulate criteria for competence oriented assessments. In the report (Dietze et al, 2000) a (student-)teacher is called competent if (s)he is able make *choices* from her repertoire of behaviour and actions, based on the acquired knowledge, skills and attitude. These choices should help her to tackle adequately, -fitting the situation-, the problems that face her in the various professional contexts, conform her role and responsibility. This ability becomes visible by looking at these choices, they way arguments are given, and the reflection on the result of the choices. In contrast with a behaviourist approach mental

constituents of behaviour are taken into account. Not only observable behaviour is being assessed but also the considerations connected to the choices that the student has made. The assessment should take into account that problems on this level of professionalism can be handled adequately in quite different ways, and that the arguments and reflection can refer to quite different configurations of knowledge, skills and attitude.

A table is given in which four contexts of the profession can be crossed with four roles of the professional. This results in 16 types of situations in which the teacher should be competent.

<b>contexts</b> \ <b>roles</b>	educational	methodological	organizing	interpersonal
with students				
with colleagues; in team				
with yourself				
with surroundings; in society				

By describing typical situations in these 16 fields a frame of reference emerges that can be used by a (student-)teacher as a looking glass to monitor her behaviour and actions. The chosen arrangement stimulates the student to see and make connections between competencies, to think holistic. The assessors, on their turn, are given four glasses to look at the history and the behaviour of the assessee, to be used in each field: *methodical approach, communication, reflection and inspiration*. The first one is connected to purposeful practical problem solving in different professional contexts, based on educational theories and on prior experiences. The second one points to the ability to verbalize your own actions and causes, to attune with colleagues and to be accountable. The third perspective is related to the ability to see growth, to strive for growth, to reflect in action and to reflect on action. The last one is related to the inspiration and fun on which a student bases his work and the ability to inspire pupils and colleagues. These perspectives will function in the future development of quality standards.

*Example 2: The national effort to get people with prior learning in a quick route to teachership*

The Dutch ministry of education has launched a program to attract more students to primary and secondary teacher education from traditional and new contingents. In August 2000 an Interim Law came into force that made it possible to deliver short and flexible routes for people with some kind of prior learning (Ministerie van Onderwijs, Cultuur & Wetenschappen, 2000d). An entrance assessment was developed on a national level (Klarus & Schuler, 2000). Many of the official state funded institutes for teacher education set up assessment centres that could diagnose applicants with reference to competence oriented criteria. A training of assessors is well under way. Assessments are executed with a pair of assessors, one being an experienced teacher from primary or secondary education, the other being a teacher educator. Assessments use a mixture of portfolio from the past and behaviour on the spot. The applicant applies for the assessment, knowing that a school is interested to employ him or her. The outcome of the assessment is the decision whether the applicant is allowed to work without strict supervision in a school or not, and a written advise about the

work based (“dual”) learning route that combines the work in school with the learning that still is necessary to get the official teaching license.

So, the follow up of this assessment should be a demand driven, competence oriented, work based learning route. The official state funded institutions for teacher education have difficulty in providing for these kinds of routes. The transformation of their curriculum concept is often not yet far enough. It is clear that this national development is a great stimulant for this necessary transformation. Competence oriented and holistic assessment and the use of portfolio instruments are now seen to be necessary in the “ordinary” programs too. The necessity of a transition to demand driven curricula has become apparent.

In 2000 there were about 3000 applicants for these short, flexible routes. In practice only a modest group remains. Many withdraw themselves, many are found unfit for working in education, or go into shortened routes fully within a teacher college. Many secondary schools rather use the existing possibility to appoint unlicensed teachers for one year than having the burden of teachers that have to combine work and study. Institutes for teacher education try to form bonds with schools to educate applicants that pass the assessment in a joint venture.

In the mean time the minister of education openly plays with the thought to open the market for the assessments and even the following flexible routes to others than the government funded institutions for teacher education: higher education in other sectors than teacher education, professional development schools, or commercial (distance learning) institutions. This could be part of a new law on “the Professions in Education” that will be proposed to the parliament in the near future.

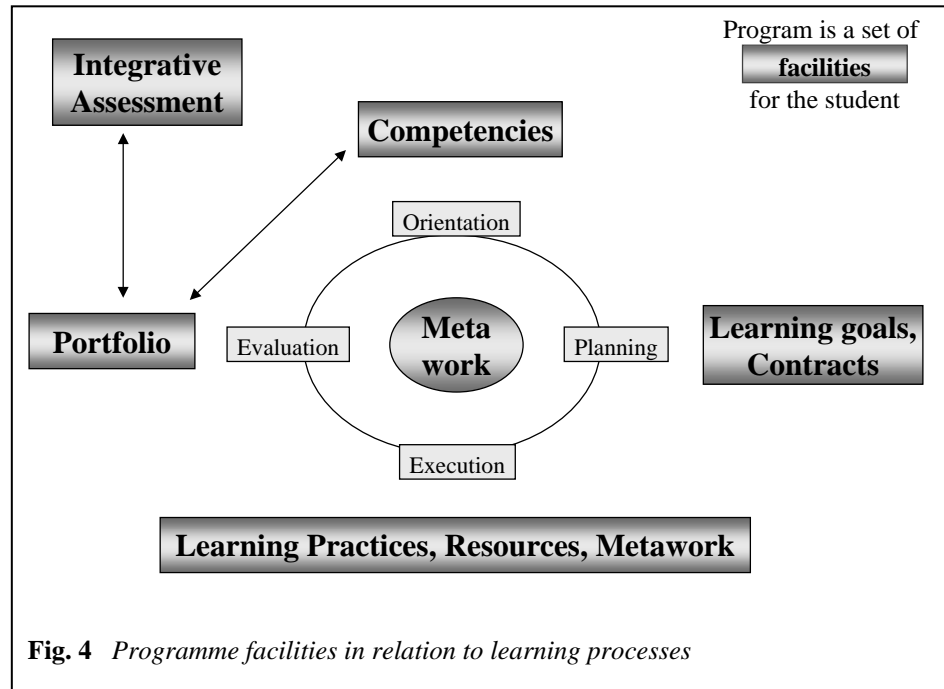
### *Example 3: The Dynamic Curriculum of EFA*

Many of the above mentioned features with respect to competence-based education can be seen in the development process of the experimental teacher education program of the Amsterdam Faculty of Education in the period 1998-2000. In chapter 3.2 the transformation of the Amsterdam Faculty of Education towards a demand driven competence-based program was characterized as an “expedition”, using four ideas as a compass: capable of managing change, responsible, freedom and authentic. Based on these four ideas, EFA tries to redesign the curriculum concept from a static to a more dynamic one, developing new instruments on the way.

The program is structured in phases. A first year takes care of the base of cognitive and metacognitive knowledge and skills. In the following main phase the student gives shape to his/her own learning route using practice based and college based elements. In the third LiO (dual) phase the student is working in a school under full own responsibility although (s)he is not yet ready to meet the full competency requirements of the profession. After graduation, the student enters the last phase as a licensed teacher. Admission to each phase is gained by an integrated competence based assessment, in which the student proves to be competent for functioning in that phase, using material from his/her history during the former phase. The assessment is a mix of proof by portfolio and proof by behaviour on the spot. The

criteria of the assessment are strict, but give room for a construction of proof that can vary from student to student. The assessment jury consists of representatives of the following phase, not of the instructors and tutors or coaches from the former phase that have helped them to get the necessary level of competency. Of course, a student can make use of the feedback, markings and opinions from these people, from peer students, or from contractors of the services they delivered during their practice based work.

The program environment consists of a number of facilities which students use in taking responsibility for controlling their processes of learning and gathering evidence of competence. These facilities are ordered with respect to the learning circle of the selfresponsible learner



*Orientation.* At fixed points during the program, students orient themselves with respect to the competencies they still need to acquire or improve. In the orientation on, and selection of, the competencies that need to be focussed on, “metawork”, in the person of the mentor and peer students, plays a supervisory, coaching role. Students and their mentor will use facilities such as the competence descriptions and (the results of) the integrative moments of assessment.

*Planning.* On the basis of this orientation, students translate the selected competencies into concrete learning goals they want to achieve in a learning practice and they determine which sources in the fields of knowledge, skills and information are required for this. In this phase, students enter into a learning contract and a work contract. In metawork, the mentor and peer students helps students in formulating learning goals.

*Execution.* Students work and learn within the frameworks agreed upon in the contract, either by involvement in work in schools as an assistant teacher or by the development of products. The learning practice relates the learning process to the work to be carried out in the profession, resources on subject and educational theories support learning of the first kind, and learning of the second kind takes place by reflecting within metawork on one's own learning and working processes during this phase of the study process.

*Evaluation.* In this phase, students consider their growth in acquiring competencies with a focus on the short term and on the long term (“internal thermometer”) and work on building up part of the evidence for the integrative moments of assessment (“external thermometer”). For both aspects, the portfolio is the main tool. In this, metawork fulfils a coaching, advising function.

A short description of the facilities follows.

- a clear description of the competencies for the profession that can be understood by students, and can be used by them to analyse their personal situation and to choose a path for the following round in the learning circle (“internal thermometer”)
- integrated assessments that can assess the level of acquired competencies; the criteria should give enough precision to help the students in preparing for the assessment and at the same time give room for the construction of an idiosyncratic proof of competence (“external thermometer”)
- learning practices that give room to competence oriented learning, connected to productive activities in authentic professional situations
- demand driven set of resources of knowledge and skills training
- portfolio system to collect materials that can be used for different purposes: to monitor the own situation for reflection and choices in the next round of the learning circle, to build a comprehensive proof of competence for the assessments, and to share expertise and materials. These materials can consist of (descriptions of) products, reports of services, agreements on learning goals and working procedure, feedback and judgements of other persons, own reflections and selfevaluations, storylines that arrange these materials for the different mentioned purposes. The students of EFA use a web based portfolio system. (Wielenga, 2000; Ritzen & Kösters, 2001).
- “metawork”, a continuous curriculum element where a mentor coaches and instructs students in their metacognitive work; the portfolio is the most important instrument. In the main phase also action research, intervision and supervision are used.

It is evident that most of the development efforts focus on these facilities. A corresponding change in selfperception of the teacher educator in his role in the learning process of the student is one of the most difficult areas of change management. One way is to involve as many staff as possible in the development of these facilities.

### *Final Remark: The end of the curriculum*

Finally it is good to mention a fundamental discussion that is going on in the academic world of Dutch educational research about the way assessment systems must be aligned to constructivist and competence based educational arrangements. The contribution of Elshout-Mohr et al. to ECER 2000 (Elshout-Mohr et al., 2000) is a good example. They distinguish three approaches to assessment and align them to three prototypical educational settings. Subject of

discussion is how the different settings must be juxtapositioned in a competence based dynamic curriculum. Also the concerns about validity, reliability, acceptability and efficiency in the different settings are addressed. The traditional meaning to validity and reliability are not relevant in the context of competence-based assessments and must be replaced by new meanings (Dierick et al., 2001).

So, it is not a question of old versus new in the world of assessment. It is new next to old, each functioning in its appropriate realm. The real issue is the change in overall concept of curriculum, from “supply driven and assessing whether the supply has been adequately consumed” to “demand driven and challenging students to construct their own proof of competence”. We are near the end of the classical concept of curriculum.

## ***Towards work based and school based curriculum***

In chapter 3.3 we also discussed the gap between theory and practice in the paragraphs about reflective practitioner and efficiency. Here, like in chapter 3.4, we will discuss some details and use a few examples of Dutch developments.

### *The situation*

In several areas of higher education there has been a strong tradition of work-based curricula (e.g. in nursing education). Here students are appointed by an employer and follow a curriculum that integrates serious work-activities with learning activities. However in teacher education, the curriculum was still based on some periods of supervised teaching practices. As mentioned in chapter 3.3 traditionally Dutch teacher education institutes aimed to offer aspirant teachers a solid theoretical background, learn them to develop series of lessons, to analyse and compare methods and to apply this in teaching practices of limited size. In the last few years the amount of teaching practice in the curricula has increased and the professional studies in the curriculum have been strengthened. Gradually better opportunities arise to connect the theory to the practice in schools, to stimulate students to reflect on their experiences in the classroom and the school and to try to situate these experiences in a broader context. Nevertheless, the situation is still far from perfect. The integration of knowledge and skills in useful practical competencies seems difficult and graduated students still often get a praxis shock when they start teaching. The change agents, mentioned in chapter 3.3, reinforcing each other, provided a strong stimulus to broaden the work-based curricula as in nursery education to other higher education areas. Besides that, these work-based courses might be more attractive to students, since they are offered a financial income during their study. Work based programmes are an answer to the problem of the praxis-shock by incorporating praxis into the curriculum where guidance can be offered.

### *Example 1: LiO*

Within teacher education, the introduction of work based curricula started with the implementation of the LiO-teaching practice that we mentioned before: the four year independent teaching practice of half a year at the end of the fourth year. At the start this LiO-teaching practice was a non-paid teaching practice, differing from other teaching practices by the duration and by the responsibility of the student. However, right from the start it became clear that such an intensive teaching practice needed a strong co-operation between the TE-institution and the school and should be based on a triple learning-working-agreement between the institution, the school and the student. The Dutch ministry of education strongly promotes the development and introduction of those programmes with a large practical component, primarily because the introduction of students working in a school might diminish the shortage of teachers. Also the schools are aware of the benefits of this model: while a few years ago schools were reluctant to allow students teachers to do their teaching practice, they now are welcoming the 4<sup>th</sup> year LiO-students, and they are even willing to appoint and pay first year students as teaching assistants.

#### *Example 2: Learning practices*

The experimental teacher education program of EFA uses the concept of “productive learning”. In “learning practices” students connect learning goals to pieces of authentic practical work that is of use to somebody (a kind of “employer”, that is). In most cases these “employers” are teachers or schools, or other institutions like a museum, the national committee on consumer affairs, the zoo, a township or a popular astronomical observatory. The concept of learning practices is used by other institutes for TE too.

In the course of the TE-programme the student can ask to be assessed for the work based phase. In that phase the employer for almost all the learning practices for one student is just one school. In the next example we will elaborate on this.

#### *Example 3: Dual curriculum*

In the last decade the one-year post-graduate courses for first grade teacher education at the universities have had a work based curriculum. For a large part of the year post-graduates work in a school for four days per week. Almost always they are being paid by the school for their work.

The PABO-curriculum of most institutes for primary teacher education has a dual aspect too. The curriculum, from the very first month in the first year on, uses the experiences that students gain in a continuous (mostly nonpaid) placement in schools. This starts with one day per week and ends with the LiO-phase of four days per week .

As a part of the EPS-project (chapter 3.2), there is a strong impulse in the development of dual work based curricula in secondary teacher education second grade. In most teacher education institutes, experiments are run in which students are appointed and paid by schools as an assistant-teacher during a part of the week. For instance there are experiments where first year students are appointed as assistant teachers at a school for senior vocational education, for one day per

week. During the rest of the week students are in the buildings of the institution to follow courses or workshops. The result was a change in the concerns of these students and a need for a different content of the curriculum. In this way, the dual curriculum leads to pressure towards demand driven teacher education, exerted by the students.

Another instance is an experiment in which highly educated fugitives from other countries, after learning the Dutch language and passing a diagnostic assessment, are appointed for four days at schools. They get a tailor-made programme to attain the level needed for the license to teach.

The experiments are trying to collect experience in dealing with the problem of coherence between the learning environments in the school and at the institute. At the moment, these experiments are rather isolated and not yet implemented in the whole of the curriculum, but the general future perspective is that students will be appointed and paid by a school, right from the start of their study, having a part-time job during their study (maybe successively at a number of different schools).

### *Conclusion*

The last example of the fugitives is one case of the quick routes to teachership that the Dutch ministry of education is promoting (see chapter 3.4, example 2). In 2000 there were about 3000 applicants for these short, flexible routes. In practice only a modest group remains. Many withdraw themselves, many are found unfit for working in education, or go into shortened non-dual routes fully within a teacher college. Many secondary schools rather use the existing possibility to appoint unlicensed teachers for one year than having the burden of teachers that have to combine work and study. Institutes for teacher education try to form bonds with schools to educate applicants that pass the assessment in a joint venture.

In the mean time the minister of education openly plays with the thought to open the market for the assessments and even the following flexible routes to others than the government funded institutions for teacher education: higher education in other sectors than teacher education, professional development schools, or commercial (distance learning) institutions. This could be part of a new law on “the Professions in Education” that will be proposed to the parliament in the near future.

An interesting element is that with this development the difference between pre-service and in-service teacher education is gradually disappearing: students are appointed at schools and are part of the school team. There are no fundamental differences in the pedagogical approach used for both groups, except the level of knowledge and experience. The in-service training is already demand driven, and the initial teacher education is following suite.

It should be clear that the Dutch educational environment is ready for a changing distribution of roles among schools and institutes for teacher education. The next chapter will elaborate on this.

# The role of the schools

## Teacher education as a responsibility of the schools

So schools are getting more and more involved in the actual education of new teachers. In the most recent policy document of the Dutch Minister of Education he states that “teacher education is a part of the human resource responsibility of a school board” (Ministerie van Onderwijs, Cultuur & Wetenschappen, 2000a). Only a few years ago school boards would not recognize themselves in this statement, feeling that their main responsibility was towards their pupils and the education they had to offer them. The education of teachers was not the responsibility of schools and involvement with teacher education was in most cases limited to incidental teaching practices. The shortage of teachers however made schools more aware of the need of intensive human resource management. TE-institutes were not able to attract enough students to teacher education to educate the number of teachers needed by the schools. At this moment schools start to recruit new (unlicensed) teachers themselves. Some schools even state that they are willing to educate teachers themselves, if TE-institutes are not able to fulfil their needs. Although this rhetoric is nowhere put into practice at this moment, it is not unlikely that large school organizations might be able and willing to organise their own education of teachers, with or without buying expertise from TE-institutions.

As a result of the teacher shortage, schools are willing to create partnerships with TE-institutes. One of the elements of these partnerships is the development of ‘dual curricula’. As part of this development, TE-institutes and schools are surveying in what way schools can take over at least part of the traditional activities of teacher education institutes. This asks for a clear description of the tasks and responsibilities of both the institute for teacher education and the school. Another condition is that schools should be able to offer students possibilities to practice their competencies at different levels and with different levels of responsibility. Finally schools must be able to facilitate mentors in the schools that are involved in the education of student teachers. Research on the LiO teachers-in-training period for primary school student teachers showed (Lunenberg, 1999) that the division of tasks and responsibilities between the mentor c.q. teacher educator in the school and the teacher educator of the teacher education institutes was vague. However, the research showed that the teacher educator in the schools seemed to be best qualified and most self assured to support the student teacher in planning and preparing lessons, choosing and using pedagogical/didactical strategies and becoming a staff member, in other words: the outward performance and class management. Pedagogical/educational issues and issues concerning professional development were more often seen as tasks for the teacher educator of the institute. Both types of teacher educators seemed to have little to offer with regards to the process of counselling like giving feedback and stimulating reflection.

Another problem is that traditionally there is hardly any differentiation in tasks and responsibilities of teachers in schools. Therefore, schools have very limited experience in providing student teachers with work situations, which are adopted to their level of development. The situation described for primary education does not differ much from the one in secondary education.

But the situation is different in schools for senior secondary vocational education. These schools have developed a range of different professional levels, varying from assistant-teachers and junior-teachers to experienced teachers. They have asked teacher education institutes to design dual trajectories to educate, as a start, assistant-teachers. Within these schools – at least in theory - student-teachers who follow regular courses at a teacher education institute can be offered tasks that ask for increasing levels of competencies and increasing responsibility.

In 2001 nearly each institution is involved in experiments with schools in creating work based curricula, in answer to specific needs of schools, in involving schoolbased teacher educators and in sharing responsibilities (van Vonderen, 2001). However, this development is still very new and there is little experience with work based learning and with human resource management in schools. The shortage of teachers in schools has the risk that students are seen as an easy and convenient solution to this problem, leading to a situation that students are just given tasks in schools, without much support in the intended learning process. The involvement of students in the daily problems in the schools might have priority above the process of learning to become a teacher. The experiences with the way in which schools have (not) been able to make in-service training a part of their policy (Inspectie voor het Onderwijs, 1997) might be illustrative for the difficulties schools have in creating a strong learning environment. Several authors have stressed the need for strong learning environments in school, both for teachers and for students in the Dutch situation (Kwakman & Kuiper, 2001; Verloop & Wubbels, 2000). Research on experiments with 'dual curricula' shows that the situation in the schools is very different. Some students are coached very well, they meet weekly three hours with their supervisor/teacher educator in the school, the supervisor reads all the material and talks extensively about the tasks the student teacher has to perform. Other students get hardly space and time to study, their supervisor is appointed a few months after the start of their teaching practice and does not have enough time. One student even reported that her supervisor was not allowed to go to the joint meetings of supervisors and teacher educators. Some supervisors ask for training, especially in coaching skills (Lunenberg, 2000).

This example shows that in some cases mentors in schools are not facilitated to take the responsibility for the education of new teachers. Either schools have to find room in their budgets to facilitate teacher educators in the schools, or institutes for teacher education must be willing to pay the mentors in the schools. In the new policy document the Minister states that he is willing to facilitate schools for the mentoring of student teachers and for the professional development of schoolbased teacher educators. Based on these statements, several teacher education institutes have started to develop training courses for schoolbased teacher educators.

In this way, the shortage of teachers leads to a situation in which schools are getting more involved in teacher education as a consequence of their human resource responsibility. The concept of school-based teacher education is developed by schools and teacher education institutes together, supported by the government. Changes taking place in schools, aiming at strengthening the human resource management (role and job differentiation, creating roles with different levels of responsibility and career opportunities), all support the creation of strong learning environments in schools, both for teachers and student-teachers. At the same time these developments lead to some fundamental questions to be answered in the near future:

- if schools are willing and able to educate teachers themselves, what right or reason have TE-institutes to exist?
- how can a strong learning environment for student teachers be created in schools, without the risk that the learning part of the “dual curriculum” comes under pressure?
- in what way can a student be prepared for the education of tomorrow in the schools of today?
- how do we share roles and responsibilities between both partners and what competencies are needed in schools?

The different experiments that institutes for teacher education and schools have started in creating new partnerships and curricula might give some light on these question.

# The role of the teacher educator

## Quality of teacher educators. Teach and learn as you preach

A promising development in The Netherlands is the growing interest in and attention for professionalization of teacher educators. The Dutch Association for Teacher Educators (VELON) plays an important role in this development.

Inspired by the standard as developed by the American Association of Teacher Education (ATE; see for instance Houston, 1999), Koster and Dengerink developed a first version for a professional standard for teacher educators, applicable both to institute-based teacher educators and to school-based teacher educators (VELON, 1999; Dengerink & Koster, 2000). The Netherlands are the first European country with such a professional standard for teacher educators.

The work of Korthagen was one of the building stones for the development of this professional standard for teacher educators. Korthagen has formulated a start for a knowledge base for teacher educators. Amongst other points teacher educators should be able to connect with the concerns and preconceptions of their students, to create a safe context for reflection, to organise reflective interactions between student teachers, to teach future teachers how they can develop their professionalism systematically and to construct theory from practice (Korthagen, 2000).

The standard describes subject competencies, didactical competencies, organisational competencies, educational and communicative competencies and competencies for learning and growing.

As an illustration we give an overview of the didactical competencies:

- The teacher educator is able to design, carry out, evaluate and adapt teacher education curricula together with colleagues.
- The teacher educator can create a stimulating learning environment for the student teachers.
- The teacher educator can differentiate to a diversity of student teachers. He or she is able to coach students with diverse competencies towards the teaching profession.
- The teacher educator can connect educational aspects to various situations.
- The teacher educator can clarify and discuss his or her own didactical choices with the student teachers.
- The teacher educator is capable to assess student teachers on (starting) competencies, to give them feedback on their progress and to evaluate their suitability for the teaching profession.
- The teacher educator is able to stimulate student teachers to reflect on their experiences and to self-assess their suitability for the teaching profession.

Based on this standard the VELON intends to create an official register for teacher educators. The next stage in this development is to formulate criteria for meeting these competencies and assessing teacher educators. Self diagnosis,

products, feedback from colleagues and putting these together in a portfolio are important tools in this stage. In September 2001 a first pilot will start with assessing teacher educators who have volunteered. For this first pilot, 120 teacher educators applied for only 40 places. Teacher educators who pass the assessment will be registered for a limited period. After that period they must prove that their competencies are still up-to-date. The underlying assumption is that this approach will stimulate continuing professionalization (VELON, 2000; Dengerink & Koster, 2000).

This emphasis on the responsibility of the teacher educator for his own professional quality and development is strengthened by institutes realizing that the changes in curricula and new approaches in teacher education ask for new competences of teacher educators. So, the management of the institutions for teacher education stress the need of professional development and are intensifying their human resource management and professional development programmes. Starting point for these programmes is the 'teach (and learn) as you preach' paradigm. So for the professional development of teacher educators the same concepts are used: competencies (preferable with the same systematic approach as the competence-description for students, using the matrix we mentioned before), productive learning, portfolio and assessments (e.g. Terwindt, 2000). However, the learning process of students and teacher educators have some fundamental differences, e.g. a student-teacher is mainly involved in developing working routines, while an experienced teacher educator has to unlearn existing routines (Kwakman & Kuiper, 2001).

The emphasis that is put on the professional quality of the teacher educator, both within the different institutions and the Dutch Association in Teacher Education, might lead to the development of a education for teacher educators. The VIOLS-institution of the University of Utrecht already has been heavily involved in providing training for teacher educators in almost all institutions for teacher education in The Netherlands.

## **Conclusions and trends**

We already mentioned at the beginning of this paper that we believe the Dutch situation with respect to teacher education to be an interesting one. The pressure on teacher education due to the shortage of teachers leads to a situation of pragmatism and where there is no room and time for critical reflection, careful consideration and balanced quality. But on the other hand it is also a situation where there is room for new experiments, searching for dynamic curriculum models and trying to describe the new demands for teachers (self-responsible, competent for change). In a situation where the role and structure of teacher education is fundamentally questioned, nothing can be taken for granted, leading to an intensive rethinking and reflection.

At this moment many developments are still based on unproven assumptions. There is a strong need for research, going along with the expeditions of the new developments. An example is the discussion about the development of assessment instruments and procedures in a competence oriented curriculum that satisfy the requirement of validity (Elshout-Mohr et al, 2000).

Innovations are initiated and stimulated both by the government and the institutions for teacher education. However, the orientation of (and motivation for) the different innovations can be quite different. We give two examples.

The stimulation of using ICT as a tool to facilitate the learning process can be motivated from *organizational* points of view, concerning:

- efficiency (independent learning using internet might be cheaper than lecturing) or
- flexibility (where a student is able to define his own learning route and to study where and when it suits the student).

But it can be motivated differently, from *educational* points of view, concerning:

- the rolemodel-concept (where a student must experience how ICT can support his learning, so he will be willing to use it in his own future teaching practice),
- productive learning (participating in the development of new knowledge) or
- collaborative learning.

The same differences in orientation can be seen with respect to flexible and tailor-made programmes. The ministry is mainly motivated by the need of short and flexible routes, taking into account prior experiences and schooling, while the institutions are mainly motivated for the development of flexible and individual learning routes by the wish to make students selfresponsible and capable of managing change.

Sometimes, these differences in orientation strengthen each other, in other situations the different orientations can hinder each other and create misunderstanding.

As we have tried to indicate, the changes taking place effect all aspects of teacher education: the role of the school, the role of the student, the role of the teacher educator and the role of the curriculum. The full consequences of these changes can not yet be grasped, since the implementation of new approaches in pilot situations has just started. So one might argue that the changes are only happening marginally. However, looking at the volumes of the past two years of the Dutch Journal for Teacher Education we see that almost 50% of the articles are about competence based teacher education (including the use of assessments and portfolio) and school- and work based teacher education. In that respect, teacher educators have changed their language. But as in each innovation process, the measure in which the new rhetoric's are translated into really new approaches is still open.

In this context it is interesting to draw a parallel with the scenarios that are developed by the OECD in their Educational Policy Analysis 2001, which describe the possible futures for tomorrow's schools (OECD, 2001). The OECD describes six different scenarios: the first one stipulating the continuation of bureaucratic institutionalised systems, resisting radical change, is recognizable in the way in which:

- institutions fail to solve financial problems, threatening the existence of teacher education in The Netherlands,
- they fail to create national solutions to shared problems
- many teacher educators are resisting the implementation of new approaches.

The second scenario which describes a future in which market approaches to education are extended much further than today, can be recognized in the way in which commercial institutions are given access to the areas of both pre- and in-service teacher education, competing with the traditional, but not always efficient, institutions for higher education.

The third scenario, describing a future where schools have developed powerful social links and a community leadership function, is parallel with the strong bonds and educational partnerships that institutes for teacher education are creating with schools in their area.

In the fourth scenario schools become learning organisations with strong knowledge focus and qualified and motivated teachers. Translated to teacher education this scenario is visible in the rethinking of the role of teacher education, positioning itself as an expertise and assessmentcenter for professional development of teachers.

In the fifth scenario, the role of the school minimizes through the widespread establishment of nonformal learning networks. This might be the future for teacher education too, when schools organize the professional development of their staff within their own institutions, using organized networks for nonformal learning and professional development between colleagues in different schools.

The last scenario is a pessimistic one: an exodus of teachers, unresponsive to the clumsy attempts to raise the status of the teaching profession, creates a 'meltdown' of school systems. Even this very pessimistic one has its parallels in teacher education: the status of both the teaching profession and teacher education leads to an ongoing decrease of the number of students opting for teacher education and to the loss of confidence of society in the usefulness of institutes for teacher education, and to a declining willingness to invest in this part of higher education.

So the future is still open. The trends we described in chapter 3 and 4 might lead to the scenarios number 3 and 4, but other forces influencing teacher education might lead to one of the other, more pessimistic, scenarios. In that respect, the situation is critical. If the institutes for teacher education in higher education are not able to give an adequate answer to the needs of schools and society and educate (together with schools) the teachers of tomorrow, they will lose their right to exist.

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